National Teacher Research Panel
engaging teacher expertise

Habitats for teacher research:
teacher perspectives on research as a sustainable environment for CPD

Improving Teaching Enhancing Learning

The survey was designed by the Panel and built upon a previous survey commissioned by the then Teacher Training Agency. It was administered by colleagues at CUREE (The Centre for the Use of Research and Evidence in Education) and analysis was completed through a partnership between CUREE colleagues (Emma Jacobmeyer, Laura Smith, Michael Hawkins, Kate Coleson, Natalia Buckler, Rebecca Raybould and Philippa Cordingley) and Katherine Hall (Panel member). The findings were interpreted with support from the Executive Committee.

The Panel and CUREE colleagues would like to express their appreciation of the time and thoughtful contributions of all of the respondents and those who encouraged participation, including TDA, GTC, LSIS, DfE, NUT, IfL, ATL, NCETM, CEBE, BERA, The Communications Trust, and various Higher Education Institutions, local authorities and subject associations. We hope that the voice of the profession shines through the report as a whole. As a foretaste of what is to come we offer you a quote that seems to us to encapsulate the essence of the great majority of the different comments and responses:

"Nationally we are approaching the end of an era of the National Strategies, where teachers have become over reliant on systems and structures and quick fix approaches to teaching. While this is restrictive and disempowering, to many teachers it is very seductive particularly in a high stakes test based profession. Until we can kick start a culture change where teachers can see the value of research and the powerful effect this can have on themselves as individuals, then we will always struggle to get teachers to access it. We need a national dialogue around learning that engages school leaders in embracing research and risk taking as an integral part of school CPD, not as an interesting add on." (respondent – see page 22)

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Executive Summary

In March 2011 the National Teacher Research Panel (NTRP) (www.ntrp.org.uk) carried out an online consultation to investigate teachers' attitudes towards educational research. The NTRP is a group of approximately 20 teachers and school leaders, all passionate about the difference that engaging in and with research can make to classroom practice and to our students' learning.

The aim of this consultation was to inform the next phase of support for engaging teachers in and with research in the context of new challenges facing the profession. The new emphasis on teacher judgement and the reduction in central prescription has been accompanied by a reduction in the free research resources (such as the GTCE Research for Teachers feature) which teachers have been able to access. This raises important questions about what teachers want and need by way of access to research.

The consultation draws the distinction between teachers engaging *in* and *with* research. By engaging in research we mean when teachers carry out their own research. By engaging with research we mean when teachers are supported and encouraged to use evidence from research carried out by others.

The consultation focused on:
- the extent to which teachers currently engage in and/or with research;
- how teachers use and access research;
- the barriers and drivers to using research, and
- priorities for future research.

This was a self selecting, mature and experienced sample of teachers. A total of 1080 responses were recorded – with a roughly two thirds female (67%) and one third male (33%) split. The majority were over 45 years of age (60%), and only 2% were between the ages of 20-24. Just under half of respondents (44%) have been teaching for 20 years or more and 31% have been teaching for between 10 and 19 years. Just 11% have been teaching for 4 years or less.

Many, but by no means the majority had a Masters qualification (35%) and 17% had a postgraduate diploma. A third (33%) stated they had no postgraduate qualification. Other respondents held various qualifications ranging from PhD/EdD (9%) to an NPQH (2%).

The majority of the sample were from secondary (42%), followed by those from the learning and skills sector (29%). A quarter were from primary (25%), and only 4% were from early years. 58% of respondents held a management or leadership role, and nearly 30% were teachers. A small, if relatively proportionate number of responses came from advanced skills teachers (AST) and a few teaching assistants and supply teachers also took the trouble to complete the survey. The sample also includes 10% of teacher trainers and CPD leaders working in and with schools who saw themselves as sufficiently relevant users of research in this context to feel strongly that their view should be included.

Key findings

1. Engagement in and with research emerged as a strongly practical endeavour and, as has been illustrated in the wider evidence base[1], led to multiple benefits not only for school staff themselves but also their pupils. The most popular reason teachers gave for accessing research (27%) was for their own professional development. A further 21% accessed research for ideas for classroom practice. 16% of respondents said that they used research on a wider basis to support CPD or initial teacher education and another 16% also used research on a wider basis to support school development. In this sense, many of the findings of the survey are positive. A very small percentage of respondents (1%) read research for their own interest or to keep up to date. The reasons for accessing research did not vary according to the respondents' levels of qualifications.

2. Over 40% of respondents highlighted their regular engagement with research; a further 50% engaged with research occasionally or when they had a particular issue. Only 6% of practitioners reported that they do not engage with research at all but, of course even this group were interested enough in the possibility to complete the survey. Comparing these figures with the findings of the previous similar survey in 2002[2] shows that the percentage of the 'research-free' practitioners has almost halved over the past 10 years.

3. Interestingly, practitioners engaging with research seldom did it for a specific qualification. Professional development and finding ideas to use in the classroom were the two most frequently mentioned reasons for engaging with research. It is perhaps then not surprising that when asked about the features they were looking for in research and research summaries, the respondents

[1]Bell, M., Cordingley, P., Isham., C. & Davis., R. (2010) *Report of Professional Practitioner Use of Research Review: Practitioner engagement in and/or with research*. Coventry: CUREE, GTCE, LSIS & NTRP. Available at: http://www.curee-paccts.com/node/2303.
[2]Everton, T., Galton, M. & Pell, T (2002). Educational research and the teacher in *Research Papers in Education*, 17 (4), pp 373 – 401.

selected 'evidence of impact on pupils' learning', 'capable of being applied to own context' and 'concrete illustrations' as the three most important features. The analysis of the obstacles to teacher engagement with research suggests that many practitioners were struggling to find research with these characteristics as over 13% of respondents identified a lack of studies written for a teacher audience as one of the main barriers preventing them from engaging with research.

4. The most common barrier to engagement in and with research, identified by the survey respondents, was time (32% and 37% respectively), which is consistent with the findings of other studies[3]. Lack of knowledge of where to find research papers or teacher friendly summaries was the second biggest barrier stated for using others' research (25%), whilst funding was the second biggest barrier for those wishing to carry out their own research (25%).

5. Lack of support from school leadership was mentioned in relation to both engagement in and with research, and this was similar for both experienced and inexperienced teacher researchers. About 50% of practitioners indicated that their schools were not engaging with research; nonetheless they saw themselves as having some or a lot of research experience. There appears to be some tensions between individual practitioners' high levels of engaging with educational research and relatively low levels of that happening at a whole school level, so it is possible to conclude that there is a lot of untapped potential related to engagement in and with research at a school level. Over 20% of respondents referred to their school as 'research-free', i.e. having little or no engagement in research. These schools might be missing out on some major forms of work-based professional development (such as experimentation, observation, modelling, etc) that are known to be linked with positive outcomes for both staff and pupils[4].

6. Limited access to specialist support was specifically highlighted as a barrier by the school practitioners who undertake research and enquiries. Given the importance of specialist input in staff professional development[5] and it being a likely area of 'sacrifice' when trying to cut school research and professional development budgets, school leaders might need further support in helping them identify how they could ensure their settings can access specialist expertise, which research about effective CPD suggests can come from research resources as well as from people, in an efficient and sustainable way.

7. Schools supporting each other and exchanging different areas of expertise might be one of the possible solutions. Yet, if we were to use practitioners' participation in networks (a peer support mechanism), as a proxy for the school-to-school support, it is clear that more work needs to be done in this area in order for it to become an accessible and reliable source of expertise for school colleagues. The survey findings highlight that only 45% of respondents are currently involved in networking with colleagues, but of those who said they were part of a local network, 98% indicated they use research journals and summaries to influence their practice. This suggests that involvement in networks has a strong influence on teacher use of research.

8. The survey respondents highlighted a range of sources of teaching and learning knowledge and expertise that was available to them as ways of accessing existing research. The internet was the single largest group (18%). Internal school CPD (nearly 10%) and external CPD (8%) together support access to research as strongly as the internet. Just over 14% indicated that they access research from official publications – presumably also, after using the internet. Whilst they might well explain the similarities on ways of accessing research between staff at different levels, i.e. equality of access, these 'ways into' research are each associated with certain challenges. The variability of quality of some of the resources surfaced by the internet and the lack of signposting of such quality except in sites specifically built for teachers, the cost of research journals and rapid disappearance of research and resources from many official websites to name but a few.

9. Primary, secondary and further education phases all had the same top two priorities for future research: 'Improving motivation/tackling disengagement' (12%, 15% and 15% respectively) and 'Strategies for teaching different ability groups effectively' (12%, 8% and 11% respectively). Early years respondents were most interested in 'Comparisons of different teaching strategies' (12%). Nearly half of respondents working in primary (46%), secondary (43%) and FE (48%) reported accessing research summaries on a regular basis, whereas the majority of early years practitioners (44%) said they only do this occasionally.

10. There were also interesting findings relating to the smaller subsets of respondents, for example ASTs. Only a quarter of this group indicated that they regularly use research to influence their practice (26%); significantly less than school leaders (96% of assistant heads, 39% of headteachers) and slightly less than classroom teachers (27%) and holders of management/TLR posts (28%).

11. Overall, the survey findings and the numbers and range of participants highlight that, despite all obstacles and challenges,

[3]See footnote 1.
[4]Cordingley, P., Bell, M., Rundell, B. & Evans, D. (2003) The impact of collaborative CPD on classroom teaching and learning. In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=133&language=en-US; National Teacher Research Panel (2010) Collaborative teacher research: making a difference to CPD. Inside Information Issue 5. Coventry: CUREE. Available at http://www.ntrp.org.uk/?q=node/7.
[5]Cordingley, P., Bell, M., Isham, C., Evans, D. & Firth, A. (2007) What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers? Report. In: Research Evidence in Education Library. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2275.

significant numbers of school leaders and practitioners are eager to be more research-engaged in order to enhance their practice, knowledge and skills, develop their schools and ultimately offer better learning experiences to children and young people. It also suggests that there has been a series of sustained increases in the numbers in this position over the ten year life of the Panel.

Implications

Teachers

- Whilst 32% of respondents indicated they had used research to generally improve their practice through exploring specific ideas or models, only 3% of respondents used research to explore the specific needs of a sub group of students. Evidence shows that focusing on particular student needs is helpful to ensuring that engaging with and in research has a positive impact on learner outcomes. Teachers could consider ways in which they could focus engagement in and with research on the needs of a specific target groups of students as a way of increasing and celebrating its benefits.

- Some respondents believed that establishing a research culture could encourage engagement in (9%) and with (7%) research. Could you contribute to this, perhaps by forming a research group? As respondents noted that they needed more information on the practical benefits of research it may be that the group can act as a champion for promoting the benefits of research for both pupil and staff learning and providing examples of this.

- ASTs used research to influence their practice slightly less regularly than teachers or school leaders (26% compared to 27% of teachers, 96% of assistant heads, 39% of headteachers and 28% of management/TLR posts). Perhaps this relates to the emphasis on their expertise and on helping colleagues tackle specific issues. As ASTs play a key role in developing the practice of other teachers you could also consider ways in which you could model effective engagement in and with research as part of your own professional learning. Can you show your colleagues how you identify research that addresses your students' needs and adapt it for your context?

School leaders

- Many teachers accessed research through a course of further professional studies (8%) or INSET (10%). In fact one of the main uses of research was to support CPD or ITT (16%). Is there someone in your school who knows where to access research summaries and articles and can help staff in using these effectively?

- School leaders accessed research more frequently than teachers. Lack of support from the school leadership was noted as a barrier to both engaging in and with research (approximately 11%). School leaders could work with their staff to promote a research culture where engaging in and with research is explicitly shown to be valued. Would taking a school priority as a mini project and modelling the use of research be helpful?

- Lack of time and funding was cited as a major barrier to carrying out research (32% and 25% respectively). School leaders may wish to consider how they can weave research into existing school and staff professional development processes so that it is not seen as an extra task but as a way of moving on practice. For example, research into a school priority could feature as an aspect of INSET sessions and as part of the performance management process.

- Involvement in networks appears to be a strong driver as to whether teachers use research findings to directly influence their practice (98% of those in networks indicated they had used research in this way). Could you think about why networks are successful in encouraging engagement with research e.g. who or what is driving teachers' use of research in networks? How can you or others in your school support the development of this? What sort of networks would be useful for your staff's development?

Policy Makers

- After lack of time, teachers cited the greatest barrier to engaging with research summaries and articles as a lack of knowledge of where to find these (24%). The two most popular places for accessing research were the internet (in particular government agency sites) and official publications and circulars such as those from DfE, QCDA, TDA, Ofsted, GTC and LAs. With recent policy changes many of these will no longer be available or will cease to be updated. So policy makers building on the White Paper's pledge to make research and evidence readily available need to consider how teachers will do this in future.

- Teachers noted the third greatest barrier to engagement with research summaries was a lack of resources written for a teacher audience (14%). They wanted research that had

evidence of pupil learning, results which could be applied to their own setting and concrete illustrations of the findings in classroom contexts. As currently 60% of respondents only occasionally use research findings from research summaries and articles to influence practice, policy makers could consider how they can ensure that such summaries are readily available and drawn to teachers' attention. How could local networks be supported to aid this process?

• Teachers had clear ideas about the educational issues and subjects that they would like research to address. Finding ways of improving motivation and tackling disengagement was the most popular issue (12%). Policy makers could consider how teachers' views about classroom issues can feed into current research funding priorities and the role of teaching schools in this.

Universities

• Teachers had clear ideas about the educational issues and subjects that they wanted research to address. Are you using your masters students as a way of finding out about the issues which concern and interest them? Analysing the research questions asked by students could provide a way of identifying potential areas for future research.

• Teachers found that a lack of access to resources written for a teacher audience was a major barrier to engagement with research. Are you signposting such summaries to your undergraduate and postgraduate students? This could be an effective strategy for ensuring continued use of research as once students have completed their studies they will not be able to access academic research journals.

Introduction

The value of education cannot be under-stated. Schools and colleges provide the training and skills for the workforce, provide life-changing opportunities for young people from every possible background, and help to shape the values, character and conduct of future generations. It is of critical importance that the education on offer in this country is the best it can be. For more than fifty years academic researchers have been establishing a body of knowledge about how people learn, about effective teaching, about school leadership and more. It matters that this evidence informs the decisions of teachers, of school and college leaders and that all those who help to shape the provision of education for young people are engaging *with* research. During the same period it has become equally evident that the most effective practitioners are those who refine and develop their professional work through reflective and systematic enquiry: engaging *in* research within the context of their own classroom or school.

In March 2011 the National Teacher Research Panel (www.ntrp.org.uk) carried out an online consultation to investigate teachers' attitudes towards educational research. The NTRP is a group of approximately 20 teachers and school leaders, all passionate about the difference that engaging in and with research can bring to classroom practice and to our students' learning. We work with other practitioners, promoting and facilitating high quality teacher engagement both in school-based enquiries and also with formal published research. We also champion the practitioner perspective in supporting and challenging the research community to pay attention to teachers' needs through relevant studies and applicable findings.

The aim of this consultation was to inform the next phase of support for engaging teachers in and with research in the context of new challenges facing the profession. There is an increased emphasis on teacher judgement and a reduction in central prescription, but this is occurring alongside the movement and closure of some free research resources such as the GTCE Research for Teachers feature. This raises important questions about what teachers want and need by way of access to research.

The consultation draws the distinction between teachers engaging in and with research. By engaging in research we mean when teachers carry out their own research. By engaging with research we mean when teachers are supported and encouraged to engage with research carried out by others. The first part of the consultation focuses on where and how practitioners currently access research and evidence from other people. It also considers why they access this and how it is used to inform their practice. The next part of the report looks at what the practitioners see as the main barriers to engaging in and with research and what they feel needs to be in place for these barriers to be overcome. The report also looks at what the priority topics and subjects for research should be in the future and how they would like to see this research presented. The questions used in the consultation build on a survey carried out by Everton et al in 2002, so the report sometimes refers to this for comparative purposes.

Angela Hardman, NTRP Chair
Robin Bevan, NTRP Vice Chair

# Characteristics of teachers taking part in the survey

Gender of respondents

1. The survey was online from March to May 2011 and was open to all classroom practitioners[6]. It was distributed via Panel members' networks and mailing lists, and subsequently by participating practitioners and organisations who alerted their colleagues and/or networks. A total of 1080 respondents replied with just over two thirds of these respondents being female (67%) and one third (33%) being male.

n=1076   ■ Male   ■ Female

33%
67%
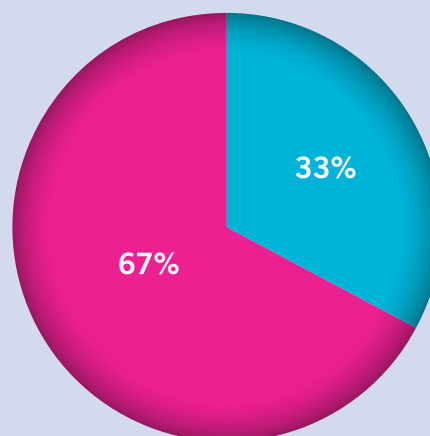
Age of respondents

2. Over 60%[7] of the respondents were aged over 45 years and over, with a further 25% being between 35 and 44 years old. Only 2% of the respondents were between the ages of 20 to 24 years.

n=1080

■ 20-24 years   ■ 25-34 years
■ 35-44 years   ■ 45 years and over

2%
12%
61%
25%
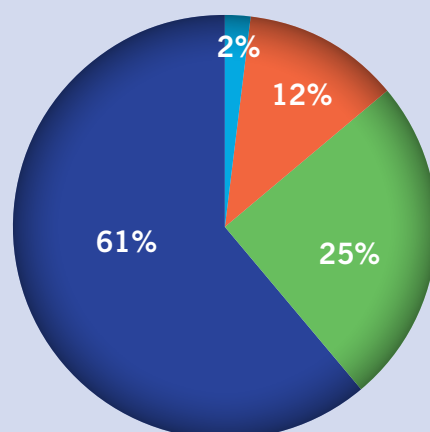
Postgraduate qualifications
(other than first teaching qualification)

3. The respondents were asked whether they had postgraduate qualifications, other than their first teaching qualification and one third of respondents said that they had no postgraduate qualifications at all. 35% of the participants said that they had a Masters qualification and 17% reported that they had a postgraduate diploma. Other qualifications where there were less than 10% of reponses were PhD/EdD (9%), postgraduate certificate (3%), National Professional Qualification for Headship (NPQH 2%) and other (1%).

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[6]To see the original survey questions please go to www.ntrp.org.uk.
[7]The percentages reported throughout the report are using the total number of responses (n) for each specific question.

Teaching experience

4. Over 40% of respondents have been teaching for over 20 years or more and 30% had been teaching for between 10 and 19 years. Only 12% are early on in their teaching career and have been teaching for up to four years.

n=1077

- 0-4 years
- 5-9 years
- 10-19 years
- 20 years or more

11%
14%
44%
31%
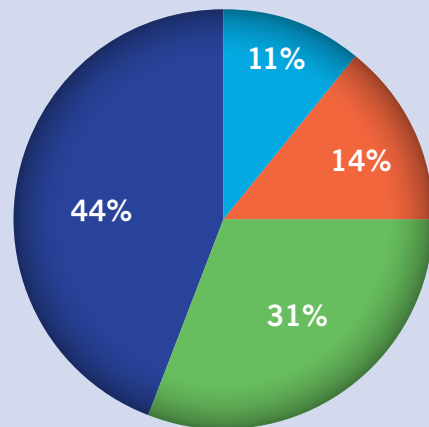
Phase

5. Only 5% of respondents were from the early years phase, with most being from the secondary phase (42%), followed by nearly 30% of respondents from the Learning and Skills sector. A quarter of the sample were primary phase teachers.

n=926

- Early years
- Primary
- Secondary
- Learning and Skills Sector

4%
29%
25%
42%
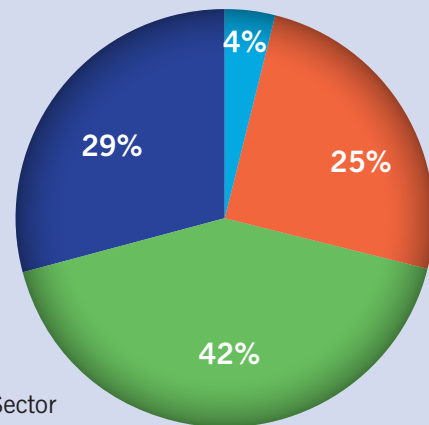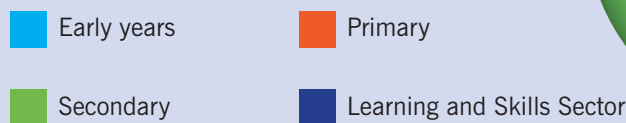
Type of institution

6. The majority of respondents (36%) reported that they worked in a maintained school, followed by 17% of respondents that work in the learning and skills sector[8]. Independent schools, special schools, HE/universities and voluntary controlled schools were each represented with less than 4%. Academies, voluntary controlled schools and other sectors comprised of 11% of responses each in the sample.

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[8] Including Further Education Colleges, adult learning and vocational learning.

Your position

7. This was a relatively senior population. Just under one third of respondents (31%) held a management or TLR post, and just under 30% stated they were teachers. 28% of the responses came from assistant heads, deputy heads or headteachers. In total, 58% of respondents had a management or leadership role. 10% reported that they were teacher trainers. A small number of responses were received from advanced skills teachers, teaching assistants and supply teachers.

n=919

8. The details we collected from respondents allowed us to determine the extent to which the evidence in this report is drawn from a representative sample of the teaching population. We recognise that survey returns are always prone to some bias as the respondents are a self-selecting subset of those who were given access to the questions. Comparing the sample data and the population characteristics of the national workforce gives us confidence that the findings in this report reflect, within reasonable b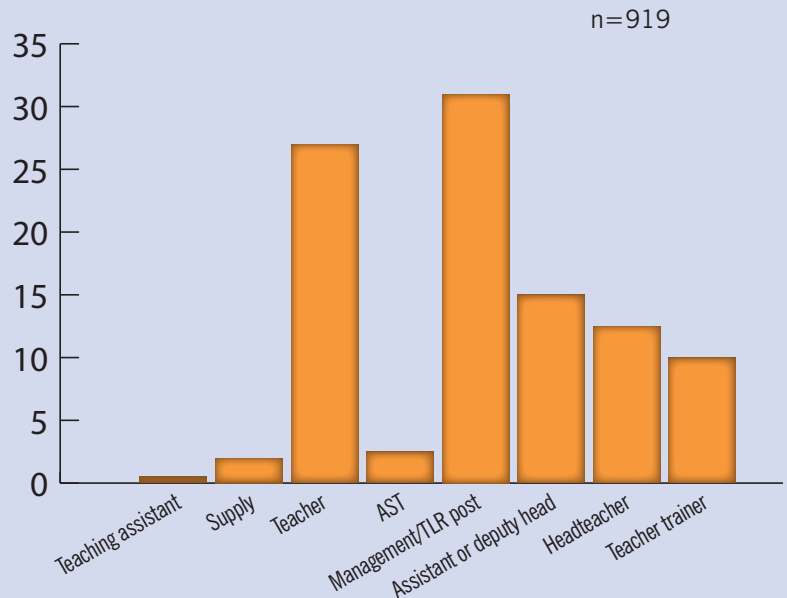ounds, the views and experiences of the wider workforce. For example, based on the most recent national statistics[9] (2009-10), gender proportions in our sample match the national figures. Although our sample appears to lean towards older members of the profession (60% over 45, compared with 41% in the national data), our analysis has taken this into account by considering separately – for some questions – the distribution of responses by professional role. Likewise our data reflects rather more returns from secondary practitioners than would be expected in a stratified sample[10]. This can partially be explained by the greater proportion of posts of responsibility in those schools.

9. A previous study carried out by Everton et al[11] (2002) had a similar number of males (39% and females (60%) responding to the survey. The ages of the respondents were similar too, 1% aged 20-24, 11% aged 25-35, 22% aged 35-44 and 65% over 45 years. The previous survey included 22% of participants who had no postgraduate qualification whereas this survey had a higher percentage of 33%. Everton et al also recorded higher numbers of participants with a diploma – 24% in comparison to 17% of the present sample. The numbers of participants with a higher degree qualification was very similar, with 50% in our sample and 52% in Everton et al's sample.

10. Whilst looking at the differences in teaching experience between the two samples, it was clear to see that we had slightly less experienced participants than Everton et al. Their sample included 63% of respondents with over 20 years of experience in comparison with 44% of our sample. Their sample included a lower percentage of respondents who had been teaching between 10-19 years (22%), with our sample having 31%. 12% of respondents only had between 0-4 years experience in comparison with Everton et al's 6%.

11. When looking at phases that the respondents taught in, there were mainly only primary (46% in this sample and 48% respondents in Everton et al's sample). On the recent survey there was a more even spread through from early years to the learning and skills sector.

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[9] GTCE (2010) *Annual digest of statistics 2009-10. Profiles of registered teachers in England.* London: GTCE
[10] A stratified sample is obtained by taking samples from each sub-group of a population, e.g. age and phase of respondent.
[11] Everton, T., Galton, M. and Pell, T (2002) Educational Research and the Teacher. Research Papers in Education, 17(4), pg 373-401.

To what extent do teachers and their schools currently engage in and/or with research?

Graph 6

Legend:
- 9) Considering the use of research summaries and articles, which one of the following most applies to your school/organisation?
- 10) Considering involvement in carrying out research, which of the following most applies to your school/organisation?

Use of research summaries and articles n=928
Carrying out research n=927

Categories:
- My school/organisation uses research findings to inform many aspects of its work / My school/organisation carries out research to inform many aspects of its work
- My school/organisation encourages its members to use research findings from time to time / My school/organisation has been involved in external research projects but has not undertaken its own research
- My school/organisation has little or no engagement with research findings / My school/organisation has little or no engagement in doing research
- I'm not sure

12. In thinking about engagement in research and/or enquiry almost half of respondents had some experience in doing research oriented CPD in school and nearly 30% indicated they were experienced teacher researchers. However, almost a quarter of all respondents had no experience of doing any research or enquiry.

13. The largest proportion of respondents (40%) indicated that their school/organisation encourages its members to use research findings from time to time. A third of all respondents' schools/organisations use research findings to inform many aspects of its work, whereas 17% of respondents' schools/organisations have little or no engagement with research. 10% did not know whether their school/organisation engaged with research (see graph 6).

14. Over a third of respondents (38%) indicated their school/organisation carries out research to inform many aspects of its work, compared to 23% who said their school/organisation has little or no engagement in doing research. Just under a third (27%) of respondents said their school/organisation has been involved in external research projects but does not undertake its own.

15. Graph 7 looks at the extent to which respondents' schools use existing research findings, compared to how experienced respondents are in carrying out their own research. Unsurprisingly, the majority of those from schools that use research findings to inform many aspects of its work were experienced teacher researchers (54%). A quarter of respondents who were not sure whether their school engages with research findings were more likely to have no experience of doing research themselves (25%). This suggests that in order for teachers to carry out their own research, they need to have seen the benefits of using existing research and evidence in their settings. Half of all respondents who have some experience of doing research oriented CPD in school (51%) came from schools/organisations that encourage its members to use research findings from time to time.

16. Graph 7 shows that where research findings are embedded into practice there is more engagement in research. Where use of research is occasional in school, then teaching professionals tend to engage with others' research. Where there is little use of research taking place in school, what does happen is research by teachers acting independently.

17. Graph 8 looks at the extent to which respondents' schools are involved in conducting research, compared to how respondents are involved in carrying out their own research. Interestingly, 16% of those who come from schools/organisations with little or no engagement with research findings consider themselves to be experienced teacher researchers. This suggests they are acting independently and with little support in using or carrying out research. As you would expect though, a sizeable percentage of respondents (27%) who said they were not sure whether their school uses research had no experience of doing research themselves. A third of respondents (34%) whose school/organisation had little or no engagement with research findings had no experience of doing research or enquiry.

Graph 7 n=929

Y-axis: 100%, 90%, 80%, 70%, 60%, 50%, 40%, 30%, 20%, 10%

Categories:
- I'm not sure
- My school/organisation uses research findings to inform many aspects of its work
- My school/organisation has little or no engagement with research findings
- My school/organisation encourages its members to use research findings from time to time

Legend:
- I am an experienced teacher researcher
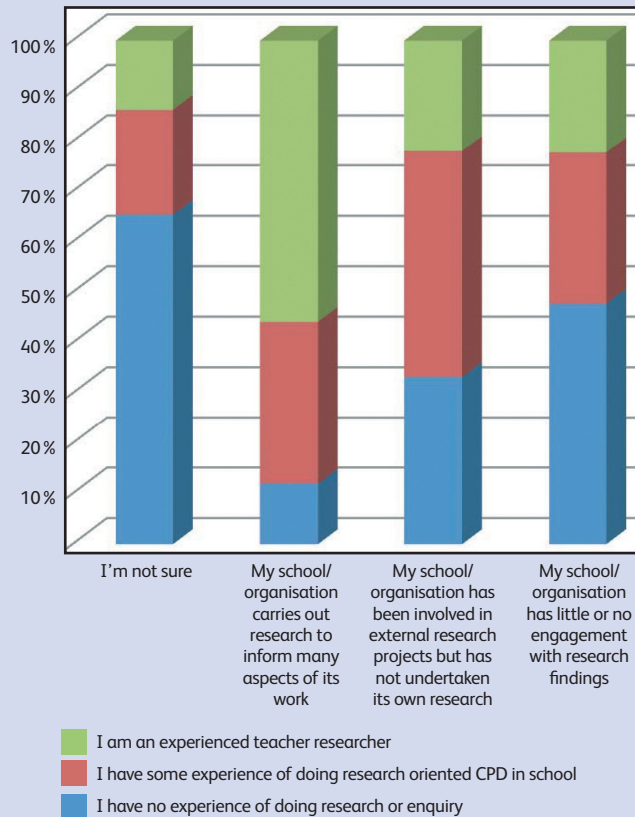- I have some experience of doing research oriented CPD in school
- I have no experience of doing research or enquiry

Graph 8 n=929

Y-axis: 100%, 90%, 80%, 70%, 60%, 50%, 40%, 30%, 20%, 10%

Categories:
- I'm not sure
- My school/organisation carries out research to inform many aspects of its work
- My school/organisation has been involved in external research projects but has not undertaken its own research
- My school/organisation has little or no engagement with research findings

Legend:
- I am an experienced teacher researcher
- I have some experience of doing research oriented CPD in school
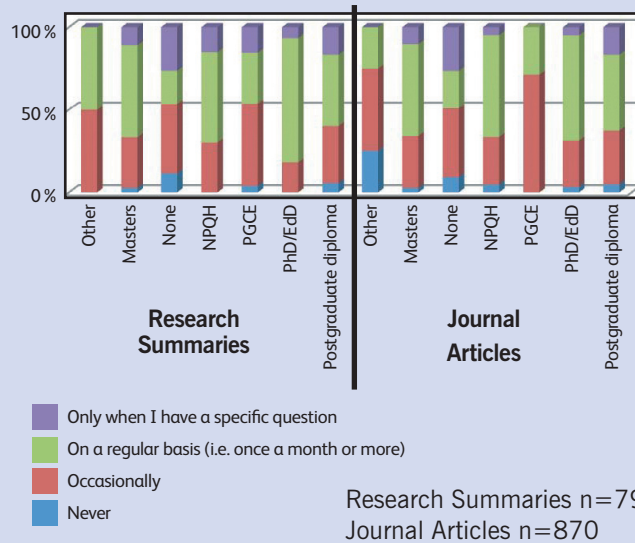- I have no experience of doing research or enquiry

How do teachers currently use research?

18. Nearly 40% of respondents claimed to access research summaries and 43% access journals at least once a month. A similar amount of respondents access research occasionally (39% for research summaries/36% for journal articles). 6% of respondents claimed that they never access research summaries or journal articles.

19. We compared questions 11 and 12 (graph 9) "How often do you access research summaries/ journal articles to read" with the qualifications that the respondents had. 75% of PhD/EdD respondents stated they access research summaries on a regular basis and 64% access journal articles on a regular basis. 62% of respondents with a NPQH primarily access research journals on a regular basis and 55% primarily access research summaries. 56% of respondents with a Masters regularly access both research summaries and research journals. 44% of those with a postgraduate Diploma primarily access research summaries on a regular basis and 46% access journal articles on a regular basis. Interestingly, 72% of Post Graduate Certificate respondents occasionally access journal articles and 50% occasionally access research summaries. This may suggest a need for an emphasis on using research in the postgraduate certificate in education (PGCE) course.

Graph 9

Y-axis: 100%, 50%, 0%

Research Summaries categories: Other, Masters, None, NPQH, PGCE, PhD/EdD, Postgraduate diploma

Journal Articles categories: Other, Masters, None, NPQH, PGCE, PhD/EdD, Postgraduate diploma

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

Research Summaries n=792
Journal Articles n=870

Graph 10
How often do you use the findings from research summaries and journal articles to influence your classroom practice?

n=841

- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

Graph 11
Where do you access research summaries and articles?

n=3528
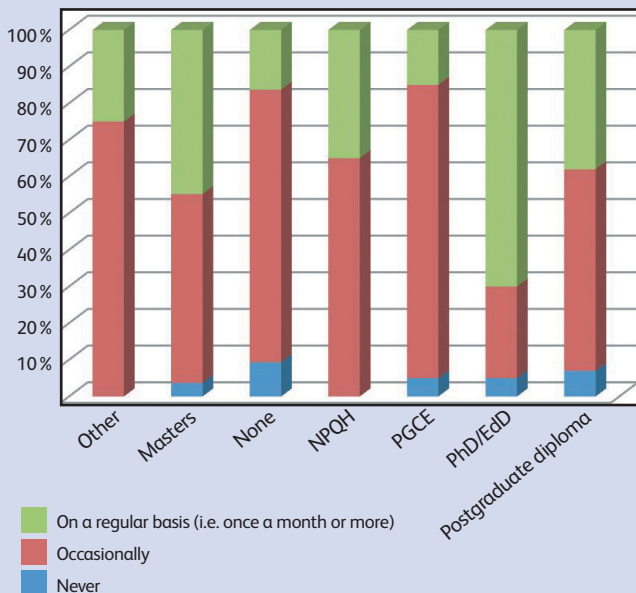
20. Graph 10 shows respondents with a PhD/EdD regularly use the findings from research summaries and journal articles to influence their classroom practice (70%). It can also be seen that all groups do access some research on a regular basis. A majority of teachers with other qualifications most frequently use findings on an occasional basis to influence their classroom practice (75% other Post graduate qualification, 52% Masters, 74% no qualification, 65% NPQH, 80% PGCE, 55% Post Graduate Diploma).

21. In the responses to question 15 "Where do you access research articles and summaries" (graph 11), 18% said "the internet" generically and 15% said official sources (including DFE, Ofsted and TDA). Between 9% and 11% of respondents used journals, newspapers, in-service training and books for research. The least often used source was TV (5%), followed by subject associations (6%). Note that these categories are not mutually exclusive and respondents could choose one or all of them.

22. We looked at respondents' position at school compared to where they access research summaries and journals, but there was no significant difference to report. We then grouped together assistant/deputy head, Headteacher and management/TLR post into a management category and all other positions (teaching assistant, teacher trainer, teacher, supply and AST) into a non-management category and looked to see if there were any differences between these groups. As before there were no major differences, though the fact that there is no variation by position may be significant in that it indicates that the sources people use are equally accessible to all.

23. Question 15a examined the responses of those who selected
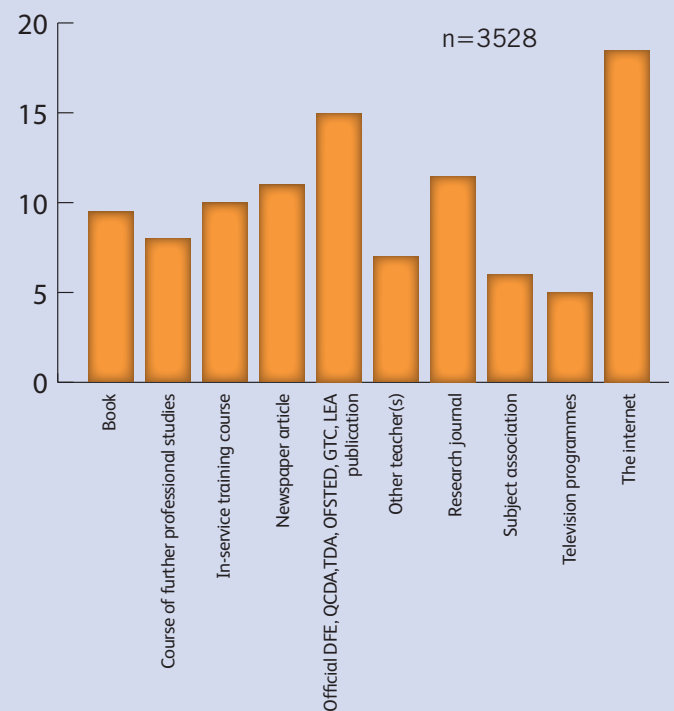
the internet and asked respondents to outline specific examples of web research articles and summaries that they accessed. These free text answers were then grouped into common themes. A table to show the themes and the number of responses in each theme is shown here:

Table 1
Specific examples of web research sources

Theme	Number of responses (n=1095)	Proportion of responses (%)
Government agencies	225	20.5
Other[12]	155	14.2
Search engines	150	13.7
National associations	108	9.9
Publication websites	89	8.1
General research	86	7.9
University websites	57	5.2
Various websites/various databases	54	4.9
Online journals	46	4.2
Subject specific websites	41	3.7
Charity websites	28	2.6
Phase specific websites	18	1.6
Subject associations	15	1.4
Special needs websites	13	1.2
International websites	8	0.7
CPD websites	2	0.2

[12] These are mainly single responses referring to teacher resource websites such as schoolzone.co.uk and tate.org.uk and virtual learning environments. Other websites mentioned in this category don't seem to be related to teaching.

24. From the same free text responses, the answers were re-grouped to show the most frequently accessed research articles and journals and the number of responses:

Table 2
Frequently accessed research articles and journals

Most frequently accessed research articles and journals	Number of responses (n=678[13])	Proportion of responses (%)
TES	82	7.5
LSIS	64	5.8
DfE	61	5.6
Google	52	4.7
University sites	48	4.4
NCSL/National College	47	4.3
Google Scholar	39	3.6
CUREE[14]	29	2.6
Ofsted	28	2.6
TDA	23	2.1
Teachers TV	23	2.1
GTC	19	1.7
Athens	18	1.6
Teachernet	18	1.6
NFER	17	1.6
Library on-line journal searches	17	1.6
Search engines	17	1.6
NIACE	13	1.2
ERIC	11	1.0
IfL	11	1.0
SSAT	11	1.0
BBC	10	0.9
NTRP[15]	10	0.9
TTRB	10	0.9

25. These free text answers were then assigned a one word or short phrase descriptor and are shown in figure 1. The larger and darker the word or phrase in the diagram, the more often it was given as an answer from the respondents. This diagram does not include research articles and journals that were mentioned by less than ten respondents.
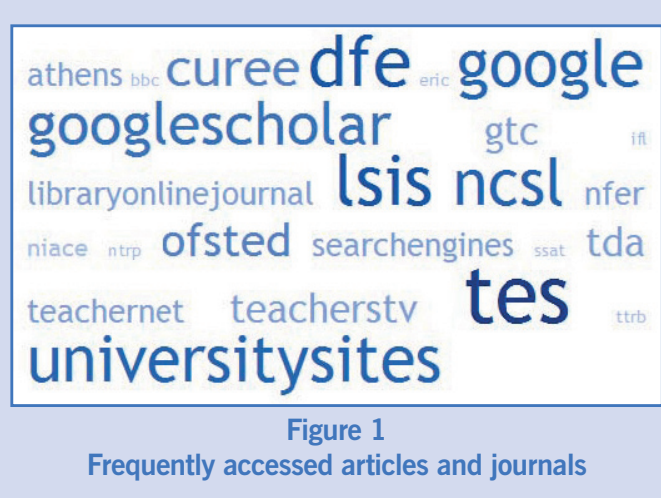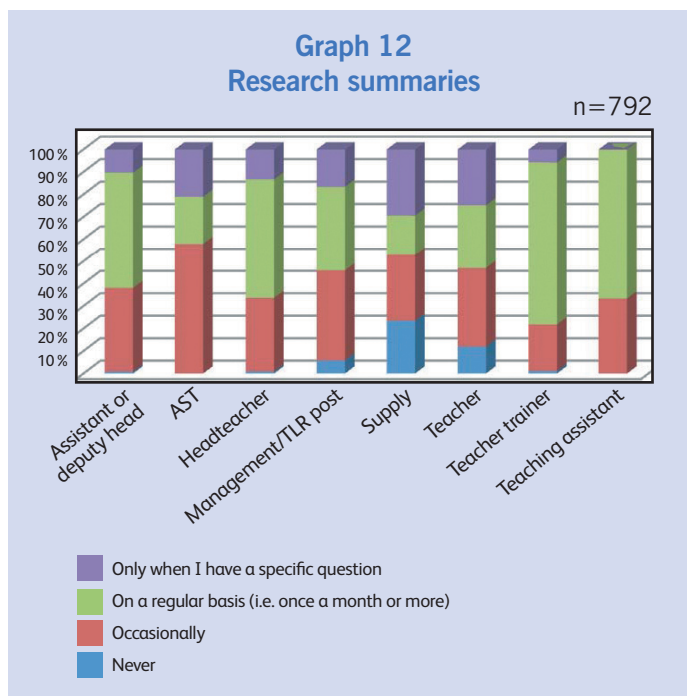

Figure 1
Frequently accessed articles and journals

26. We looked at the extent to which positions the respondents held in school compared with how often they accessed research summaries (graph 12). Assistant/deputy heads (52%), headteachers (53%), teaching assistants (67%) and teacher trainers (72%) were the groups that accessed research summaries on a regular basis. Interestingly, 58% of ASTs, 40% of management/TLR respondents and 35% of teachers claimed to only access research summaries on an occasional basis. 29% of supply teachers reported that they accessed research summaries on an occasional basis or when they have a specific question.
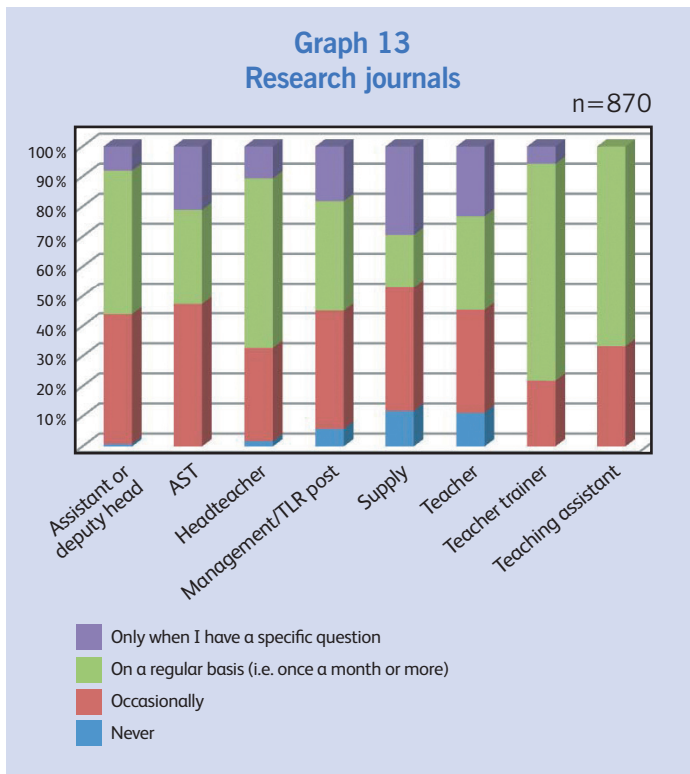

Graph 12
Research summaries

n=792

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

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27. We looked at the extent to which positions the respondents held in school compared with how often they accessed research journals (graph 13). As above, assistant/deputy heads (48%), headteachers (57%), teacher assistants (67%) and teacher trainers (72%) were the groups that accessed research journals on a regular basis. Interestingly, all other groups of professionals – 48% of ASTs, 34% of teachers, 40% of management/TLR respondents and 41% of supply teachers claimed to only access research summaries on an occasional basis.

Graph 14

n=841

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

Graph 13
Research journals

n=870

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

to support CPD or initial teacher education and another 16% also used research on a wider basis to help assist with school development. A very small percentage of respondents (1%) read research for their own interest or to keep up to date.

28. When we made comparisons between positions respondents held in schools and how often they used the findings from research to influence their classroom practice (graph 14), teachers trainers (70%) and teaching assistants (67%) were found to use research to influence their classroom practice regularly. 74% of ASTs, 65% of management/TLR positions, 63% of assistant/deputy heads, 57% of heads, 64% of teachers and 50% of supply teachers occasionally use research to influence their practice.

29. Question 16 asked the respondents to identify why they accessed research (graph 15). Unsurprisingly, 27% accessed research for their own professional development. A further 21% accessed research for ideas for classroom practice. 16% of respondents said that they used research on a wider basis

Graph 15
Why do you access research?

n=2457

30. When we made comparisons between respondents' qualifications and the reasons why they access research (graph 16), most respondents sai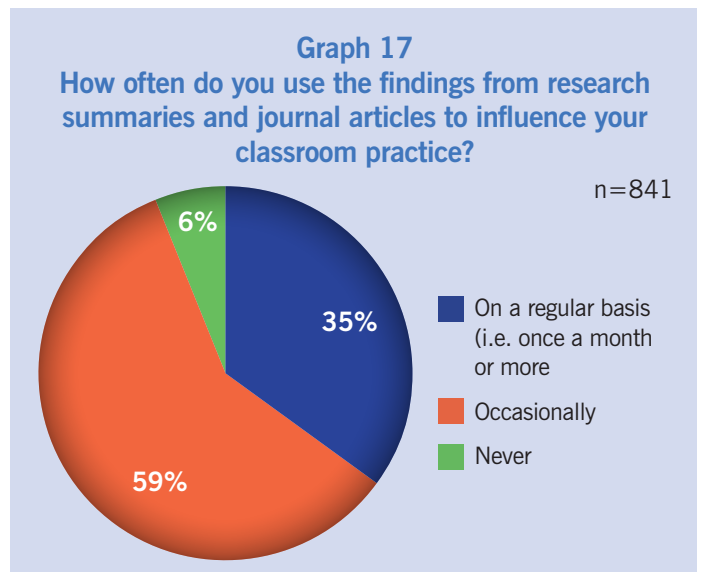d that they primarily accessed research for their own professional development (respondents with: Masters - 28%, no postgraduate qualification - 29%, Post-Graduate Certificate - 31%, Post-Graduate Diploma - 29%, Doctorate -24%). 29% of respondents with an NPQH and 31% of respondents with other post-graduate qualifications primarily accessed research for school development purposes. The second most popular reasons for accessing research tended to be:

- for ideas on classroom practice – 28% of Post Graduate Certificate respondents, 25% of respondents with other qualifications and also for respondents with no postgraduate qualification, 22% with a Post-Graduate Diploma, 20% with a Doctorate and finally 19% of respondents with a Masters;

- to support CPD or initial teacher education – 23% of respondents with a NPQH; and

- for professional development – 25% of respondents with other Post-Graduate qualifications (along with ideas on classroom practice as reported above).

31. In summary, there doesn't seem to be any difference in the reasons for respondents accessing research related to post-graduate qualifications.
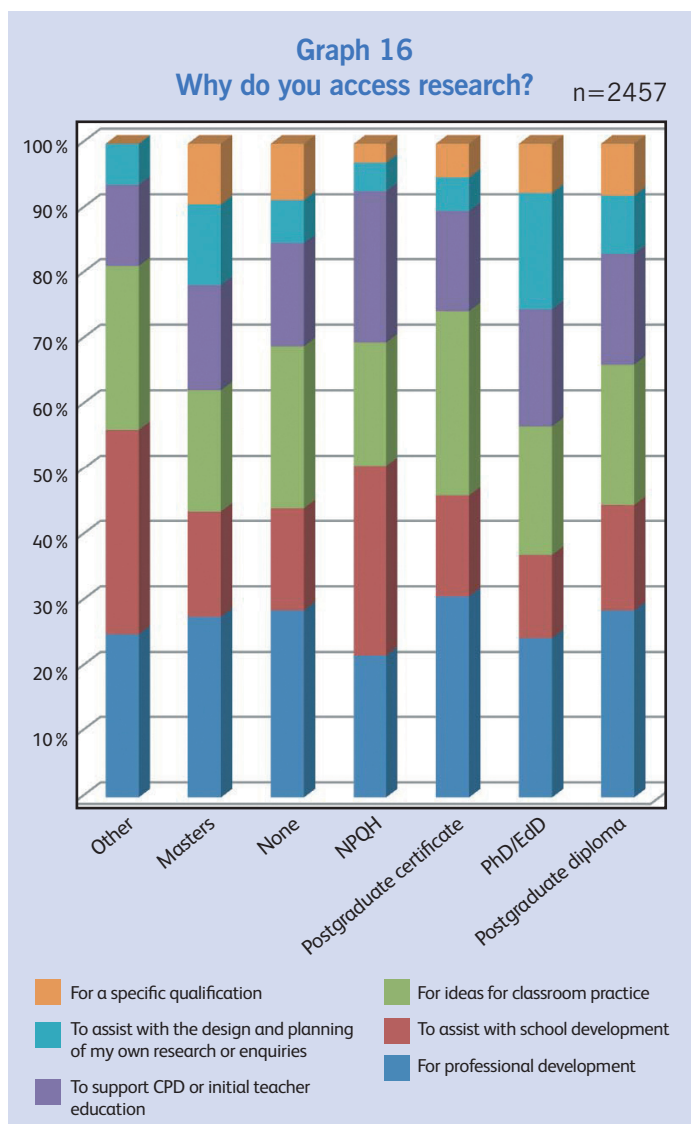
32. Nearly 60% of respondents claimed that they occasionally use the findings (graph 17) from research summaries and journal articles to influence their classroom practice. Only 6% of respondents never use the findings at all. The great majority of respondents accessed research for many practical reasons connected with enhancing their own and colleagues' practice.
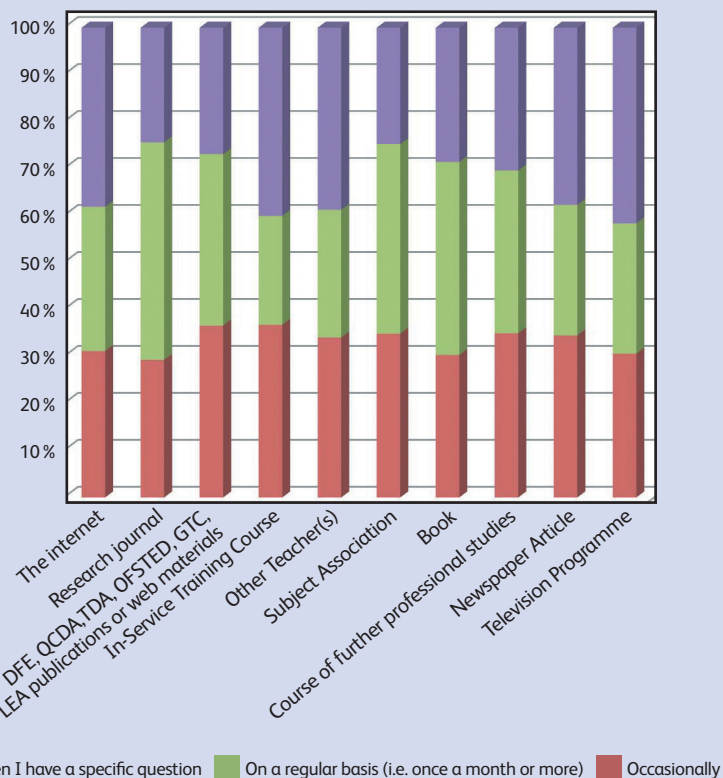
Graph 16
Why do you access research? n=2457

Legend:
- For a specific qualification
- For ideas for classroom practice
- To assist with the design and planning of my own research or enquiries
- To assist with school development
- To support CPD or initial teacher education
- For professional development

Graph 17
How often do you use the findings from research summaries and journal articles to influence your classroom practice? n=841

- 6% Never (green)
- 35% On a regular basis (i.e. once a month or more
- 59% Occasionally

33. We did a comparison to find out where those that engage with research regularly access summaries and journal articles (graph 18). The results reflected the initial analysis, in that the majority of respondents in this group, and all those who don't access research as regularly, primarily use the internet. We also ran another comparison to find out if this was different for those accessing journal articles, but there were no other significant findings to report.

34. We did a comparison to find out if there was any difference in the way research is accessed and used between different phases. Nearly half of respondents that work in primary (46%), secondary (43%) and L&S (48%) access research summaries on a regular basis, whereas the majority of early years practitioners (44%) only do this occasionally. Another comparison was carried out to see if this result was different when accessing journal articles. The results were marginally different, in that this time the majority of early years (46%) and primary (38%) practitioners access journal articles only occasionally, whereas both secondary (44%) and L&S (49%) practitioners access journal articles on a regular basis. We did a comparison to see if the extent to which respondents use research findings to influence their practice varied depending on the phase in which they teach, but no noticeable variations arose.

Graph 18

n=792

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally

Categories: The internet; Research Journal; DFE, QCDA, TDA, OFSTED, GTC, LEA publications or web materials; In-Service Training Course; Other Teacher(s); Subject Association; Book; Course of further professional studies; Newspaper Article; Television Programme

35. Graph 19 shows the results of a comparison between how often teachers access research findings, and what they use research for. The majority of respondents access research summaries and journal articles on a regular basis for all of the reasons given as options in the survey. Therefore the patterns were broadly similar except for when teachers use research to design and plan their own research or enquiries. 69% of teachers regularly used research summaries for this purpose and a slightly smaller percentage of respondents (64%) use journal articles regularly for this purpose.

36. 'Ideas for classroom practice' as a reason for accessing journal articles was fairly evenly spilt between occasionally (39%) and on a regular basis (43%). The gap was marginally bigger for research summaries with 37% accessing them occasionally and 44% on a regular basis. Only a very small minority never access research summaries (6%), or journal articles (5%) for any of the options given.

37. We asked respondents to highlight specific examples of where they have used research to inform their practice. There were 675 free text responses which we have grouped into categories shown in table 3.

Graph 19
How often do you access research summaries/journal articles to read?

Research Summaries   Journal Articles

Legend:
- Only when I have a specific question
- On a regular basis (i.e. once a month or more)
- Occasionally
- Never

Research Summaries n=792
Journal Articles n=870

Categories: For professional development; To assist with school development; For ideas for classroom practice; To support CPD or initial teacher education; To assist with the design and planning of my own research or enquiries; For a specific qualification (repeated for both Research Summaries and Journal Articles)
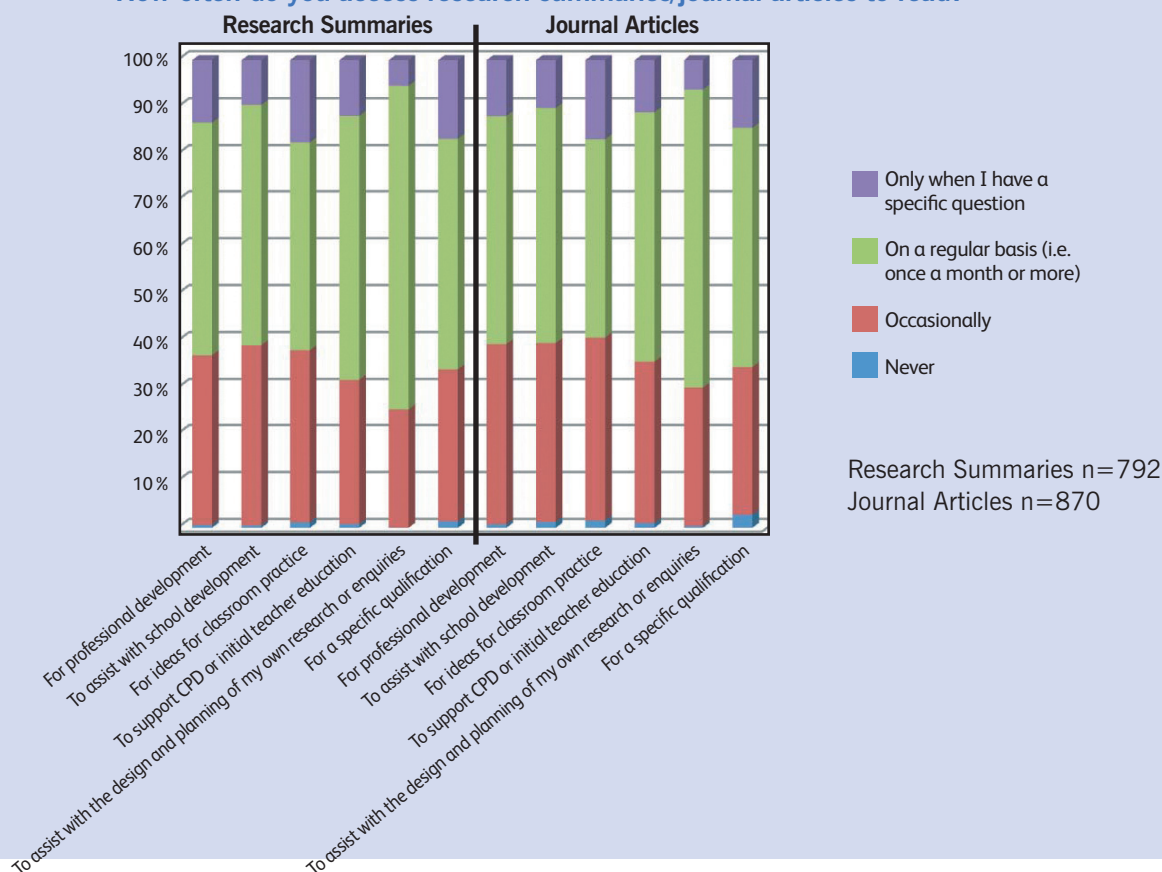
Table 3

Specific examples of where respondents have used research to inform their practice

Specific reasons for using research to inform practice	Number of responses (n=675)	Proportion of responses (%)
Research exploring a specific idea or model	213	31.6
Developing subject practice	86	12.7
CPD/Leadership	64	9.5
A generalised approach to connecting practice to research	62	9.2
To promote specific pedagogic strategies	54	8.0
Assessment for Learning	48	7.1
Classroom management	48	7.1
To tackle particular needs (e.g. dyslexia or ESOL)	33	4.9
Big ideas in society (e.g. sustainability)	28	4.1
To explore the needs of specific groups of pupils	19	2.8
Other	14	2.1
Not engaged in Research	6	0.9

38. The largest percentage of responses (32%) had used research to explore a specific idea or model. A popular reason was research to explore something for masters or post graduate study, or own action research project.

I am currently studying towards both an MA and a Postgraduate Diploma in Education. I have reflected on the use of AFL teaching strategies and examined how to use these to best engage SEN pupils.

Engagement in my own action research led to me reading research on incentives and the effect they have on student motivation.

39. There were also reasons exploring a specific topic or model with the purpose of bringing about change in practice such as research into the use of interactive whiteboards or using music to motivate children.

40. Using research to develop practice in subjects was the second highest with 13% of respondents highlighting examples such as "new ideas for teaching fractions" and "use of synthetic phonics to teach reading".

41. Exploring the needs of specific groups of pupils was the third lowest category of specific reasons for using research with 3% of respondents using research to tackle a specific pupil need. There were 14 responses we were unable to categorise and 1% of respondents were not engaged in research so were unable to give specific examples.

42. We have chosen a few of the responses that were richer in detail, to show what research has been used and how it has been used in the classroom. A Religious Education (RE) teacher talked about their current use of research from Glasgow University, Kings College London and Queens Belfast to inform the development of RE "to make it more focused and to enable pupils to develop a better vocabulary for expression in RE, especially in terms of theological language".

43. A music teacher said that they had adapted the 'Musical Futures[16]' programme in her own classroom. The teacher said:

Musical futures came about following research into musicians and learning styles of professional musicians. I first experimented with my students and then have written a specific scheme of work for Year 9 students following and adapting the model.

44. Another respondent said that they had completed a research project on the best ways for children to assess their own learning:

After returning from a course and trialling and evaluating a number of initiatives with children, I turned my thoughts to which were most suitable for the class and discussed with other teachers how such assessment could be carried out with the younger children. It enabled them [the pupils] to take ownership of their own learning and was thus implemented throughout the school.

45. Another respondent that has been researching all aspects of teaching and learning, personalisation and assessment for learning said:

[16]http://www.musicalfutures.org.uk/

I am keen to develop my own on-going practice. This has involved research projects to inform my own classroom practice and reflection. My school is on a drive to get outstanding and so being in my first year of teaching post NQT I am getting to grips with everything at a much deeper level. I find that research helps me to get 'a handle on my practice'.

46. One teacher also talked about her use of research when thinking about specific children in her class. The teacher said:

I read research to help me to plan for his effective adult support in the classroom. I wanted to know how best to deploy teaching assistants.

47. Other respondents said that they used research to think about classroom management issues such as behaviour management, thinking skills and group work strategies. Illustrations of these are shown below:

I recently used some of Dylan William's behaviour management and assessment for learning strategies such as 'no hands up' and 10 minute exercises to engage the students. Now I am using Bloom's taxonomy and thinking hats to create differentiated work after I was in a CPD session presented by an Advanced Skills Teacher.

After I read research into grouping of pupils and groupwork, I have changed the way I group for literacy and mathematics.

I use Carol Dweck's research to challenge student perceptions of their mindset. I never allow students to think that they cannot achieve without effort. I avoid setting easy work in the belief that challenging minds is important in learning.

Networks

48. Question 24 looked at whether the respondents were involved in a local network. Interestingly 55% had no involvement with a local network. Those who were part of a local network (45%) were more likely to use research to influence their practice (98%), at least on an occasional basis.

Table 4
Type of network

Type of network	Number of responses (n=194)	Proportion of responses (%)
Shared interest/focus	81	41.8
Facilitated by others	33	17.0
Formal association	25	12.8
Role specific	24	12.4
Subject based	18	9.3
Others	13	6.7

49. Those who were in a network were asked to give details of the type of network they belonged to. The free text answers were grouped together into categories which are shown in table 4. Formal associations included LATE (London Association for the Teaching of English), NCETM (National Centre for Excellence in the Teaching of Mathematics) and NATE (National Association for the Teaching of English). Networks facilitated by others included networks with higher education institutes, local authorities and charities such as RSA. Networks involving specific roles tended to be ones such as ASTs (Advanced Skills Teachers), Head teacher networks, SENCO networks (Special Educational Needs Co-Ordinator) and teaching assistant networks. Subject based networks mainly tended to include literacy and numeracy networks. Other subject networks included art, geography, modern foreign languages and design and technology. The others tended to be networks that have stopped because of financial constraints or respondents expressing a wish to join a network.

50. Those 42% of people involved in a shared interest/focus network tended to be in curriculum based networks, 14-19 consortiums, primary or secondary cluster schools, for example.

51. From the responses received, we counted up how many of these were national, regional and local networks. We could only report on the ones which we knew definitely fell into one category or another so n=69. 48% of this sub group of respondents were in local networks, 33% belonged to regional networks and 19% were part of a national network.

52. Out of the 194 responses received, 10% were in more than one network.

Engagement *with* research

53. This section looks at how teachers engage with research, by which we mean reading or using existing research to inform their practice and/or professional development. We asked respondents to state what they felt were the barriers to this and what they felt needed to be in place if teachers are to engage in research findings more.

What are the barriers?

54. Question 17 asked respondents to pick from five available options what they felt were the greatest barriers to teachers engaging with research summaries and articles. They were also able to state any specific barriers under 'other'. Table 5 shows the amount of responses for each available option.

Table 5
Greatest barriers to teachers engaging with research summaries and articles

	Number of responses (n=978)	Proportion of responses (%)
Time	357	36.5
Lack of knowledge of where to find research papers or teacher friendly summaries	239	24.4
Availability of research written for a teacher audience	133	13.6
Lack of support from school leadership	114	11.7
Availability of relevant research	111	11.3
Other	24	2.5

55. Time was by far the greatest barrier identified, with just over 36% of responses. Just over 24% stated that there was a lack of knowledge about where to find research papers or teacher friendly summaries. Nearly 14% felt there was a lack of research that is written for a teacher audience.

56. Other specified responses included: fatigue; a lack of understanding that research can inform and benefit practice (both by the individual and/or the school); and quality and relevance of research.

57. We ran a correlation between question 11, 12 and 17 to find out if those who accessed research on a less regular basis specified different barriers to those who accessed research more regularly. This did not display any surprising results – time was consistently reported as the biggest barrier across all groups.

What needs to change?

58. Question 23 asked respondents what they felt needed to be in place to encourage more teachers to access research in the future. Common themes were identified from the free text responses, into which all answers were grouped. Table 6 below shows the themes and the number of responses for each theme.

Table 6
Factors to encourage more teachers to access other people's research in the future

Theme	Number of responses (n=825)[17]	Proportion of responses (%)
Time	201	24.4
Easier access to research	110	13.3
Funding	64	7.8
Alerts and guidance on accessing research	62	7.5
National changes to school systems	57	6.9
Encouragement and support	54	6.5
Establish a research/ learning culture within school	51	6.2
One stop shop	47	5.7
Evidence of Impact	47	5.7
Teacher friendly research summaries	33	4.0
CPD opportunities	25	3.0
Other[18]	25	3.0
Awareness of the benefits and impact	14	1.7
Collaboration between schools and academic researchers	11	1.3
Free to access	9	1.1
Greater value placed on research by Government	8	1.0
Collaboration between schools	7	0.8

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[17] The number of respondents was less than the number reported as many respondents' answers fitted in to more than one theme.
[18] Responses under 'other' included, for example, 'a dismissal of political correctness', and 'Less research grounded in an individualistic model of learning', or were unrelated to the question.

59. Just over 24% of respondents indicated that teachers needed more time to be able to read research papers and digest the findings.

Time as a team or group to discuss – finding the research alone does not necessarily suggest that it will be used or even applied into practice. Getting ideas and exploring the issues associated to the research may enable practitioners to become less afraid and more comfortable accessing, using and applying their findings.

As with so much in teaching time is the main factor. I have been in the lucky position of having more time than most and have enjoyed doing reading but there are so many different places to access research it takes a lot of sifting through to find what is relevant to you.

60. Easier access to research and alerts or guidance on accessing research was highlighted by 13% and 8% of respondents respectively. Some respondents explained that the latter could be in the form of a newsletter or an online forum. Linked to this was a need for a 'one stop shop' where teachers can find a range of accessible research findings in one place (6%), and research to be written in a practitioner friendly format (4%).

Easily accessible and clearly written research summaries and papers. Time is of the essence and teachers don't have time to wade through theoretical discussion and models. It must be practically applied, have proven benefits to learner performance and be clearly explained.

A centralised front end…An easily navigated structure that can be cross referenced by subject, results, age groups, etc. Evidence of practical applications with successful results.

A support system to enable teachers to be able to access research efficiently. For example, use of the internet workshops to find research, colleagues or buddies who have already completed research and support.

61. Four out of the 47 respondents who highlighted a need for a centralised site for research indicated either previous or currently existing sites they felt were close to meeting this need. Across the sample as a whole the top 5-6 sites for this purpose were TES, LSIS, DfE, University sites, and the National College. For this very small subgroup the top sites highlighted were much more

tailored to specific needs, and included the Teacher Training Resource Bank (TTRB), Janet, EBSCA Summon or discovery, and Web of Science/MIMAS for researchers. It is also important to note that in an earlier question, which asked specifically about internet sites respondents used to access research, these were rarely, if at all, mentioned.

62. Just under 8% felt that more funding would encourage teachers to access research summaries and articles. The majority indicated that this should be used for supply cover; others said that there should be funding for postgraduate courses. One respondent highlighted the way in which HEI systems differ to L&S:

The majority of research which is funded outside of the institution itself takes place within HEIs. This is simply due to HEIs and researchers being more familiar with bidding and accessing funding streams. In order to support the current pressure facing FECs (delivery of HE provision and cuts in funding, administration, etc). FECs and their staff would be in a stronger position if they were more informed about such (funded) research opportunities and invited to take part in those activities that are linked to them.

63. It is important to note that within the responses included under the two themes of 'Encouragement and support' and 'Establish a research/learning culture within school', 53% of respondents specifically mentioned the leadership team needing to have more active involvement. For example:

School leaders need to disseminate information and encourage discussion on issues that come up in research findings. Teachers ought to be encouraged to look into research findings and share their opinions with other staff.

A lot of this is down to encouragement in individual schools and developing a culture of reflective practitioners who access research. My own interest in classroom based research began with a Best Practice Research Scholarship from the DfES and schemes such as this were a great support.

64. Just under 7% of the sample felt that there should be changes in the way school systems work, in order to make research part of the workforce and not an additional extra:

Nationally we are approaching the end of an era of the National Strategies, where teachers have become over reliant on systems and structures and quick fix approaches to teaching. While this is restrictive and disempowering, to many teachers it is very seductive particularly in a high stakes test based profession. Until we can kick start a culture change where teachers can see the value of research and the powerful effect this can have on themselves as individuals, then we will always struggle to

get teachers to access it. We need a national dialogue around learning that engages school leaders in embracing research and risk taking as an integral part of school CPD not asan interesting add on.

The establishment of a culture of 'evidence based practice' whereby teachers are trusted to develop their individual and whole school practice through effective CPD and leadership support. Having moved from NHS management to education, I was extremely surprised at the outdated approach whereby changes are imposed by school leaders with no mention of evidence to support their ideas. When I have considered aspects of teaching which seem to lack research, I have been unable to gain any knowledge of where to apply for research grants etc.

65. Nearly 6% of responses indicated a need to provide teachers with more information on how using research can impact on their practice, and more importantly, their learners' outcomes:

A greater understanding and awareness of how, by accessing research as a teacher, you can significantly improve your own practice. I think that if more teachers experienced the value of research and contextualised into their own classroom, they would be more likely to see the relevance and therefore access and implement it more.

Showing how it can improve classroom practice and pupil outcomes. Continue to provide frameworks like the TLA stages to give teachers easy to follow, basically fool proof writing scaffolds.

66. An additional point that arose from the data is the difference between how the Schools sector and the Learning and Skills Sector are involved in research. A couple of people commented that there is a lot of research available that focuses on schools and HE, but the same research is not available for those in L&S, which results in those practitioners having to "read between the lines". Another respondent commented:

Further education colleges and their staff are more often than not ostracized from both sides of the teaching community due to the very nature of their student cohort. Representation within research bodies and invitation to participate in various research activities do not enable the development of research culture as found in other areas of education.

Engagement *in* research

67. This section looks at how teachers engage in research, that is, carrying out their own research to develop their learning and improve practice. We asked respondents what they felt the barriers were and also their opinion on how teachers can be encouraged to do more classroom enquiry in the future.

What are the barriers?

68. Question 18 asked respondents to state which three of five indicated options were the greatest barriers to teachers carrying out their own research. There was also an 'other' option to allow for more specific responses. Table 7 shows the number of responses for each option.

69. Unsurprisingly, the majority of respondents cited time as the biggest barrier to engaging in research (32%). The second highest answer was lack of funding for teachers to carry out research projects at 25%.

70. 14% of respondents felt that they had a lack of knowledge of where to find funding opportunities. A further 10% indicated that they didn't have enough access to specialist support.

71. Other responses included teachers trying to maintain a work/life balance, suggesting a struggle to cope with mounting

Table 7
Greatest barriers to teachers carrying out research

Barrier	Number of responses (n=1080)	Proportion of responses (%)
Time	347	32.1
Lack of funding for teachers to carry out research projects	266	24.6
Lack of knowledge of where to find funding	148	13.7
Lack of support from school leadership	120	11.1
Access to specialist support	104	9.6
Lack of knowledge of where to find research papers or teacher friendly summaries	86	8.0
Other	9	0.8

pressures on their time; and a few felt that engaging in research is not relevant due to the pressure of accountability and focus on attainment targets in school.

Table 8
What needs to be in place to encourage more teachers to carry out research?

Theme	Number of responses (n=1175)[19]	Proportion of responses (%)
Time	286	24.4
Funding	233	19.9
Support/encouragement from leadership team	87	7.4
More information on the practical benefits of research/evidence of impact on learners	63	5.4
Establish a research culture within school	57	4.9
Specialist advice and support	54	4.6
More collaboration between schools, LA's and HEIs[20]	36	3.1
Other[21]	36	3.0
A requirement of CPD	32	2.7
Recognition in the sector that it's valuable	30	2.6
Professional research communities (within and between schools, locally, nationally, internationally)	25	2.1
Training on research design/methods	24	2.0
Recognition of achievements in research activity (locally, regionally or nationally)	24	2.0
Opportunities to publish research findings	24	2.0
Advice and support from colleagues (e.g. as buddies/mentors)	24	2.0
Opportunities to share best practice and reflect with colleagues	22	1.9
Incentives/rewards for teachers	22	1.9
Assessment and/or accreditation of research activity (e.g. towards a masters qualification)	21	1.8
Practical resources/tools	20	1.7
Free access to practitioner friendly research	20	1.7
Opportunities to share research findings in school or network	15	1.3
Information about research projects/opportunities	15	1.3
Paid study leave/sabbatical	14	1.2
A requirement of teaching qualification	10	0.9
Support from clusters of schools	8	0.7
Information about research at INSET	7	0.6

Table 9
Overview of free text responses

Theme	Number of responses (n=1175)	Proportion of responses (%)
Time and funding	533	45.5
Support	233	19.8
Incentives	136	11.6
Research/learning community	104	8.9
Information	78	6.7
Access and tools	47	4.0
Requirement of teaching	42	3.6
Other	36	3.0

[19] The number of respondents was less than the number reported as many respondents' answers fitted in to more than one theme.
[20] One respondent stated that CAMStar is a strong example of this – University of Cambridge working with 15 schools.
[21] Responses included under 'other' included, for example, 'less emphasis on league tables', and 'use young enthusiastic teachers', or were unrelated to the question.

72. We compared the results of question 8 against question 18 to find out if those with varying levels of experience in conducting research had different perceptions of barriers. On the whole the results were similar for all three groups of respondents, but there were a couple of differences worth noting. Those with no experience of doing research (19%) were more likely to state 'lack of knowledge of where to find funding' than those with experience (14%). But those with experience in carrying out research (15%) more frequently stated 'lack of support from school leadership' as a barrier (compared to 9% of those with no experience).

What needs to change?

73. Question 23 asked respondents what they felt needed to be in place to encourage more teachers to carry out research in the future. In order to analyse the free text responses we grouped all answers under categories, as shown in table 8.

74. To enable an easier overview of the responses to this question, we have regrouped the categories listed in table 7 into a list of seven common themes, and 'other'. The results of this can be seen in table 9.

75. Needing more time to carry out research was, unsurprisingly, the most popular answer with just over 24% of all responses. A few respondents felt that giving teachers timetabled time out of classes would mean undertaking research was less likely to be "ignored or neglected", as it would hold more importance to them and the school.

Time within the timetable to actively encourage teachers to pursue their own research interests. Especially with extra-curricular commitments, I feel that I have no time to focus on my own development other than writing ideas down in my planner on an ad hoc basis should I be inspired during a lesson.

76. Time was also noted as crucial for those working in the learning and skills sector:

In L&S, there is no assumption that research will be carried out beyond CPD, so there is no resource (time or money) for it. Different workload patterns would need to be created if L&S teachers were to find the time to research. They could do primary research in the classroom, but the constraints of the curriculum and contact time mean people don't want to take risks.

77. Funding was almost as high a priority for respondents (nearly 20%). It should be noted that requests for time and funding were linked, in that many respondents specified funding for supply cover to enable them to have time out of the classroom for conducting their own research. We have also included under this category responses regarding advice on where and how to gain funding.

Funding which goes directly to the school for the specific purpose of freeing up the time and training of teachers so that they can be true practitioner researchers, having an impact on their own context.

78. The third highest response at 7% was gaining support from the senior leadership or management team in school, including Headteachers. Linked to this was the identified need for a research culture in school (5%), so that there is "recognition of the value that [research] can bring to teaching and learning".

Leadership that encourages teachers to engage in research that is then shared with whole staff and reflection as part of good practice.

More support from SLT including both senior and middle management/line managers recognising the research the teacher has conducted and making this relevant – giving it a higher profile by allowing that research teacher to give a brief talk/presentation to their department or whole school about their ideas.

79. The data also showed how some teachers value time to collaborate and reflect with fellow colleagues about shared interests (7%). Similar to this was the need for a "culture of learning" in and across local schools (2%)

Performance management should include a research element and staff meetings should always have a 'share best practice' item. Also schools should plan regular 'TeachMeet' style staff meetings where staff present their findings so far. Government should introduce a simple, flexible, cost effective post graduate qualification where teachers can design their own programme and 'credits' can be taken with them as they move from school to school. It must be possible for groups of staff to work together on a project and gain credits for doing so.

A research champion in every school to encourage and motivate teachers to use research. Development of a critical mass of research engaged teachers.

Collaborative networks of teachers both within and amongst organisations so that if you have a question, difficulty or issue it can be discussed, researched and reflected upon in an open and supportive environment with time and funding to allow it all to happen.

80. Over 5% of respondents also identified the need for more information on the practical uses and benefits of engaging in research. Being able to see evidence of impact on pupils was clearly an important feature. This may highlight a need to provide in school CPD that explains how research can be undertaken by teachers and how previous teacher led projects have benefited their own and their pupils' learning.

Features and benefits need to be sold to the teachers to let them know how important it is to their CPD and development of learners

There needs to a be a clear link between the research outcomes and the practical application for teachers and managers

81. Another point that came across was a need for teachers to know that their research would be valued to make them feel that the extra work would be worth it (12% as stated in table 9). This ranged from monetary incentives, to sharing their findings in "an arena which is peer recognised", to recognition through accreditation or being able to formally publish their work.

If teachers feel that their findings or experiences were to be valued then they are more likely to participate

There should be positive benefits to carrying out research – whether these benefits are financial, time allocation, social or CPD orientated. There is a desperate need for schools to look at what they are doing and develop practice rather than carrying out CPD tick box exercises

It would be useful if the DFE gave a higher profile…to the importance of research in schools and especially that which is carried out by teacher researchers

82. Less than 1% thought that making practitioner enquiry a requirement of the teaching profession would be beneficial, and a slightly higher number (3%) felt that it should be an essential part of CPD. On a similar note, 2% felt that more training was needed on research design and methodology, including providing frameworks and tools that teachers apply to their research. Respondents also stated that CPD courses should help to motivate and inspire teachers to want to learn more.

It has to be a priority in school SDIPs that teachers should engage in active research, and this should carry reward and prestige; it should be an essential part of teacher development.

Embedded into job role/CPD so it becomes 'normal' for teacher research to be carried out rather than restricted to activities linked to a specific qualification.

83. A few respondents mentioned specific programmes or agencies that were effective in supporting teacher engagement in research that are worth noting. These included:

- "MTL should continue" (stated twice)
- "TLA good but schools are reluctant to pay"
- TLA was an "excellent support mechanism for those engaging in research for the first time. The different levels of TLA provide good support"
- "NCETM funded projects with support for teachers"
- "Dedicated time and easily identifiable structures and courses such as Teacher as a Researcher run by the IOE"
- "The GTC model was the best one: a real shame it has been pulled"

Comparison between engagement in research and engagement with research

84. This section explores the differences and similarities between responses concerning accessing and using others' research to influence learning, and conducting ones own research to influence learning.

85. With regards to the barriers teachers face when engaging in or with research (Table 10), time came top in both (32% and 36% respectively). Lack of knowledge of where to find research papers or teacher friendly summaries was a bigger barrier for those using existing research rather than for conducting their own research, as might be expected. Lack of support from school leadership was mentioned by nearly the same level of response for both (approximately 11%). This may well be linked to the other barriers stated, in that it could be showing how important it is for school leadership teams to provide teachers with the time, knowledge and support to use research and evidence in their practice.
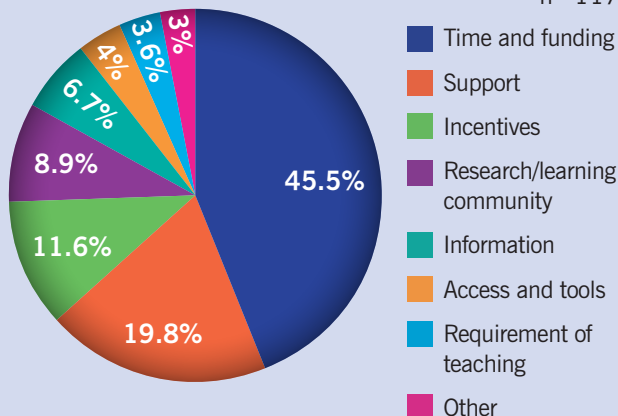
Table 10
Comparison of barriers

	Conducting own research (proportion of responses %)	Accessing research (proportion of responses %)
Time	32.1	36.5
Lack of support from school leadership	11.1	11.7
Lack of knowledge of where to find research papers or teacher friendly summaries	8.0	24.4

86. To enable a comparison between responses to questions 22 and 23[22] we amalgamated the common themes identified, using the same headings for both where possible. This was managed for all but two themes. These were 'Requirement of teaching' and 'National changes to school systems'. The results of this can be seen in graphs 20 and 21.

[22]Q22 – What do you feel needs to be in place to encourage more teachers to access research in the future?
Q23 – What do you feel needs to be in place to encourage more teachers to carry out research in the future?

Graph 20
What do you feel needs to be in place to encourage more teachers to carry out research in the future?

n=1175

- Time and funding — 45.5%
- Support — 19.8%
- Incentives — 11.6%
- Research/learning community — 8.9%
- Information — 6.7%
- Access and tools — 4%
- Requirement of teaching — 3.6%
- Other — 3%

Graph 21
What do you feel needs to be in place to encourage more teachers to *access* research in the future?

n=825

- Time and funding — 32.2%
- Access and tools — 31.6%
- Support — 10.8%
- National changes to school systems — 7.9%
- Information — 7.4%
- Research/learning community — 7%
- Other — 3%

87. Getting support was considered a higher priority for those carrying out their own research (20%), compared with those using existing research findings (11%). The most notable difference was related to incentives – this was the third most common theme for encouraging practitioners to conduct their own research; whereas no respondents indicated incentives would be an encouragement to access existing research findings.

88. Respondents indicated that getting access and tools (including free access to practitioner friendly summaries, a 'one stop shop' for research, and guidance on accessing research) was much more important for encouraging teachers to use existing research (32%) than to conducting their own research (4%). It should be noted that responses under this theme for Question 23 (carrying out research) also included access to practical tools and frameworks.

89. Understandably, it also appeared to be slightly more important for those conducting their own research to have access
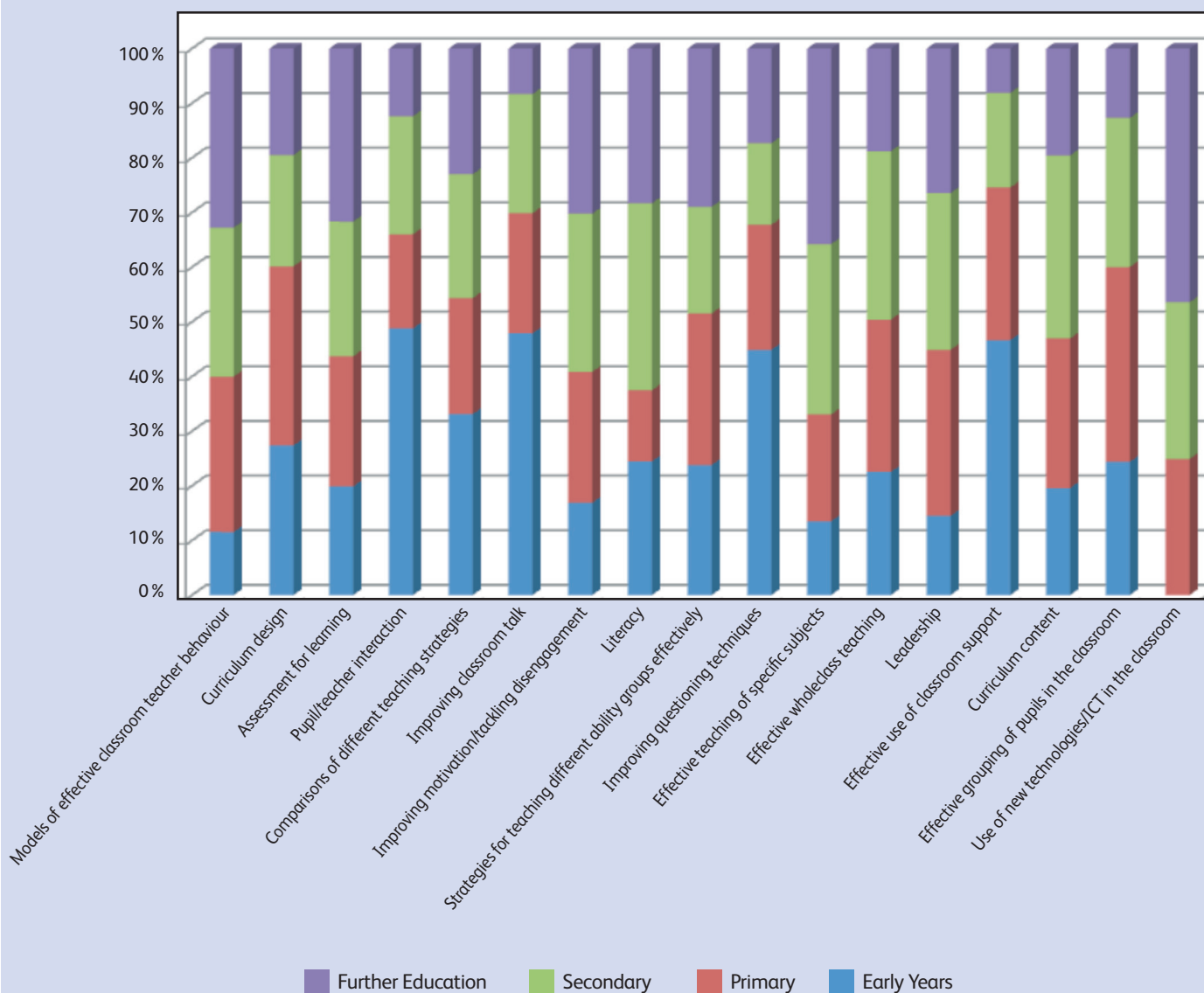
to a research/learning community in which they can share and reflect on their work with colleagues. This theme came 4th in the list at just under 9%, and 6th in the list for accessing research (7%).

Looking to the future

90. In this section we look at how educational research should be approached in the future. We explore which educational issues are priorities for each phase and if different types of practitioners have differing priorities. We also look at which subject specific contexts practitioners might be looking to apply future research knowledge, and finally explore the specific features that practitioners want from research summaries.
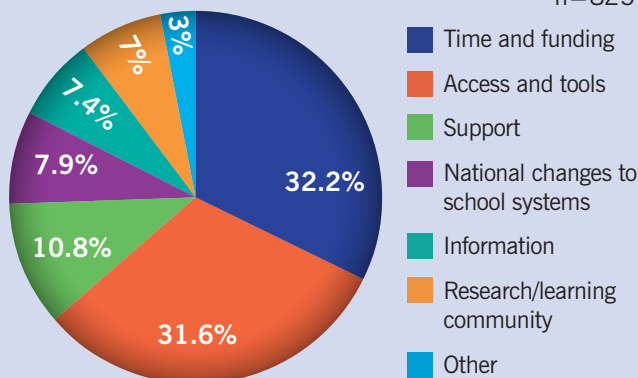
91. In question 19 we asked respondents to pick from 21 available answers which three educational issues they thought should be the priorities for research in the future:

Table 13
Which three educational issues do you think should be the priorities for research in the future?

Educational issue	Number of responses (n=1147)	Proportion of responses (%)
Improving motivation/tackling disengagement	137	11.9
Strategies for teaching different ability groups effectively	113	9.9
Use of new technologies/ICT in the classroom	85	7.4
Comparisons of different teaching strategies	80	7
Curriculum design	76	6.6
Effective teaching of specific subjects	73	6.4
Assessment for learning	69	6.0
Models of effective classroom teacher behaviour	67	5.8
Curriculum content	47	4.1
Effective whole class teaching	46	4.0
Pupil/teacher interaction	44	3.8
Leadership	40	3.5
Improving classroom talk	39	3.4
Effective use of classroom support	36	3.1
Literacy	34	3
Improving questioning techniques	32	2.8
Effective grouping of pupils in the classroom	24	2.0
International learning	21	1.8
Transition	20	1.7
Numeracy	19	1.7
Gender	5	0.4
Other	40	3.5

Graph 22
Which three educational issues do you think should be the priorities for research in the future?

n=1147

Legend: Further Education | Secondary | Primary | Early Years

We also included an 'other' option to enable more specific responses. The top three responses to this question were as follows: Improving motivation/tackling disengagement (12%); Strategies for teaching different ability groups effectively (10%) and Use of new technologies/ICT in the classroom (7%). The lowest priorities for respondents were Transition (2%); Numeracy (2%) and Gender (0.4%). 4% of respondents indicated 'other' and these included issues such as 'learners with learning difficulties and or disabilities/SEN', 'mentoring and coaching' and 'the effects of disruptive pupils'.

92. Graph 22 looks at the educational priorities of respondents in comparison with their phase of education. In keeping with the overall number and proportion of responses above, primary,

secondary and L&S phases all had the same top two priorities: 'Improving motivation/tackling disengagement' (12%, 15% and 15% respectively) and 'Strategies for teaching different ability groups effectively' (12%, 8% and 11% respectively). Early years respondents were most interested in 'Comparisons of different teaching strategies' (12%).

93. For secondary and L&S phases the lowest priority was 'effective grouping of pupils in the classroom' (3% and 1% respectively). For early years the lowest priority with no responses at all was 'Use of new technologies/ICT in the classroom', although this came third in the overall list of priorities, and was the third highest priority for L&S (11%). Leadership was the second lowest priority for both early years and primary phases (2% and
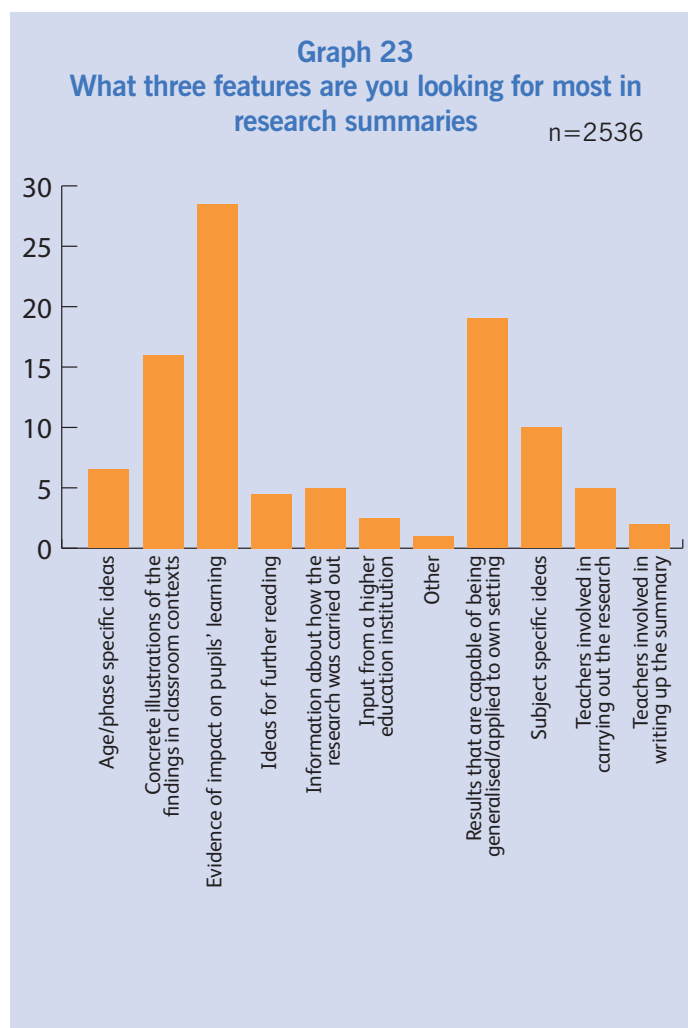
4% respectively), with 'Literacy' being the lowest priority for primary (1%).

94. We asked respondents to pick from a predetermined list which subject specific contexts they might want to apply any future research knowledge. The results of this can be seen below in table 14. The top three answers to this question had only a 1% difference. English was the most popular subject with 11%, literacy second with 10% and mathematics third with 10%. Numeracy received the fifth most responses (7%). RE, drama and PE had the fewest responses with 3%, 3% and 2% respectively. Respondents were also able to select 'other' and indicate the subject with which they might be looking to apply research knowledge in the future. 8% of respondents selected 'other', of this 3% were not subject specific and so were excluded from the final count. The remaining 5% included a number of vocational topics such as health and social care and hospitality, as well as early years, ESOL and classics.

95. Question 21 asked respondents to pick from 10 options which three features they are looking for most in research summaries (graph 23). There was also an 'other' option to enable alternative responses. The three features respondents were most looking for in research summaries were: 'Evidence of impact of pupils' learning' (29%); 'Results that are capable of being generalised/applied to own setting' (19%) and 'Concrete illustrations of the findings in classroom contexts' (17%). The features least of interest were 'other' (1%); 'Teachers involved in writing up the summary' (2%) and 'Input from a Higher Education Institution' (3%). 'Other' features included 'specific outcomes for different sectors', 'relevance to everyday classroom teaching' and 'political context'.

Table 14
In which subject specific contexts might you be looking to apply any future research knowledge?

Subject	Number of responses (n=1890)	Proportion of responses (%)
English	198	10.5
Literacy	188	9.9
Mathematics	184	9.7
ICT	151	8.0
Science	144	7.
Numeracy	134	7.1
PSHE	95	5.0
Social Sciences	91	4.8
Technology	89	4.7
Citizenship	78	4.1
MFL	68	3.6
Art and Design	64	3.4
Geography	63	3.3
History	62	3.3
Music	56	3.0
RE	48	2.5
Drama	47	2.5
PE	45	2.4
Other	85	4.5

Graph 23
What three features are you looking for most in research summaries
n=2536

Conclusions and discussion

Practitioner engagement in and with research is known to lead to multiple benefits not only for school staff themselves but also their pupils. As Bell et al[23] found in their systematic review of evidence about teacher engagement in and with research, positive outcomes include improvements in pupils' knowledge and skills, behaviour and attitude to learning and the benefits for teachers relate to their practice, knowledge and understanding and motivation to learn and to experiment with new approaches.

In this context, many of the findings of the survey are very positive. Over 40% of respondents reported regular engagement with research; a further 50% engaged with research occasionally or when they had a particular issue. Only 6% of practitioners reported that they do not engage with research at all. Comparing these figures with the findings of the previous similar survey in 2002[24] shows that the percentage of the 'research-free' practitioners interested enough in their development to complete such a questionnaire has almost halved over the past 10 years.

Practitioners using educational research on a regular or occasional basis came from all phases, levels of qualification and experience and represented various job roles, from teaching assistants to senior and management staff.

The most common barrier to engagement in and with research, identified by the survey respondents, was time, which is consistent with the findings of other studies[25]. Lack of support from the school leadership was mentioned in relation to both engagement in and with research. About 50% of practitioners indicated that their schools were not engaging with research; nonetheless they saw themselves as having some or a lot of research experience. There appears to be a certain degree of discrepancy between individual practitioners' high levels of engagement with educational research and relatively low levels of that happening at a whole school level, so it is possible to conclude that there is a lot of untapped potential related to engagement in and with research at a school level. Over 20% of respondents referred to their school as 'research-free', i.e. having little or no engagement in research. These schools might be missing out on some major forms of work-based professional development (such as experimentation, observation, modelling,

etc) that are known to be linked with positive outcomes for both staff and pupils[26].

Interestingly, practitioners engaging with other people's research seldom did it for a specific qualification. Professional development and ideas for using in the classroom were the two most frequently mentioned reasons for engaging with research. It is perhaps then not surprising that when asked about the features they were looking for in research and research summaries, the respondents selected 'evidence of impact on pupils' learning', 'capable of being applied to own context' and 'concrete illustrations' as the three most important features. The analysis of the obstacles to teacher engagement with research suggests that many practitioners were struggling to find research with these characteristics, as over 13% of respondents identified a lack of studies written for a teacher audience as one of the main barriers preventing them from engaging with research.

Limited access to specialist support was specifically highlighted as a barrier by the school practitioners who undertake research and enquiries. Given the importance of specialist input in staff professional development[27] and the likelihood of reductions in resources, school leaders might need further support in helping them identify how they could ensure their settings can access specialist expertise, which research about effective CPD suggests can come from research resources as well as from people, in an efficient and sustainable way.

Schools supporting each other and exchanging different areas of expertise might be one of the possible solutions. Yet, if we were to use practitioners' participation in networks (a peer support mechanism), as a proxy for the school-to-school support, it is clear that more work needs to be done in this area in order for it to become an accessible and reliable source of expertise for school colleagues. The survey findings highlight that only 45% of respondents are currently involved in networking with colleagues.

The survey respondents highlighted a range of sources of teaching and learning knowledge and expertise that was available to them as ways of accessing existing research. The

[23]Bell, M., Cordingley, P., Isham., C. & Davis., R. (2010) *Report of Professional Practitioner Use of Research Review: Practitioner engagement in and/or with research.* Coventry: CUREE, GTCE, LSIS & NTRP. Available at: http://www.curee-paccts.com/node/2303.

[24]Everton, T., Galton, M. & Pell, T. (2002) Educational research and the teacher in *Research Papers in Education*, 17 (4), pp 373 – 401.

[25]See footnote 23.

[26]Cordingley, P., Bell, M., Rundell, B. & Evans, D. (2003) The impact of collaborative CPD on classroom teaching and learning. In: *Research Evidence in Education Library.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=133&language=en-US.

[27]Cordingley, P., Bell, M., Isham, C., Evans, D. & Firth, A. (2007) What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers? Report. In: Research Evidence in Education Library. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=2275.

internet, research journals and official websites, such as DFE, TDA, Ofsted, etc, were mentioned most frequently. Whereas they might well explain the similarities in ways of accessing research between staff at different levels, i.e. equality of access, these 'ways into' research are each associated with certain challenges. The variability of quality of some of the resources surfaced by the internet and the lack of signposting of such quality except in sites specifically built for teachers, the cost of research journals and rapid disappearance of research and resources from many official websites, to name but a few. For a very small proportion (8%) of the teachers in this survey, the creation of a single portal to streamline access represents an answer, but for the great majority tailoring research summaries to teachers' needs and interests, quality assurance, clarity and illustration are key issues to be tackled in fulfilling the promise in the white paper[28] to make research accessible to teachers.

Overall, the survey findings and the numbers and range of participants highlight that, despite all obstacles and challenges, significant numbers of school leaders and practitioners are eager to be more research-engaged in order to enhance their practice, knowledge and skills, develop their schools and ultimately offer better learning experiences to children and young people; and that there has been a series of sustained increases in the numbers in this position over the ten year life of the Panel.

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Lou Harrison, Heather Primary School
Paul Talan, South Thames College
Sue Dobbing, Lauriston School

[28]Department for Education (2010) *The Importance of Teaching - The Schools White Paper 2010*. CM 7980. London: Department for Education. Available at: https://www.education.gov.uk/publications/standard/publicationdetail/page1/CM % 207980.