

# **Integrating Theory and Practice: Teachers' Perspectives on Educational Research.**

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## **Introduction**

In the past few years a great deal of discussion has taken place in the UK about the importance of educational research, particularly its value to policy makers and its usefulness to teachers. One of the key issues in this debate has been the extent to which the purposes of carrying out research in education should be chiefly directed towards school improvement in general and, in particular, towards facilitating effective classroom practice. Those that think it should, such as David Hargreaves (1996), believe that education, like medicine, should be an 'evidenced-based' profession in which research findings are used by teachers in ways which take into account the varying contexts in which different schools operate. This view accords with that put forward by Nate Gage (1985) in the United States and Brian Simon (1994) in the UK who both interpret pedagogy as *'the science of the art of teaching'* rather than either a science (Reynolds 1998) or an Art (Woods 1996) per se. It is a science in the sense that there are principles derived from theoretical considerations (mainly psychological) and from empirical evidence. These principles identify which methods are most effective in bringing about certain specified learning outcomes. But pedagogy is also an art in that these general principles have to be applied to different individual pupils in contrasting school and classroom environments. Thus an effective pedagogy requires that educational theory needs to be integrated with teacher's *craft knowledge*, that is knowledge of *what works in practice*.

To address this some of the above issues a questionnaire, based on an earlier TTA version<sup>1</sup>, was constructed and distributed during October and November 1998 to all schools receiving the CSCS and NAPE newsletter. The method of distribution of the questionnaire involved a number of unknowns so it is difficult to estimate the degree of response. In retrospect, it appears that the task was generally left to the senior management since of the 302 returns, 177 (58.6%) came from principals and a further 76 (25.2%) from deputy principals. 92 returns came from primary schools.

Not surprisingly, given the number of principals and deputy principals returning the questionnaires, 59.2% of respondents had a higher degree. Only 14.6% had gained no further qualification since they graduated as teachers. It would seem that interest in using research had been stimulated through further study. There were slightly more men (53.6%) than there were women in the sample. 76.5% of respondents had at least twenty years teaching experience and 73.8% of the teachers were over 45 years of age.

### **The Impact of Educational Research**

Some 96% of the sample reported that they had seriously considered educational research findings since first qualifying as teachers. Of the small proportion that responded negatively to this question there was little information to suggest that this attitude represented the views of a particular group other than that slightly more of them were female. Virtually all those teachers with qualifications and more years of teaching experience claimed to have given serious consideration to research. Inexperienced assistant teachers appeared to have less use for research, although the small numbers involved makes it impossible to draw firm conclusions on this point. Further data involving recent entrants to the profession is now being collected and analysed.

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<sup>1</sup> The Teacher Training Agency supported our work with a small grant

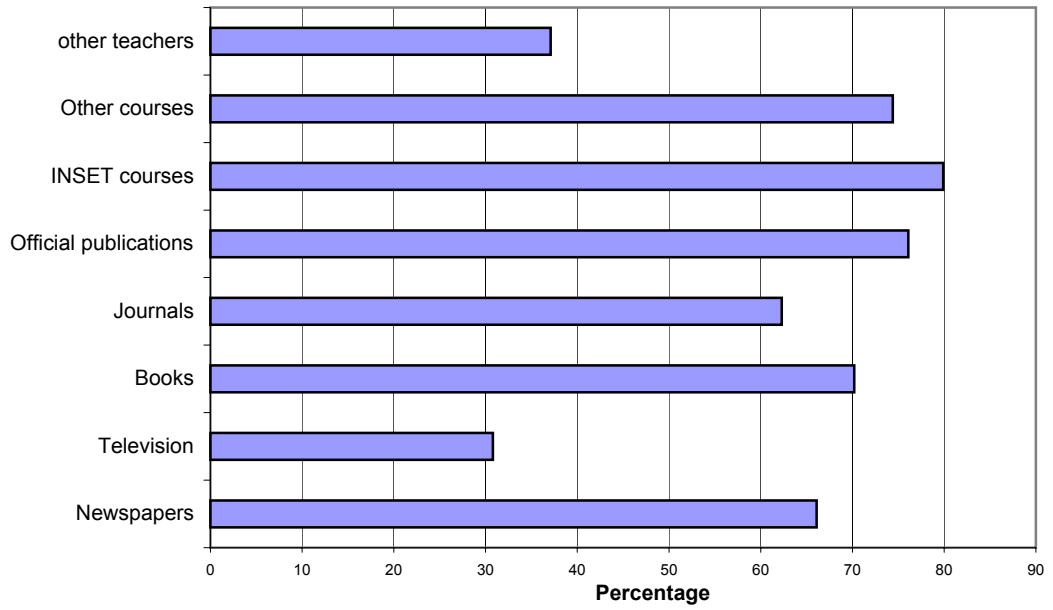
### **Sources of Research and their Usefulness**

Teachers were asked to list the sources that they relied upon to gain information about educational research. They were free to indicate more than one source so that the totals in Figure 1 do not add up to 100%.

In-service training courses were the most likely source of information on research. Nearly 80% of respondents selected this category. Next were official sources such as publications and circulars from OFSTED, the TTA, the DfEE and the Qualifications and Curriculum Agency (QCA), (76%), followed by courses leading to further professional qualifications (74.4%). Nearly two thirds of teachers in the sample had at one time or another gained information from journals while other teachers (37%) were least frequently cited as a source of information on research.

The next question asked teachers to list any research projects or findings that had influenced their teaching. Overall, 73.2% of the sample responded to this question. Within this group just over a third (34.8%) named three influential projects or researchers, 14.6% named two and just under a fifth (19.2%) named one. Over a quarter of respondents (26.8%) left the question blank. When the 4% of teachers, who in response to an earlier question said that they had never considered research, are subtracted from this latter figure it still leaves 22.8% of teachers who, having given serious consideration to research, could not subsequently give a single example of research that had influenced them. These 81 teachers were equally likely to work in the primary or secondary sector. They were mostly without further postgraduate qualifications and had less than ten years experience. As might be expected with this background, they were primarily classroom practitioners rather than having an administrative role as deputy or principal.

**Figure 1 Relative popularity of research sources**



### **Areas of Research Influence**

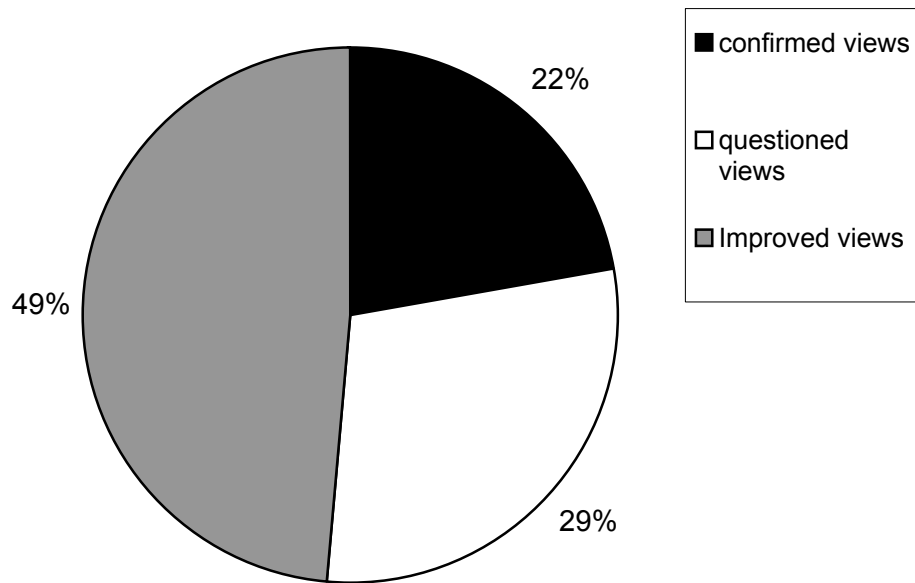
The 221 teachers who said research had influenced their teaching between them named a total of 523 research topics (or researchers associated with certain topics).

The most common area referred to concerned *aspects of learning*; there were 88 references in this area. *Management and leadership* was the next most commonly cited body of work although there were only 39 references here. A number of other themes were mentioned with similar regularity; these included *language and literacy*, *social and personal relationships*, *gender issues* and *school improvement*.

Some of the issues referred to by teachers, such as classroom discipline and pre-school education were not bounded by time in that they are the subject of continuous research interest. However, the majority of references by teachers to named researchers or to specific identifiable topics for the most part concerned publications in the early nineteen eighties. Only in those cases such as school improvement, gender and assessment were there indications that more recent work had been studied. This emphasis on research carried out a decade or more ago was particularly true of research into children's learning and pedagogy. One can speculate that in all probability many of the topics mentioned were studied as part of initial teacher training or as part of a higher degree course when, perhaps, many of the current principals were undertaking professional development in pursuit of career advancement.

Teachers were also asked to indicate the effect which the research quoted had upon them; whether, for, example it caused them to question their existing viewpoint. Only one third of the 523 comments were sufficiently clear to enable them to be classified. Figure 2 shows the distribution of these 178 unambiguous responses. It is heartening to learn that, in the opinion of nearly half of these teachers, involvement with research led to them changing their views for the better while in 29.3% of cases it at least forced them to reassess their current position.

**Fig 2 Effects of studying research**



Earlier it was reported that many of the teachers who said they had not been influenced by research had been less than ten years in the profession. This factor may be significant in that teachers with more positive attitudes tended to refer to research which was mainly carried out between ten and fifteen years ago.

### **Important Issues in Education**

Following on from the proposition in the previous paragraph that teachers will act on relevant research, the second section of the questionnaire asked respondents to pick those educational issues where they would like more research to be carried out in the near future. Twenty-four statements were presented with a further six spaces left blank so that teachers could write in their own suggestions. Finally, teachers were asked to pick what they considered to be the three most important of their chosen issues and to list these in order of priority. The twenty-four listed issues will be examined before going on to consider the ones that teachers added to the list.

The six most frequently mentioned issues were as follows:

- *Comparison of different teaching strategies* which was chosen by 61% of teachers.
- *Models of effective classroom teacher behaviour* which was selected by 57% of teachers.
- *Strategies for teaching different ability groups effectively* which was mentioned by 54% of the teachers.
- *Improving motivation and tackling disengagement* selected by 50% of teachers.
- *Developing creative thinking in pupils* mentioned by 45% of teachers.
- *Effective whole class teaching* which was selected by 40% of teachers.

However, there were different priorities when teachers were asked to identify their three most important issues for further research. In analysing the degree of importance attached to a particular issue first choices were weighted three times as important as third choices and second choices were weighted two times as important.

The need to *improve motivation and tackle pupil disengagement* was regarded as almost twice as important as any other issue when this weighting system was employed. This was then followed by *comparisons of different teaching strategies* and *strategies for teaching different ability groups effectively*. Not included in the six most frequently mentioned topics but regarded as the fourth most important issue was the link between *information and communication technology and pedagogy*.

These results, based on the responses of all 302 teachers, mask differences between those from the primary and secondary phases. Table 1 shows the issues where there were significant differences between the number of primary and secondary teachers mentioning an issue together with their respective ranking in order of importance.

**Table 1 Differences in Primary and Secondary Teachers' Research Priorities**

Issue	PRIMARY		SECONDARY	
	% (N=92) mentioning issue	Ranking in importance	% (N=198) mentioning issue	Ranking in importance
<i>Subject knowledge and effective teaching</i>	25.0	13=	42.9 *	6=
<i>Effective teaching of specific subjects</i>	25.0	15=	46.0 **	5
<i>Pupil-teacher interaction</i>	30.4	19	43.4 *	14=
<i>Improving classroom language</i>	9.8	21	27.8 **	21=
<i>Improving motivation/tackling disengagement</i>	33.7	7	58.6 **	1
<i>Developing learning in manageable steps</i>	20.7	13=	32.8 *	12
<i>Managing children's' learning performance</i>	21.7	20	41.9 **	4
<i>Helping pupils handle information</i>	23.9	24	39.4 **	17

The general trend is, as might be expected, for secondary teachers to be more interested in research into problems of pupil disengagement, managing student achievement, language and subject teaching compared with primary colleagues. Despite the emphasis on subject content in the National Curriculum for England, primary teachers still appeared to be more interested in general aspects of pedagogy and, in particular, in strategies for teaching different ability groups effectively.

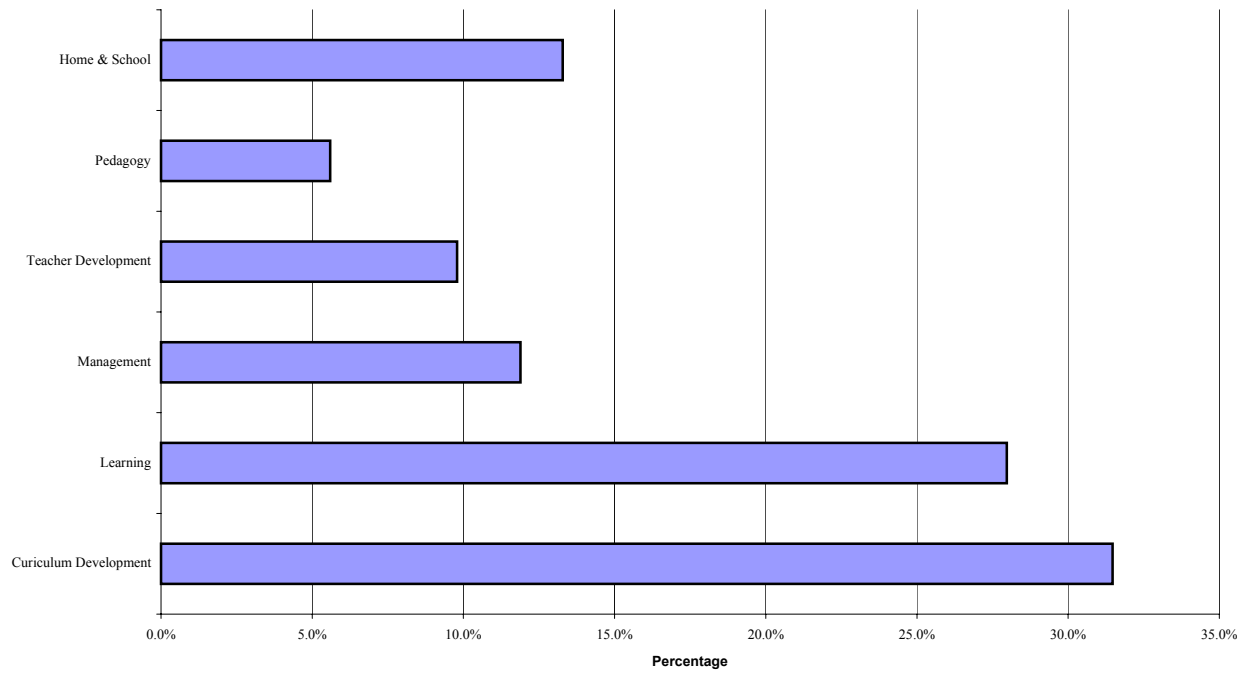
### **Teacher generated issues**

Teachers also had the opportunity to add other issues to the 24 listed in the questionnaire. In all 240 additions were made but 97 of these were unique, not supported by any other respondent. The remaining 143 additions covered 37 topics.

Only two of these were listed more than ten times, *effective parental support for pupils* (14) and *improving pupils' self esteem and motivation to learn* (11). The reference to parental support is a distinct addition to the original list. For the most part the issues mentioned were variants on those already presented in the original twenty-four items. The reference to self-esteem and motivation clearly relates to the question of pupil disengagement, the fourth highest rated issue of all those presented in the questionnaire. Other issues, such as Literacy and Numeracy, which are a central focus of the current primary school curriculum, received little additional comment, presumably because they were directly mentioned in the original list of items.

Figure 3 sets out the range of additional issues listed. Because of the low frequencies associated with most of the additions to the original list, the issues are grouped under six headings.

**Fig 3 Additional Research Issues**



The dominance of **Curriculum Development**, with the relatively large number of distinctive additions, reflects the continuous changes made in this area since the introduction of the National Curriculum. Perhaps more interesting are the additions made under the heading **Aspects of Learning**, including the issue of independent learners. In the United States, the increased emphasis on *teaching for understanding* (Good and Brophy 1994) has concentrated on helping teachers to ‘scaffold’ knowledge rather than to present it to pupils directly. The aim is to provide a supporting structure within which pupils can learn to think for themselves. This not only involves what Shulman (1994) terms *strategic* knowledge (what it is legitimate to say or do in a domain or discipline and what ‘breaks the rules’) but also *self*-knowledge (knowledge of ourselves as learners). This latter type of knowledge involves the ability to regulate one’s thinking processes by monitoring progress and identifying errors, so that, as advocated by Ann Brown (1990), instead of talking with adults or peers the pupil holds a conversation with him (her) self. Hughes (1996) has reported similar concerns in the UK.

Of the remaining issues listed, those under **Home School Links** probably stem, in part, from the concerns of principals with the recent government emphasis on parental contracts, social exclusion and truancy.

### **The Perceived Value of Educational Research**

In the final section of the questionnaire respondents were asked to rate on a five-point scale eighteen statements about the value of educational research for teachers. In general, research evidence was valued when it focused on classroom action, tackled specific aspects of teaching or demonstrated effective learning. Less valued was the capacity to help teachers design their own research, or to enable them to interpret research data for their own benefit. For ease of interpretation the ratings given for each of the eighteen statements were subjected to a process of statistical analysis known as *factoring*. This produced two distinct scales that were internally consistent in the sense that all the statements on one scale had more in common with each other than with any statement on the other scale.

The degree to which the scale is consistent is measured by its reliability coefficient which can range in value from zero to one. The nearer the reliability coefficient is to this maximum value of one the greater the degree of internal consistency. Values close to 0.8 and above are generally regarded as satisfactory.

The first scale concerned **the value of educational research for classroom practice**. It had a reliability coefficient of 0.79 and the statements most strongly associated with this scale concerned the capacity of educational research:

- to focus on *classroom actions*, particularly *teacher-pupil interaction*;
- to provide specific information on aspects of pedagogy such as *questioning*, *providing feedback* and *carrying out assessment*; and
- to enable teachers to *assess themselves effectively*.

The second scale concerned the teacher's own **involvement in research** and had a reliability coefficient of 0.92. Teachers valued educational research if it:

- helped them to *design their own project*;
- taught them to *interpret data*; or
- enabled them to *prepare research summaries*.

On the first scale, the **value of educational research for informing classroom practice**, there was very little difference between the various groups. The mean rating on the five-point interval scale was 4.03 for secondary teachers and 4.02 for primary colleagues. Neither were there significant differences between male and female teachers. Only in respect to greater teaching experience did a trend emerge.

More interesting were the results on the other scale, personal **involvement in research** and its value for helping teachers to engage *in* and *with* research. Here there emerged significant differences (at the 1-% level) between different categories of teachers at primary level. Classroom teachers, in contrast to their principals, were more likely to seek personal involvement and valued educational research that helped them achieve this aim. No difference of this kind emerged from the analysis of the secondary sample. Indeed, overall, secondary teachers appeared less well disposed towards personal involvement in research than their primary colleagues (also significant at the 1-% level). Not surprisingly, given the gender imbalance between the two phases, female teachers were also more supportive of personal involvement in research.

Four of the eighteen statements could not be fitted onto the two scales. There were significant differences in the value placed on research into teachers' *subject knowledge* and in research which made it clear that findings had to be interpreted in the *context* of one's teaching situation (i.e. the fitness for purpose). In both cases primary teachers rated these attributes more highly than secondary colleagues.

### **Some lessons for future research**

There are also some lessons for the research community in these findings. The fact that so few respondents referred to recent studies may give some credence to Hargreaves's (1997) criticisms that too much current research is either esoteric or irrelevant to teachers' concerns. While part of the reason for this state of affairs has been the growth of 'policy studies', mainly concerned to identify the consequences of the application of a 'market forces' approach to schools, it has also been a consequence of the need for all staff in University Departments of Education to do research as part of the HEFCE Research Assessment Exercise. Most of these new researchers were and are engaged in teacher training. Research on teaching the teachers has, therefore, expanded and of its very nature it is not likely to have a direct impact on those charged with teaching pupils.

It must surely be a cause for some concern within the educational research community that in two out of the four areas regarded by teachers as most important, namely mixed ability teaching and coping with pupil disengagement, there has been a dearth of well designed, longitudinal studies during the past decade. Answers to questions about the precise effects over time of streaming, setting and banding on pupil performance and attitudes still draw heavily on quantitative research studies carried out two and three decades earlier. Harlen and Malcolm's (1997) review, for example, could cite only two recent studies on the effects of streaming at secondary level in the UK; one a longitudinal study of mathematics involving some hundred pupils in two schools and the other a case study of a single comprehensive school.

On a more positive note, it is worth repeating that despite limitations in the sampling referred to earlier, there is evidence that younger teachers were willing to engage both *with* and *in* research, providing it could be demonstrated that it had a direct impact (rather than merely an awareness raising function) upon specific classroom practices. This applied particularly to primary teachers, despite the fact that they have been subject over recent years to considerable change and might therefore have been expected to opt for a period of retrenchment. It suggests that the idea of an 'evidenced-based profession' is not an impossible one, providing ways can be found to allow teachers extended contact with research and providing the research community can develop better procedures whereby the concerns of teachers are taken into account when funding is allocated.

In summary, therefore educational researchers can take some comfort from these findings. Teachers appear willing to engage both *with* and *in* research providing it has a direct impact [rather than merely an awareness raising function] upon specific classroom practices. However, it would appear that much of the interest in research was generated during advanced study which for many of the sample took place at a time when there was funded support for such activity.

The approach is now very different and schemes such as the recently inaugurated Best Practice Research Scholarships provided by the Department for Education and Employment and the Teacher Training Agency's, Teacher Research Grant Scheme expect teachers to do research in their own time and to use funding to support the cost of help from educational researchers in Institutes of Higher Education. In a different approach the new ESRC Teaching and Learning Initiative also places a high emphasis on teacher involvement. The projects involving schools in Phase II all impact on the concerns of teachers in the survey, particularly the emphasis on children's learning and social development. It is, however, one thing to have recognised the concerns of teachers but another to create conditions under which co-operation between the researchers and the practitioners can bring about changes in practice that are sustainable and can then be disseminated in ways that broaden their impact. It is these two issues that I wish to address in the remainder of the paper.

### **Changing Classroom Practice**

Interventions by researchers rarely succeed in sustaining change in classroom practice beyond the lifetime of the project (Fullan 1993; 1999). We have recently visited a number of schools involved in the previous government's *Superhighway* initiative to explore how teachers in Y6 and Y7 are using ICT to support transfer. All initiatives appeared to have ceased once the commercial sponsorship was withdrawn. In a recent draft paper Milbrey McLaughlin<sup>2</sup> and her colleagues at Stamford University have reviewed a number of projects that set out to reform classroom practice by building upon 'promising theories of learning and instruction'. The review cites the case of a wealthy Texan philanthropist, who having looked at various bids for funding educational research asked the awards committee, 'when are you going to stop drilling, and start pumping'? The three projects reviewed by McLaughlin share a similar rationale to those funded by TLRP. They sought to create changes in classroom practice that were based on specific principles linked to improvement in pupils learning as construed from theories of

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<sup>2</sup> McLaughlin, M. with Mitra, D and Stokes, L. *Theory-Based Change and Change –Based Theory: Going Deeper, Going Broader*, Stanford University, February 2000, (Draft for Comment)

cognition and of children's intellectual and social development. McLaughlin calls this theory-based change and sets out to establish two key principles governing the conditions necessary to bring about effective implementation.

The first of these is that educational theories need to be re-constructed so that they can adapt to the ways in which teachers have to function on a daily basis. Thus researchers have to start by gaining an understanding of the various factors that compete for the teachers time and attention or that conflict with the principles under which the reform has been determined. Learning about the conditions under which teachers will have to implement the change enables theories to be refined and develops a deeper understanding of student learning. Theories become 'context-sensitive'.

The second principle that follows from this view is that theoretical ideas must therefore be anchored in concrete teaching contexts. A useful model here is the International Academy of Education's booklet on *Teaching* by Jere Brophy (2000) in which each A3 page consists of a top half devoted to a particular aspect of pedagogy while the bottom half describes the consequences for classroom practice. The approach embodies the earlier definition of pedagogy as the *science of the art of teaching*.

McLaughlin and her colleagues set out five areas that they see as central in sustaining theory-based change. The first, perhaps, obviously, concerns resources. They cite similar examples to the previously quoted Superhighways *projects* where teachers withdrew from the project because resources could not be sustained at the initial levels. Brown and Campione's (1994) work, for example, involving reciprocal teaching, offered teachers a considerable amount of adult support in the classroom. Later the programme was adapted to include peer tutoring. Pupils were taught to teach other pupils rather than having researchers teaching teachers.

Second, and perhaps more important, is the need for teachers to gain an understanding of what McLaughlin terms 'Knowledge of First Principles'. She accepts that teachers require knowledge about the reform's activities, materials and strategies in order to acquire ownership of the reform within their own classroom, but argues it is more

important for teachers to have knowledge of the reform's first principles, if change is to be sustained once the 'special project' status ends. Such knowledge is important because it enables teachers to respond to subsequent competing pressures or changes in their environment. In our own work in Transfer, for example, some participating LEAs also agreed to participate in the DfEE Key Stage 3 Pilot Project because they assumed that schools could consolidate their efforts on what were seen as overlapping initiatives. However, the philosophy of the Key Stage 3 pilot involves a highly directed structured approach, whereas in our transfer project the researcher's role is to help evaluate the teachers' solutions for improving curriculum continuity. Some teachers are finding it difficult to 'square the circle'.

The third criterion is 'a supportive community of practice'. For McLaughlin this is best achieved through 'whole school' involvement. She argues that if teachers engaged in reform become isolated from colleagues, then what they do takes on the form of an experiment rather than an authentic experience. They point, as an example, to an ICT project where the new technology was situated in one or two classrooms causing the other teachers to feel jealous. McLaughlin also recommends that the key teachers in the project should be given leadership roles in supporting the reform throughout the school.

This, in turn, highlights the key role of headteachers, who may have various reasons for taking up reform. It may, for example, provide extra equipment and local 'kudos', while it is sometimes seen as a way of revitalising the career of a 'jaded' colleague. Researchers need to anticipate these possibilities and build them into the design. Local Authorities also have a role to play (Fullan 1999: 65). Headteachers will have a hard time sustaining reform if the philosophy of those in charge of education in their LEA pushes against it.

This is a fairly obvious point, but the UK situation is more complex because of national initiatives and pressures from bodies such as Ofsted and QCA. This can restrict the role of the LEAs and prevent them from offering the kinds of support required. .

While not disagreeing with the kinds of analysis offered by the likes of McLaughlin and Fullan (1994; 1999), it is a characteristic of this approach that it seeks to create 'professional communities of practice' based on the belief that in the right conditions all teachers will participate in reform. This view has been challenged by Goodson (2000) who, in the face of similar evidence as that provided by Woods et al (1997) argues many teachers now sustain their creativity by engaging in activities unrelated to teaching or education. Although Fullan (1999: 4-6) argues that change is both complex and evolutionary, neither he nor McLaughlin have much to say about the processes by which individual teachers move from mere awareness of reform to a point where they are willing to forgo additional resources and work without the active support of colleagues in their own school. In our work on clustering in small rural schools (Galton and Hargreaves 1995) where some teachers, including headteachers, were reluctant to collaborate for fear of losing autonomy in matters of resourcing and staffing, committed teachers in the cluster initially formed the 'community of practice'. Other teachers, standing on the periphery of the reform, made decisions on the basis of their own self-interests. They viewed after school cluster planning meetings as a drain of their valuable time and refused to attend. The bulk of teachers, in accepting there might be benefits in clustering chose to concentrate on the practical problems of working together on common curriculum tasks without being over-concerned with the consequences for pupil learning. Only the committed teachers viewed the reform as an opportunity to promote pupils' cognitive development. As Fullan (1999:47) observes, 'the intellectual burgeoning of the quality and depth of pedagogical knowledge and means of enhancing learning for all has barely touched schools'. Moving teachers along the continuum that begins with '*thinking about self*' and moves through '*thinking about tasks*' to '*thinking about the child*' (Fuller and Brown 1975) appears to be central to the creation of communities of practice capable of sustaining change. As yet we know little of this developmental process.

Finally, I want to look at three projects which are part of the TLRP to explore how far they incorporate the criteria set out by McLaughlin. A summary is presented in Table 2. The first of these projects is the one in which I am involved with Peter Blatchford and Peter Kutnick. It is called the SPRING (Social Pedagogy Research into Grouping) Project and seeks to explore ways of making classroom groups more effective to enhance

pupil achievement. Teachers will be brought out of school and presented with summaries of existing evidence about groups and grouping as well as the theories underpinning different approaches. They will then be asked to use these ideas to create a training programme for pupils that is designed to improve the effectiveness of working in groups. Initially teachers will work on a programme for a specific key stage, but these will then be merged so that the elements that are common and unique to different settings can be identified. These teachers will then work closely to support a second cohort whose task will be to test out the effectiveness of the materials. The professional communities of practice therefore consist of these two cohorts with little formal links to the school or LEA although the key stage samples will be selected from among LEAs where close working relationships have already been established. The argument that change is more likely to be sustained if there is wide whole-school involvement can, in part, be met by selecting, where possible, teachers for each cohort from the same school.

**Table 2 Key principles governing theory based change**

<b>Key Principles</b>	<b>Grouping (Blatchford, Galton &amp; Kutnick)</b>	<b>Learning to learn (James, Wiliam &amp; Southworth)</b>	<b>Parents and Teachers' 'funds of knowledge' (Hughes &amp; Pollard)</b>
<b>Theory is 'context sensitive'</b>	Teachers will develop programmes to train pupils to work in groups	An action research approach will be employed	An action research approach will be used.
<b>Authentic teaching context</b>	A range of KS1,KS2 and KS3 classrooms will be used	Opportunity samples based upon previous working relationships	Schools situated within two contrasting regional cultures.
<b>Resource implications considered</b>	Cover provided but no additional classroom support	Key teachers and advisers will offer support at each site	Seconded teacher researchers will support the work
<b>Teachers inducted into first principles</b>	Teacher packs will be produced	Web resource of materials on learning to learn	Focus is on existing knowledge exchange among parents and teachers
<b>Developed communities of practice</b>	Teachers who develop training programmes in cohort 1 will work with cohort 2.	In one site whole school communities will participate	Schools will need to endorse participation within their development plans
<b>Clearly delineated roles for LEAs and headteachers</b>	Emphasis on individual teachers	Roles already established within existing structures	Partnerships with LEAs already established

In contrast, the two other projects have adopted an action research approach. Relevant research will be made available, in one case by means of a web site. However the emphasis placed on this material in providing a focus for the teachers' deliberations does not appear as marked as in the grouping project. On the other hand, both projects, by their nature, offer additional support in the classroom, in Hughes and Pollard's case by using seconded teachers as researchers. Out of the three examples considered, only the James' project on the Cambridge site proposes to use a whole school approach.

The conclusion would seem to be that while elements of the framework proposed by Mclaughlin et al. are to be found in all three examples they are not so clearly delineated as in the three cases she describes in her paper. Part of the explanation may be that in the English (and Welsh) systems power is not so clearly concentrated within school districts but in different contexts resides either at national or school level. Local circumstances, therefore, largely dictate the form that partnerships with the LEA and its schools will take.

It might be no bad thing, however, if at some point the various TLRP project teams came together to explore some of the issues concerning theory based change, particularly its sustainability and the capacity to spread beyond the teachers and schools directly involved in the research.

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