TTA School Based Research Consortia Initiative

The Evaluation

Final Report

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SECTION 1: THE PROGRAMME AND THE EVALUATION

Introduction

This is the Final Report of the evaluation of the second phase of the TTA funded School-Based Research Consortia Initiative that was funded for three years from 1997-2000. An independent evaluation of the first phase was conducted by the Centre for the Evaluation of Public Policy and practice, Brunel University. This focused on the establishment of the Consortia, management processes and early outcomes (TTA evaluation specification, para 2, p.1). The present evaluation of the second phase was commissioned to focus *'upon the impact the Consortia is having on raising the standards of pupil achievement, the improvement and development of teachers' skills, and LEA and HEI work to help teachers to improve their practice and raise standards in schools'* (TTA evaluation specification, p4). The specification also asked the evaluation to look at contextual factors associated with such processes and outcomes. This focus was extended in the evaluation proposal to incorporate an analysis of the strategies and infrastructures that supported or were needed to support teachers engaging (in programme terms) 'in' and 'with' research. It was further refined by issues identified in the field when documenting the experience of the teachers and the partnerships.

Description, aims and objectives of the Programme

This was a three-year multi-site programme funded by the Teacher Training Agency (TTA) jointly with the Centre for British Teachers (CfBT). The CfBT - already collaborators with the TTA - was attracted by the coincidence of its principal corporate aim, 'raising standards of achievement of pupils', and that of this Programme. Four consortia were selected and funded, each comprising a number of schools, a LEA (two in one consortium and three in another) and a university. Each consortium was perceived as a partnership between these three major stakeholders, supported and managed in terms of the funding and broad intention by the TTA. In this sense the Programme, the term used throughout this report**,** refers to the four consortia plus the TTA. The Programme was centred in four university cities in England (Leeds, Manchester, Newcastle and Norwich) and was managed from the TTA central office in London.

Across the whole Programme there were four universities, 29 schools (16 Primary; 13 Secondary), and seven local education authorities (i.e. two consortia are located within one LEA, Manchester links with Salford and Newcastle spreads across three LEAs). Core funding was £105,000 per Consortium over three years with an expectation of

matched funding in kind from participants. This has been made up through a combination of Higher Education tutor's time, LEA time, appointment of research staff and funded research projects. Additional amounts were added by TTA as the programme developed for attendance at meetings and residential events.

The principal aim of the Programme was *'to explore how research and evidence can contribute to improving teaching and raising standards of achievement'*. This was to be achieved through the operational objectives of:

- encouraging teachers to 'engage' with research and evidence about pupils' achievements; for example, to use other people's research to inform their practice and/or to participate actively in classroom research;

- increasing the capacity for high quality, teacher-focused classroom research by supporting teacher involvement in the development of research proposals for external funding;

- developing long term, medium scale data sets, which provide related quantitative data about what teachers and pupils do and how that affects pupil achievements.

Evolution of programme goals in practice

The first goal was stated as *'encouraging teachers to 'engage' with research and evidence about pupils' achievements; for example, to use other people's research to inform their practice and/or to participate actively in classroom research'*. Many programme participants interpreted this goal to mean that teachers should either use research devised by others to improve performance and enhance learning or engage in it themselves. As the Programme progressed the phrase 'engaging in and with research' came to be adopted to encapsulate the variety of ways in which teachers were engaging with research. According to the Programme Manager this was not a change in the first goal of the Programme, rather more a shorthand way of expressing what the TTA had intended from the outset and which became increasingly clearer and more explicit as teacher possibilities for research were explored. Many teachers did find that engaging in research was a prerequisite for them of engaging in a meaningful way with research. Others found that working in partnership with higher education research colleagues or with colleague teacher researchers as, for example, in the NE Consortium as coaches or in NASC in the cross theme research groups, was the preferred starting point, one that often though by no means always led to teachers engaging in research themselves.

With reference to the second goal, the degree of teacher involvement in securing external funding came to be reassessed by both teachers and higher education personnel in recognition of the complexity of the process, the additional burden placed on teachers and its perceived relevance to them. One of the Programme mangers suggested that it was never the intention that teachers actually write the proposals and if this was assumed it was a misreading of the Programme's second goal (the intention of which was that the proposal should be discussed with teachers and be seen to reflect their interests).

Similarly, the emphasis on the development of data sets (goal three) was reduced owing, once more, to the difficulty of translating the aim into concrete reality. Such modification and rephrasing of aims is not uncommon to innovatory programmes in response to emerging understanding and to what they discover to be the possibilities and constraints in the reality of practice. Much of the character of this programme emerged over time and in response to the first year that came to be regarded as an early developmental phase.

The Evaluation

The evaluation reported here is a single multi-site case study of a Programme. The concept of a single case study of the Programme was given in the evaluation design (through the identification and reiteration of issues across the Programme) and in what is reported here. At the same time to ensure that the diversity and complexity of the Programme across sites was retained, case profiles of the essential characteristics of each consortium were conducted in each site. These, which are documented in Appendices 2-5, serve to remind the reader of the particular approach of each consortium and also where their structure and experience may be similar or different from the issues reported in the single site case study evaluation.

The evaluation specification indicated that *'the purpose of the evaluation is to inform further development of programmes intended to promote research and evidence-based practice as a means of improving teaching and raising standards of achievement'*. The aim of the evaluation reported here is to provide evidence to inform such policy development. In presenting issues we draw on evidence across the Programme, identifying a particular consortium and/or comparing one with another where it is its useful and important to do so to illustrate diversity and complexity.

In-depth profiles of the experience of teachers in the programme were also conducted. In the latter stages of the evaluation, the experience of the 'profile' teachers, as well as the experience of other teachers interviewed, was further analysed through teacher workshops held in three of the consortia.

The Context

The TTA School-Based Research Consortia Initiative reflects and is proscribed in its aims by aspects of national education policy. These are primarily to do with '*improving the quality of teaching, raising standards of teacher education and training, and promoting teaching as a profession, in order to improve the standards of pupils' achievements, and the quality of their education'* (see TTA Annual Reports and Corporate Plan). Such aims derive from the corporate responsibilities of the TTA as the Agency charged with guaranteeing an adequate flow of competent teachers into the school system and promoting their continuous professional development. Funding the

development of research and evidence-based practice in teaching extended its core brief into an area that has, subsequently, been transferred back into the DfES.

In developing these responsibilities the TTA became committed to a view of teaching as a profession that is guided by the systematic use of research and evidence – in particular, classroom research (TTA, 1996a and b; Hargreaves, 1996). At the time of setting up the Initiative, the TTA claimed that *"only a small if significant body of research findings directly focused on classroom practice and enhancing it; more is needed"* (TTA, 1996b, p.1). Accordingly, the Agency stated an intention to:

"...Improve the accessibility of the existing stock of knowledge; improve the quality and relevance of research; help teachers play a more active role in conceiving, implementing, evaluating and disseminating research" (TTA, 1996b, p.1).

This led to various initiatives instigated by the TTA. In 1996, the TTA began to devote a small amount of its budget to funding practising teachers to carry out research. It followed up this initial round of teacher research grants in a number of ways including funding and promoting teacher research and seeking to extend TTA and teacher influence over educational research agendas. This latter was to be accomplished through such strategies as establishing a 'National Teacher Research Panel' to provide an "*expert teacher perspective on teachers' involvement in, and use of, educational research and other evidence"* and by increasing TTA active involvement in policy issues concerning education research, especially when it concerned teachers and teaching. This included input to the Economic and Social Research Council (ESRC) sponsorship of school-related research, providing commentary on research proposals to the ESRC *Teaching and Learning Research Programme*. There was also some discussion of ways in which the TTA could further engage with research funding at national policy level (see, for example, Millet, 1996).

Not long after these developments educational research was subjected to high profile public scrutiny in a series of reports commissioned by OfSTED (Tooley and Darby, 1998) and the DfEE (Hillage *et al*, 1998). These were critical of the quality and relevance of educational research in relation to the information needs of teacher-practitioners[1]. The reports echoed in part the argument that had been put forward by David Hargreaves in his TTA Lecture in 1996, that educational research had 'failed' schools: *'It is this gap between researchers and practitioners which betrays the fatal flaw in educational research'* (Hargreaves, 1996)

The tenor of the subsequent debate was of the need to reform the research base in education in terms both of its substantive focus - i.e. to more closely align research themes with the policy agenda, and of its political economy - i.e. to reconsider where and how educational research is funded and located. The reports noted above provided fuel

[1] Both reports and the Hargreaves (TTA) lecture on the same theme were (with little irony) widely questioned with respect to their evidence base and to their political independence, and were regarded by some as attempting to erode the independence of educational research. What is more certain is that they identified a problem but did much less to illuminate the reasons for its existence.

for the debate and for the growing claims that teachers and schools had not historically been well-served by educational research but might be if research were conducted differently and did more to engage practitioners. At the heart of the public argument was the aspiration to evidence-based practice: that classroom action, for example, in many schools might be more closely informed by research that documented exemplary practices and solutions. The TTA Programme is one example of how teacher engagement 'in' and 'with' research may be developed, though the Programme, as we shall see, had a wider brief and range of activity than some characterisations of evidence-based practice espouse.

The purpose of the Programme, as indicated above, was *'to promote research and evidence-based practice as a means of improving teaching and raising standards of achievement'*. How it did this varied between consortia but all were exploring a closer relationship between the generation, interpretation and use of knowledge acquired in and through research on teaching and classroom learning. During the course of the Programme 'evidence-based' was recast as 'evidence-informed' practice[2] to reflect the current term being adopted by the DfES at that time and a widespread unease at the implicit conservative view of professionalism of the former..

Structure of the Final Report

This report is structured in four main sections. The first is this introduction to The Programme and the Evaluation. Section 2, titled The Character and Experience of the Programme, documents how the Programme was developed, organised and managed. It includes a discussion of the diversity and complexity of experience in and between consortia, how each partner managed their contribution given the accountability structures within which each works and the time and the capacity each has to generate an infrastructure to support programmes of this kind. The section concludes with a characterisation of the essential culture of the Programme and how research was organised within it and how the role of the TTA contributed to the structure and experience of the Programme.

Section 3 takes us to the heart of teacher and HE experience of the Programme. Through detailed vignettes of the experience of two teachers, the central issues in teachers' experience are first described and then subsequently analysed in relation to other teachers' experience documented in the interviews and teacher workshops held at the end of the Programme. Also documented is a short account of how the Programme impacted upon HE personnel. The section includes an analysis of the significance of the teachers' experience in this particular Programme in advancing professional knowledge and

[2] This was intended to reflect a shift to a more responsive and situated view of evidence in which teachers make judgements about incorporating and adapting an existing evidence-base rather than serving as the recipients of it. Moreover it allows for evidence to be generated directly by the teachers whose practice it is supposed to inform. This change and the reasons for it were outlined by Judy Sebba, Senior Education Adviser at the DfES**,** in a paper she gave at BERA 1999 (Sebba, 1999).

teachers' self-worth, and concludes with a consideration of the impact of the Programme on pupil achievement.

The final section, Section 5, Findings and Implications, signposts specific findings from this evaluation and draws attention to some implications that arise from them for further deliberation and policy discussion. These are:

- Criteria for judging improvement in teaching
- When the focus shifts from teaching to teachers
- Stable infrastructure
- The university as a 'natural' home for teacher-research
- Transparency and accountability
- The appropriateness and implications of methodological choice
- Research validity

Finally, the Report closes with a discussion of three issues which, though lying beyond the immediate remit of this evaluation, have emerged out of the experience of this Programme. They are offered for consideration and as suggestions for further enquiry. These are:

- The professional organisation of teacher research
- Policy negotiation and the role of the intermediary agency
- The differentiation and integration of educational policy

SECTION 2: THE CHARACTER AND EXPERIENCE OF THE PROGRAMME

Consortia and their themes

A Consortium was defined by the TTA not as a research project, but as a framework that brokered and supported teacher engagement in and with research and conduct of research as a means of improving teaching and enhancing learning. Engagement in and with research, according to the Programme Manager was interpreted broadly to include not only doing research but discussing research, working with school colleagues and HE colleagues who were doing research, and contributing to research such as in identification of issues for research, items for questionnaires and interviews and discussing results with colleagues. Each consortium had diverse themes and interests as well as diverse working practices within the three overarching goals of the programme. The substantive foci of Consortia work may be summarised as the following broad fields:

- Leeds – *pedagogical development for mental Maths at Key Stage 2*
- Manchester & Salford – *speaking and listening in English, Maths and Science at Key Stage 2*
- North East – *development of Thinking Skills across the curriculum at Key Stages 3 and 4*
- Norwich – *pedagogical implications of pupil disaffection from learning*

These broad foci were developed in each site in a number of activities and project. The following brief accounts show some variation across Consortia. (Each Consortium moved from a first phase of pilot research projects - largely confined to single schools - to a second phase of more co-ordinated and often cross-school projects.

Norwich - In NASC how the topic of pupil disaffection from curriculum was researched in the first phase differed from school to school. In two schools the research topic was disapplication from the National Curriculum particularly with respect to modern languages and, in one of these, the development of work related life-wide curriculum for those disaffected pupils. In a number of other schools, foci of research included:

- how to identify disaffection;
- how to move from exclusion to inclusion;
- the experience of the silent disaffected student;
- parental and pupil perceptions of different subjects and their effects on achievement;
- responses of underachieving students to lesson activity and teaching style;
- teacher perceptions of rewards and sanctions;
- the effectiveness of teaching styles and classroom management;

- the use of differentiated tasks and minimum performance targets to encourage 'self'-directed' learning.

Several of the foci above were further researched in the four cross-school themes that were adopted for Phase 2 - Key Stage 4 Curriculum Enrichment; Classroom Management; a project looking at teachers' use of Rewards and Sanctions; and The use of ICT to Combat Classroom Disaffection. The research on disapplication from the national curriculum noted above, for instance spread to two other schools in the cross school theme on Key stage 4 Curriculum Enhancement; research on teaching styles and classroom management extended to a cross- school theme on Classroom Management; and teacher perceptions of rewards and sanctions broadened in the Rewards and Sanctions cross school theme to include student perceptions and curriculum development. What was enabled through this process was an accumulated understanding, in and across cross-school themes, of how curriculum, teaching and learning could be changed to improve teaching and pupil learning for those disaffected from it in the current structure. Curriculum and policy changes were implemented on the basis of research on these themes. For instance in one of the schools the year 10 and year 11 curriculum was modified and the timetable restructured to incorporate one-day a week work experience for all students and two days a week work experience for those with literacy and numeracy needs. In another school one of the observational tools generated by the Rewards and Sanctions cross-school themes was adopted across the whole school.

Manchester and Salford - In the Manchester and Salford Consortium first phase research activities, as with NASC above, focused on issues identified by individual schools and relevant to them in their particular contexts. One of the reasons for this, shared with NASC, was a belief that engaging teachers in research and in using research was more likely to happen if schools and teachers could focus on issues close to their concerns. In the case of Manchester and Salford, an added impetus for taking this approach was that the majority of schools chosen served children from disadvantaged backgrounds described as having multiple challenges and many of the teachers involved in the Consortium were new to research and/or had not volunteered to be involved. Foci the schools chose included parental involvement in school, raising SAT scores in Mathematics and raising standard in literacy. In the second phase and partly in response to the TTA 's interest in Consortia adopting a sharply defined focus the cross -school theme of Speaking and Listening was adopted as a unifying focus. This was supported by a monthly meeting held at one of the schools to discuss cross-school progress and joint observation of videos of classroom experience.

Leeds – This was a Consortium of six primary schools, a university and a local education authority. Its substantive focus in Maths, centred on the Numeracy Hour. Schools – which were selected on the basis of pre-existing (ITE partnership) relationships - chose their own projects which eventually became focused on mental maths. One school whose chosen focus lay in language use withdrew from the Consortium in its second year. It was at this stage that the other five schools were discovering similarities in their projects. The main focus on research process has been on classroom and pedagogical observation, critically exploring the use of observation instruments (Tharpe & Gallimore) and less

formalised collegial observation. There was an experiment with teacher diaries, but this was not regarded as successful. Out of the research the Consortium developed a model of teaching behaviours best suited to teaching mental maths. In the later stages of the Consortium schools developed dissemination packs out of their work and trialled them with each other. The six themes that were addressed were:

- Approaches to questioning
- Visualisation (i.e. the use of visual prompts for pupil learning)
- Teaching styles
- Involving children of all abilities
- Teaching strategies for dealing with errors
- Language use to promote comprehension

The focus for Consortium activity became numeracy – for the most part targeted at improving practice in the 'numeracy hour'. Consortium activities have consisted, in the main, of:

- Collegial observation among teachers in the same school of each other's teaching using observation instruments
- Reading of salient research literature and the adaptation of models of observation and analysis
- Team meetings in each school
- Meetings of School Co-ordinators to discuss progress and strategy
- Workshops and seminars to discuss seminal research ideas and to analyse key research texts
- Diffusion' through written reports and workshops of each school's experience to others who then trial the strategy for themselves

Northeast - The substantive theme of the Consortium was to develop 'Thinking Skills' in schools and classrooms and the particular focuses were on reflecting on the nature of teaching, on pupil contributions to pedagogical interactions and on the nature of the interaction itself (the task). The chosen approach was classroom action research – i.e. cycles of enquiry and experimentation conducted with colleagues and centred on teacher action. This was spoken of in terms of "teacher's craft knowledge" through what is called "enactment" - a process in which "theories and research findings are tested or realised through practice and a community of practice is fostered". One instrument to support the action research process was collegial 'coaching' in which teachers were helped by colleagues to explore their pedagogy.

Specific activities the Consortium engaged in included such as:

- Implementing Thinking Skills and monitoring its impact
- Researching the nature of questioning in classroom interactions
- Researching teacher perceptions of teaching and learning
- Exploring the nature of evidence of classroom improvement
- Video-taping lessons for subsequent analysis of pedagogical interaction

- Writing cross-curricula learning tasks to explore inference, use of evidence, etc.
- Triangulation – i.e. of classroom observation, pupil lesson logs & teacher diaries
- Collegial dissemination – i.e. through subject-specific and generic (Thinking Skills) seminars and workshops
- Involving newly qualified teachers (NQTs) in enquiry activities
- Collegial 'coaching'

The development of Consortium themes

The shape of each Consortium was given by how bidders responded to the TTA specification and how those initial bids were negotiated. Accompanying that specification was a statement of TTA corporate aims with respect to research, which set out certain requirements that research focused on pedagogical improvement and raising classroom 'standards'. Consortia could, and did, design their own projects, but within limits set by the brief.

In each case the Consortium aspired to develop research cultures to inform and enhance teaching strategies through teacher research and co-research with HE research mentors. One Consortium reported that its goals were set in such a way as to be *"realisable"*. Targets were reviewed periodically and action plans developed throughout the life of the Programme during which objectives became more tightly specified. In all consortia there was a natural process through which stated objectives developed over the period to finally become descriptors of what was achieved.

In addition to the range of ways noted above of engaging teachers with research, all Consortia went through processes of piloting research approaches, developing forms of collaboration and devising appropriate research questions. In each case, the first year was characterised by within-school activities and cross-Consortium work largely centred on the contributions of HE research mentors/tutors in terms of research training workshops, providing access to research knowledge, theorising about the nature of the partnership and co-ordinating activities through the management groups. Subsequent years saw the emergence of cross-school themes and projects. These were characterised by teacher and school networking with a shift of responsibility for maintaining cross-Consortium work to the school co-ordinators and in two consortia to the research co-ordinators in HE. The first year, too, was an opportunity to better define the relationship between Consortia and the TTA and for each party to revise their aspirations in the light of how that relationship was developing and the reality of practice. Hence, for example, early NASC intentions to explore the curriculum dimensions of pupil disaffection and to give a high degree of autonomy to teachers in defining their own research questions were adapted to reflect TTA's concern that the prime focus of the Programme be on pedagogy. The NASC team saw this as an inevitable consequence of accountability pressures on the TTA and, said one HE co-ordinator *"we did, in a sense, capitulate in many respects to that anxiety"*.

The early period was also an opportunity to rehearse the broader theoretical framework within which a Consortium was located and to adapt the language of aims to different

contexts and audiences. For example, the Leeds Consortium was reported in the first annual Programme review as taking a focus on *"matching specific pedagogy for specific purposes in numeracy and literacy"*. In the next annual review a second principal theme was noted as *"continuing professional development"* and, later, a third theme was added as *"pupil motivation"*. Meanwhile, in a conference paper to the British Educational Research Association in 1999, the first Leeds Consortium Co-ordinator expressed the rationale behind the Consortium as concerned with *"the development of professional identity and the generation of knowledge as a result of participation in specific communities of practice"* (Edwards, 1999). In that paper the early period of the Consortium was explained as one in which research for teachers was transformed from an object to be mastered to a knowledge experience with which to engage as a 'resource'.

To some extent this is evidence of the need to negotiate one's way with diverse audiences that have different judgements to make of one's project. To one constituency aims are defined in 'teacher' terms; to another, in more 'academic' terms. It is also evidence of a conventional distinction between aims and objectives. Objectives reflect operational goals under an umbrella of aims that reflect intellectual/theoretical ideals. Broader aims reflected the aspirations of the HE members of partnerships and were expressed, for example, in the following ways:

- in Leeds, to develop '*communities of practice'* among teachers and a teacher-based culture of research knowledge;
- in Manchester & Salford, to develop '*critical communities of enquiry'*;
- in NASC as an opportunity to '*create a culture of collaboration* between HE and schools ', and to advance the principles of an enquiry-based approach to curriculum development with a transfer of control over research agendas to professional practitioners;
- in the Northeast Consortium to develop enquiry-based approaches to teaching and curriculum development.

These broad intellectual aims were, for the individuals involved, long-standing and associated with pre-existing schools of thought and knowledge cultures**.** For example, two of the university co-ordinators of the Thinking Skills group in the NE, trace their aims to Dewey, Vygotsky and Stenhouse; the first University consortium co-ordinator in Leeds, to 'socio-cultural' psychology' and 'educational action research'. The Norwich Consortium was co-ordinated by a long-standing advocate of action research for curriculum change. For the most part, negotiations with schools and LEAs over the shape and activities of Consortia took place within the umbrella of these aims and the Consortium approach was an opportunity to advance them. The exception to this was the Manchester and Salford Consortium which was built upon the LEA's strategic commitment to school improvement for the participating schools, though linked with a University partner which had a strong tradition of teacher and action research.

Teacher Experience

The evaluation generated a great deal of data on the experiences of participation within the four consortia. In the internal Interim Report we documented much of that experience in relation to the question of what kind of impact teachers reported *on their pedagogy* arising from engagement 'in' and 'with' research. We reported there – and confirm here on the basis of subsequent conversation – that there were a range of impacts, such as:

- Direct impact on pedagogical strategies such as classroom organisation (e.g. the use of 'zonal seating' to enable differential questioning); greater responsiveness (e.g. improved questioning techniques);

- Greater methodological sophistication in the interpretation of developing personal practice (such as the use of teacher diaries, pupil logs, video-based collegial observation); adaptation of analytical frameworks for understanding classroom action (e.g. the adaptation of the Tharp & Gallimore category system); collaborative research with pupils (e.g. in the design and administration of a questionnaire);

- The development of theoretical tools for understanding classroom phenomena (e.g. the RHINO concept, concept-mapping, visualisation techniques for mental maths);

- Improved relations in the classroom – principally as a result of closer interaction with pupils;

- New forms of teacher participation in policy-making, such as membership of the National Teacher Research Panel, were facilitated by participation in the Programme;

- Career enhancement – as in the case of school co-ordinators taking seconded advisory LEA roles, or national roles at the TTA, or where teachers developed skills in the presentation of research experience at conferences.

Above all, we highlighted the capacity for involvement in this Programme to re-professionalise the teacher. This sense of professional renewal was confirmed by some members of the Steering Group, one of whom suggested that the principal outcome of the Programme had been a sense of *"enthusiasm and engagement"* among the teachers. It manifested itself in a number of ways:

- A sense of being proactive in implementing and adapting national teaching initiatives (such as the Numeracy Hour, school improvement) – even of taking some ownership of them;

- The re-valuing of teachers' professional judgement of what counts as quality in classroom interactions;

- The rediscovery and development of professional 'communities of enquiry and action' through networking with colleagues in other schools;

- A sense of esteem which can arise from successful interaction and recognition with university researchers.

These latter forms of impact relate more to the *pedagogue* than to the *pedagogy*. This, we suggested, was the principal outcome of the Programme, and in this section we discuss a change of emphasis in Consortia from improving teach*ing* to improving teach*ers* – i.e. signifying a shift from action to agency; from the role to the person. This came about – not in all cases – as a result of the appropriation of the Programme into teachers' experience.

Following the production of an internal Interim Report, the evaluation made use of *teacher workshops* and further interviewing to ascertain the extent to which a series of written summaries of experience captured that of teachers across the Programme. This enabled the evaluation to arrive at a clearer view of the areas of commonality and diversity of teacher experience. Two teacher 'vignettes' are presented below, followed by an explanation of the extent to which these express key aspects of the experience of other teachers across the Programme.

Vignette 1: Terry

Terry was one of the School Co-ordinators in a Consortium and had been promoted to Deputy Head at around the time the Programme began. This was something he partially attributed to his involvement in the Consortium. He cited three other colleagues in the Consortium who had been promoted since it began, and mused over whether that had been a result of being involved or whether it indicated something about the type of person who got involved in the Consortium. Terry claimed that "*doing research gives you more power to deal with things from outside, and you have a better profile as a professional*". A case in point was how he felt the attitude toward him of a literacy consultant had changed for the better when she found out that he was involved in the Programme, had done research, and knew a key figure in the LEA.

Terry described the school's initial involvement in the Consortium as "*an opportunity for us to get support…to basically improve our own SATs results*". The school's research focus was mental arithmetic. There had been a set of results that were "*astoundingly poor*" and Terry, as maths co-ordinator in the school had insisted on a maths research focus rather than on literacy (as initially proposed by the head teacher). Regarded in the school as an enthusiastic teacher, Terry was also recognised for his ability to motivate colleagues. However, he claimed this was difficult to bring about in a climate of targets set by the LEA, OfSTED and the school itself, some of which he felt could not be met.

Terry described how the school was in some danger of falling under special measures triggered by its work with literacy, and how an increased use of setting was amongst the strategies that had been employed. He also described how vulnerable the school's collective efforts were, pointing out that "*all it takes is for someone to go off sick*" for benefits to be lost. Five teachers were off sick on the day of his first interview.

For Terry, teaching had increasingly become defined by accountability pressures in which teachers were seen as the "*managed deliverers of recipes*". The Initiative had been a welcome departure from this trend, and had been an opportunity to "*professionalise…again*" and to rediscover a sense of responsibility for teaching. His view was that "*re-professionalisation needs to gain more momentum and then to snowball*". Terry wanted the time and opportunity to meet with colleagues to make fundamental decisions with regard to such matters as the organisation of the week. He suggested this way of working could be supported by INSET activities if these could become less dominated by directives from outside the school.

Peer observation had been a particularly important and valuable part of Consortium activity and had led to much learning. However, Terry had concerns about the time and resource implications, stating "*there is a desperate need for non-contact time, to plan and evaluate. This needs to linked to the school plan*". Such time was a pre-requisite for successful research amongst teachers: "*the only way to get them properly involved and respectful of what they're doing is to show them the respect of giving them time away from the classroom instead of putting extra pressure on them*". A related concern was that with a focus on raising attainments, the teachers most likely to be involved in research activity were those looking after classes in the run-up to SATs. Such teachers were not easily replaced with supply cover, especially as "*supply cover is not always as good as it needs to be. We've had a lot of bad experiences for the children. It's a highly risky business, and many supply teachers are not up to speed with the literacy and numeracy strategies*".

Terry described how his participation had included the contribution of a large amount of "*personal time*". In contrast to his previous experiences of research, in undergraduate and postgraduate courses, this personal time was justified because the research within the Consortium served "*a real purpose*". However, "*to make the project happen, sometimes teaching and school…*(had) *to take a back seat…*(for this reason) *other staff and the head want to see an end to it now*".

Though committed to research, Terry was also wary of the outcomes of research. "*There is a constant danger of overclaiming…what works here now may not work here in a few years, let alone now in other schools. Models can only be ideal types and good practice is always in a situation that makes it good practice*". He underlined this point by drawing attention to the local context: his school was in an environment characterised by a "*number of languages and cultures*" and "*all sorts of social problems…drugs, prostitution, a prison down the road…*(there are) *all sorts of exceptional circumstances within this community*". He had made this point when presenting his research at a major national conference that included professionals from fields other than education.

Terry's confidence grew during his participation in the Consortium. He felt that his school's involvement had led to several other successful outcomes, including probable effects on raising standards, though these were difficult to attribute directly. He noted "*as a school we need to see if effects of the Initiative can still be seen in a few years*".

There had been some missed opportunities across the Programme. In particular, he suggested that there had been a disappointing amount of work across consortia and that there could have been more comparison between schools within his Consortium. "*Schools have so much to learn from each other…League tables put heads and schools into a ridiculous competition with one another*".

Vignette 2: Sandra

Sandra had at one time intended to train to become an educational psychologist, but found that she enjoyed teaching too much to leave it. She had taught for ten years and had spent another two years as a LEA advisor. Her idea of research changed during her participation in the Consortium, and she described how when she had carried out research as part of her earlier psychology degree course, it had involved testing from a base line, using control groups and looking for "*statistical evidence that you had a change in behaviour or whatever it was you were testing*". However, "*the difference in educational research*", she explained, was that "*it is very difficult to have a real control within a school*". Sandra gave the example of trying to measure the difference in improvement between two teachers working with parallel classes, one of whom had been involved in the Consortium and the other of whom had not. This had proved impossible because "*lots of things had infiltrated…the teachers had joint planning; some of the issues that came out of research we made* (into) *whole school issues so everyone was putting mathematical vocabulary in their school planning; everyone had words of the week on the wall; everyone was using zonal seating; everyone was starting to use remodelling up and down from children's errors and expertise. So even though the research was going on in three or four classes the impact was across the whole school*".

For Sandra, "*the research came as a way to talk about teaching…* (as opposed to talking about) *materials we were using or what was going to be taught. The main thing was how do we actually teach it, because you can have everybody working from the same script but not actually delivering it in the same way*". It was, she said, important to "*have some quality time to talk about how we were actually teaching and how the children learn…to talk to each other in the research group about each others' teaching*". She also described an example of the impact of the research activity on her own teaching:

> "*One of the things we found out particularly in whole class teaching that we decided to have was what we called zonal seating so we had children sitting in particular zones on the carpet in the classroom according to ability, so that you could direct your questioning at the lower or higher achievers…I have mine in a little arc so my higher achievers (are) at the back and the middle achievers in the middle, and then the poor achievers at the front…when I ask a question if only the back row have got their hands up I can know straight away that I'm only hitting the high achievers with that question and then I have to re-focus that question to involve more children in the classroom. Sometimes I'll focus a question more*

directly at the front of the class if it's too easy for the ones at the back…so it's a way of keeping all the children involved in the whole class lesson, particularly on our mental starter but also when you're introducing topics and modelling and demonstrating lessons. So it's really a quick way of being able to see. Obviously if all hands go up then you're hitting everybody and then you can direct your questioning to the different zones of the class. That was one of things that we found was really effective in whole class teaching in maths so that's one of the things that we shared with the rest of the school and now I think almost everyone now has some sort of zonal seating so they can direct their questioning".

Sandra suggested that her position as a Deputy head and as maths co-ordinator had been important in the process whereby the outcomes of research became policy in the school. She said that the impact of research on her own pedagogy was partly a matter of definition: "*…if you think that research is a reflective teacher taking chances, making changes, analysing what happens, then yes I've done research all the way through my career, but not in a formalised way as we have in the last year*" (i.e. during participation in the Programme).

Involvement in research activity within the Consortium had led Sandra to read research papers. One example of this related to target setting, where a particular paper had inspired her to try a new form of target setting with children and their parents. She said "*for parents evening I wrote a target for the children, the children wrote their own and when the parents were there I got the parents to write one whilst they were looking at the children's books, so then we got involved in a method of target setting that does involve children, parents and teachers. The children have individual targets and work towards them and a lot of the children know what their targets are: 'this is how I'm going to get from a level 3b to a level 3a, I need to do this…'. And that sort of began from me reading that piece of research*".

In summing up the impact of the Programme, Sandra described a "*huge effect on* (my) *teaching particularly…I suppose really you have to be asking the question would it have happened without the research? I think some of it would have because I wanted to move maths forward anyway, but it* (the Programme) *just gave us a vehicle to do it* ('move maths forward') *and made it real and made teachers see the benefits of it and evidenced it…I wouldn't have done exactly the same without the research…Those strategies, and teachers actually talking about the strategies, feeling able that they can talk, observing each other, all of that has had an impact on teaching and of course consequently on learning. Because we have shown improvements. As I say we found it very difficult to show improvements as regards to SATs, but we have definitely showed a big improvement in the tests that we used which obviously weren't standardised. I don't think that's really that important. It's more important that we were engaged in it and we learnt from it and moved on…There's so much hidden benefit that you don't actually have any evidence for but you just know that its had some sort of effect*".

These accounts differ in important respects (e.g. terms of their apparent definitions of engaging in and with research; the nature and status of the knowledge derived from

research activity; the prospects for generalisation). They are similar in their view of the extent to which impact can be measured by conventional means. Together, the two accounts are presented on the grounds that they do capture and give voice to the essence of the experiences of many other teachers who participated in Consortium activity. This was borne out when the accounts were used as a basis for comparison in teacher workshops and some subsequent interviews.

Key aspects of teacher experience

Like Terry, many teachers who had participated in the Programme confirmed that there had been a positive effect on both their self-confidence and on their standing as professionals. This ranged from changes in relationships with colleagues, parents and others to fundamental personal and professional change, often associated with the experience of being recognised in new arenas. An example of the former was Mary, a Primary teacher who described how participation had dramatically altered the way she felt about having visitors of any kind in her classroom: she had moved from feelings of intimidation to being comfortable and confident. An example of the latter was Geraldine, a School Co-ordinator who having sketched out her earlier isolation as a teacher, and having suggested this had been typical, described what it had been like to:

> "*...go into a wider arena and realise that other people are interested in your viewpoint…and the things that you might be doing in your classroom are new for them or different for them and they find that quite innovative…I've never seen myself in that way…when you open it up for discussion you discover that you have an enormous amount of expertise that you never really kind of validated before*".

Geraldine went on to describe herself as a "*completely different person*" as a result of participation in the Programme. For her an indicator of this was that she now talked freely with "*people that I would not have even thought that I walked in their shadow*" such as professors in the educational field: furthermore, she found such talk "*mentally stimulating*". She also claimed that participation had helped to establish a more rounded and comprehensive view of the role of subject co-ordinators in her school. Geraldine's increased self-confidence resonated with the experience of other teachers across the Programme, including some with many years in the profession. A closely related concept is that of autonomy. Often teachers saw the Programme as representing a departure from a system-wide trend that sought continually to reduce their scope for decision-making. However, whilst many shared Terry's view about the urgency of enhancing autonomy in a climate of seemingly increasing demands, they varied in their view of how much difference participation had actually made to their lives in this respect.

The Programme was experienced by many teachers as providing opportunities to develop new understandings and new ways of thinking. There appear to be a number of levels of expression within this change. Nearly all teachers agreed that the Programme had helped them to gain a familiarity with new ideas, frameworks and perspectives that were derived from the research and experience of others. However, many went much further than this, for example describing how the Programme had provided a "space" in which to problematise their teaching and refine it in ways that had a direct impact on practice. A

few claimed that the Programme had given them an opportunity to approach aspects of their professional lives in completely new ways: as one put it, "*to think outside your normal box*". For some teachers in one Consortium, the Programme had at one point imposed an overly narrow definition of pedagogic research, which had then had a negative effect on the level of enthusiasm amongst the teachers involved.

For some teachers participation had meant a regular and scheduled release from teaching duties, and this was seen by many as a valuable model. For others, particularly those with management responsibilities, regular time-slots of this kind had been difficult to realise within the competing demands of a complex professional role, and the maintenance of participation had given rise to wariness about effort expended and to occasional feelings of resentment. This had made the task of enthusing wider groups of teachers very difficult. A small number of teachers felt that although the Programme had helped to confirm the need for increasing teacher involvement in and with educational research, it had not provided a sufficiently radical solution to overcome the logistical barriers to guarantee the realisation of this goal.

The Programme generated an extensive use of peer observation and the related use of video. These aspects of the experience, often with focused support from HE staff, were universally acclaimed for the professional learning they engendered and sometimes for the explicit links they made possible with educational research. As with other facets of participation, collaborative activity was key. Working in a group had been a way to avoid research becoming "*a chore*" and a means to get beyond working "*with just your own view…you need other people*". Several teachers described how the Programme had enabled them to learn to "*read*" videos of their own and each other's teaching and said that the process had yielded insight and had led to many planned and monitored changes in teaching practices.

Like Sandra (see Vignette 2 above), most teachers attributed improvements in teaching to involvement in the Programme. For many of these, the Programme represented a shift from an ordinary, everyday personal reflection on action which was usually an isolated and negative process (i.e. a self-monitoring for "*things that didn't work*"), to a more conscious, systematic and collaborative reflective habit, perceived as a positive process and shared with others within and beyond the school. The group-based nature of research activity was generally seen by teachers as both cause and effect of improvements in their teaching. Such improvements were signalled by teachers with a great deal of prior experience as well as those relatively new to the profession. One experienced teacher claimed "*I think I've become a better teacher…it* (the Programme) *really has been empowering to me...*(and made me) *a lot more sensitive to the needs of the kids*". However, perceived improvement took many forms, and relatively few of the teachers' accounts make the direct link that Sandra did between changes in practice and examples of published research.

Vignette 2 also included some insight into changed understandings of research, and this struck a chord with other teachers. In particular, many had found that their early assumptions about research methodology were derived from a particular model that was

difficult to sustain in professional situations. They discovered that activities that could be called research were already embodied in their professional practice. Some teachers had noticed examples of the outcomes of research becoming school policy where the School Co-ordinator was in a management position and could effect a change. On occasions ideas had been generated (or action influenced directly) by reading research papers. Sandra's point about the difficulty of demonstrating improvement through conventional measures attracted widespread agreement. As Louise put it in one of the teacher workshops, "*we felt there were lots of things in her description that were much the same as ours*".

Terry's point (Vignette 1) about between-schools collaboration and the opportunities for learning drew considerable attention. For some teachers, the opportunity to share research activity across schools had been a particularly welcome feature of the Programme:

> "*We've had some rich discussions at meetings and before (*the Consortium*) existed we had hardly any other point of contact with teachers in any other schools. I think if you go back ten years then there was a lot more, but the intensity of the competition issues between schools and the fact that we have all become self governing and the local authorities control more…yes, it's the collaborative work that has been professionally satisfying*".

There were a number of other outcomes that teachers in workshops and interviews claimed were important legacies of their own experiences of participation in the Programme. These were:

- Ongoing research and writing;
- Joint production of guidance, based on findings, for other teachers - e.g. for the teaching of mathematics;
- Changes to the induction processes for new staff in a school;
- Changes to the organisation and culture of Continuing Professional Development in one school;
- A more critical engagement with LEA advice together with innovation in the generation of assessment and target-setting policy within one school;
- An "improvement group" in one school, linked to a University;
- Regular use of "reflection sheets" in teacher planners in one school.

As the above paragraphs demonstrate, the Programme has left a significant mark on the professional lives of many teachers

University Staff Experience

The various accounts of higher education staff encompass a range of experiences that are more difficult to express thematically than those of teachers. This is at least in part because the respective higher education institutions began from different positions in

relation to teacher research and built their Consortium work on the foundation of different traditions. In addition, staff were themselves in different situations, as teacher educators, research professors, or contract researchers for example. For some, the Programme represented an opportunity to fund and to legitimate the continuation of established ways of working with teachers and schools. During the Programme, some welcomed its endorsement of a kind of research work that was otherwise discouraged by the pressures of accountability. Others welcomed the fact that the Programme coincided with signals that the Research Assessment Exercise would change to take more note of research work that was close to the interests of "users", whilst (as discussed earlier in this report) yet others felt the Programme presented them with a dilemma, because it appeared to divert them from an all-important focus on maximising research ratings.

For the majority of higher education staff involved, the Programme represented an extension of their primary task of educating student teachers or working with teachers on programmes of continuing professional development. The Programme provided a set of learning and developmental opportunities for higher education staff. For several it was a significant turning point. One described it as the "*highlight*" of her time working in a University, because it had become a new source of legitimation to her core interest in doing collaborative research on issues of practice and effective pedagogy, thereby altering aspects of the research culture (the way that different kinds of research work was socially organised in the institution). For another it had produced new understandings amongst both higher education staff and teachers in schools, in that each came to appreciate more of the realities of the others' daily work.

There are instances of the Programme having been credited with challenging aspects of higher education culture in relation to the erosion of a distinction between those who do research and those whose task is to train teachers. More broadly, the Programme is recognised as having led to some new thinking and theorising amongst some higher education participants, covering matters such as Activity Theory but also research methodology, the HEI/schools relationship, and the changing nature of academic work.

The significance of the experience of the Programme

Mention has been made in this section of different ways in which the Programme was seen as responsible for having nurtured or enabled changes in teacher thinking. Given that the first two of the original aims of the Programme rested squarely (though implicitly) on changes in the way teachers think about their work, this aspect of the evaluation deserves a little more attention.

The evaluation data suggests that changes in teacher thinking may be conceived as falling within a conceptual hierarchy (that is, in terms of a series of three levels, each successive level incorporating the level below). At the first level, virtually all participating teachers confirmed that they had become aware of new ideas, frameworks and perspectives on their practice and that this brought about some changes in what they actually did when teaching. At a second level, some of those interviewed spoke of having developed new reflective processes and a more fundamental questioning of their own and each others' practice, often in collaborative spaces that the Programme had provided. Thirdly, the

accounts of a few teachers took them beyond this level, in that they also attributed fundamental changes of a personal and professional kind to their involvement in the Programme. This third level can be thought of as the apex of a pyramid that contains all examples of changes in teacher thinking across the four consortia.

There are two links to be made here with existing theoretical frameworks. The first is in the study of professional knowledge and its relation to professional action. Many researchers and theorists have continued to find relevance in the famous distinction made by Ryle between "knowing how" and "knowing that" (Ryle, 1949), and in the case of teaching this reminds us that the "evidence" in "evidence informed practice" may take different forms: relatively little of it may be in the form of research findings that can be expressed as clear propositions. Professional action draws upon process knowledge as well as propositional knowledge: by definition process knowledge resists codification (Eraut, 1994; James *et al* 1999). Indeed some theorists have argued that professional action is best understood as artistry, and that the technical rationality of conventional research can do little to support it (e.g. Stenhouse, 1980; Schon, 1983). Such debates remind us of the real-world complexity of even the most simply expressed aim to change teacher behaviour in some respect.

A second link is with attempts to theorise impact assessment. Hall and Loucks (1978) provided a helpful starting point in suggesting a continuum of "stages of concern" ranging from mere awareness that an initiative exists through to "refocusing", a creative response to an innovation or change that implies a person's complete incorporation of it and identification with it. There are clear examples of both in the evaluation data on this Programme.

Together with some of the evaluation literature (which reminds us of the need to assess impact both within and beyond stated aims), such models draw attention to a wide range of positive outcomes that are possible in a Programme of this complexity.

Some of the HE staff interviewed expressed the view that the Programme was conceived in such a way as to disconnect it from previous work in areas such as teacher thinking, professionalism, change and biography. However it is important to note that the arrangements for consortium bidding gave higher education partners scope to specify such connections from the outset, and in the operation of the Programme there are examples of encouragement at several levels to make connections with a range of previous work.

SECTION 3: STRUCTURE, ORGANISATION AND MANAGEMENT

Consortium organisation and management

Consortia reflected a novel form of organisation and management. These were collaborative structures bringing together a university, at least one LEA and a number of schools. They all sat together in a deliberative forum allocating resources and establishing priorities for action. That each Consortium made its own arrangements guaranteed diversity across the Programme and ensured a high degree of local autonomy in setting goals and targets.

The organisational culture of Consortia was defined by the aspiration to 'partnership' – primarily between the three principal parties, University, LEA, and schools. This concept was intended to signify an equality of status and ownership among constituent groups. As one Consortium put it, the intention was to prevent any one constituency from *'dominating the research agenda'*. Each Consortium worked with a similar organisational structure. There was a small number of schools (approximately six in each consortium though the number fluctuated slightly in two consortia as schools changed), in each of which a teacher was nominated as 'School Co-ordinator'. Each school had a university academic and sometimes a LEA person linked to it.

For some, this principle of partnership denoted a departure from conventional relationships in which intellectual authority rested with the university academic, in favour of a situation in which teachers had equal say over the intellectual and conceptual aspects of the work. However, the reality of relationships put them closer to what one Consortium described as *"equable and complementary"* – where university academic, LEA adviser and school teacher had different and interlocking contributions to make to the research effort. The university contribution was often one of training in research methods and analysis, inducting teachers into research knowledge and providing theoretical resources, while giving support and encouragement and serving as 'midwife' to research activities taking place within and between schools. The LEA contribution was most typically one of infrastructure support such as supporting networking and dissemination. The school and teacher contribution was in the main creating the research agenda and carrying it out with support in liaison with HE personnel. The Consortia Programme also held inservice training meetings at which Consortium schools disseminated their work. Reporting the outcomes of the research activities was shared between schools and HE – sometimes with joint presentations at research conferences in regional, national and occasionally international settings.

In most cases it was the university that was the contract-holder, managing the TTA award and co-ordinating activities. Each consortium was managed by a Management Group, which in two Consortia was chaired by a school head; in another by an independent figure (from a local TEC); and in the fourth by (M&S?). These Management Groups functioned in different ways, though their basic framework and role was laid down in the

original specification for Consortia (for example at least 20% of Boards should be "serving classroom teachers" (TTA Consortium specification undated).

Consortium Management Groups took various approaches. In one Consortium, the Committee met seven times and saw itself as, essentially, a "business" forum, allocating the grant in response to bids and proposals from schools. In another Consortium the Committee met eighteen times and served as a discussion and development forum for cross-consortium deliberations. From time to time it would also convene itself as a seminar to hear external speakers or to receive reports on research activities. In a third Consortium there were, at the start, two Committees – a device to separate business decisions from other concerns, leaving the main Committee as a Consortium policy forum. In time, these two functions merged. One Consortium designed the Management Committee as a *"buffer"* between the schools and the TTA – i.e. to protect schools from demands extraneous to their task.

Each Consortium had a Link Officer, appointed by the TTA to serve as its field officer to provide advice and support and to link with the TTA and Programme Steering Group. There were three Link Officers for the Consortia (one doubled up) and one of these was also the Programme Manager. These officers took a Janus like role communicating 'up' to the TTA and 'down' to the Consortium, making programme process somewhat more transparent for each.

Partnerships and pressures

The idea of partnership, all consortia pointed out, was not confined to partnership between universities, LEAs and schools. Teachers, subject departments in some instances, and schools, increasingly accustomed to working in competitive isolation, found, through the Programme, novel and fruitful partnerships with peers and the opportunity to work with non-subject-related mutual interests. NASC and the NE Consortium (both comprised of secondary schools) were the clearest examples of this, though subject department development was also evident in Newcastle. In Leeds and in Manchester and Salford (both comprised of primary schools) such collaborative work was more typically within subject areas - a reflection, in the case of Leeds, and Manchester and Salford to some extent, of a connection with the National Numeracy Strategy and in the latter also the National Literacy Strategy. In Manchester and Salford, in the second phase, collaboration was also across the joint theme of Speaking and Listening.

These collaborations began to provide some foundation for the sustainability of Consortia beyond the funding period. However without programme arrangements and structure (funding, co-ordination, common purpose), many participants pointed out that such alliances may not survive.

Link to infrastructure

The first point to make about these partnerships is that at all levels (school, consortium and the Programme as a whole), they were features of the Programme structure. Innovatory programmes are temporary structures and this extends to the attempts in this

Programme to link development gains to infrastructure. Such an aspiration (for example, to draw in LEAs and school managers) reflects learning from past endeavours in national educational innovation which have shown a general failure of 'change' programmes to become embedded in mainstream institutional and professional cultures. However, linking to infrastructures meant embracing the problems as well as the possibilities of those structures, and to some extent, importing them into the Programme.

The Programme Manager was cognisant of the need to include LEA personnel in the partnership early on when she reflected:

> *"My best guess was that LEA would have an important part to play in brokering and freeing up some of the kind of paths and strengths and cultures…It seems to me that LEAs were well placed for diffusion, dissemination mediation, good practice… so it was important to involve them for that, but it seemed to me also very important to involve them because part of what we're doing here is trying to create funding, space, infrastructure and pressure to recognise intra-school activity and LEAs have a lot of expertise and experience in doing that, including knowing, particularly in the secondary sector how hard that had got, after LMS and everything else, and competition and Grant Maintained schools and so on*"

The Programme manager also pointed to another source of motivation:

> *"I also thought that by having another body that had its own power structures, one would disturb the straight classical teachers- university relationship, i.e. here's the pyramid and I'm at the bottom of it, they're at the top. They would bring another set of issues to that."*

The evidence from the evaluation suggests that across the Programme, the aspiration to link research activities to infrastructure support from LEAs and HE had varied success and the partnership was less than equal at times, though each Consortium indicated that the basic partnership arrangements (HE/LEA/School) came to work well over time. At first, there were different degrees of involvement. One Consortium had a strong lead from the LEA from the outset and in the bidding process. In another the LEA was written in, as the specification required, although HE and teachers mainly wrote the proposal. In both of these the LEA was strongly committed to disseminating the results of the research. In a third, three LEAs were involved and one was able to be more active than the other two. The fourth LEA, though it was committed, had problems of its own from the outset (through a recent OFSTED inspection), which one of the consortium participants said reduced the capacity it had to be actively involved in consortium activities.

It has to be remembered here that all partners including the TTA were operating in a complex changing policy context. The LEA context was particularly constraining for at least three of the LEAs involved in the Programme, one through a recent OFSTED inspection, as indicated above, which led to a partial privatisation; another through

economic cuts and staff reduction; a third through reorganisation, making their involvement less than might otherwise have been the case.

HE partners had the constraints of the QAA and the RAE to contend with in finding time to support teacher engagement in and with research. The schools were constrained by having to implement multiple innovations and respond to pressures to raise standards of achievement. The TTA also faced its own pressures and, at times, an uncertain political future.

The emergence of mutual understanding and respect between partners seemed initially to feed into a comfortable, if conventional, differentiation of role and labour, as indicated above, with the university partners on the whole broadly responsible for co-ordination and theory; schools and teachers participating in research and data generation; and LEAs for brokering access and dissemination support. As the Programme progressed however, school research co-ordinators came to have a stronger role in the partnership. In at least two consortia, University PGCE tutors also came to be more directly engaged in research with the schools and many teacher and HE partnerships developed, based either on joint equal involvement or differentiation of roles in pursuit of a common shared goal - in the move towards *"equable and complementary*" relationships indicated earlier.

Notwithstanding this general level of infra structure support and interaction, there were pressures that militated against collaboration. For example, each of the partner institutions had to work within different accountability structures (see below) and the demands of these could and did influence research in particular directions. One head teacher, for example, categorically said that had the school not chosen an area of research that related to their school development plan, they would not have become involved. Two LEA personnel noted that the research foci schools adopted needed to relate to the LEA's educational development plan if any support was to be forthcoming. Furthermore, there were important differences, pointed out by participants in several consortia, between the rhythms and cycles of institutional working that placed some limits on the nature and extent of collaborative working (explored below).

Accountability structures

Each of the partners were subject to distinct accountability frameworks and requirements, though all faced 'low-trust' accountability from funding agencies which reduced their freedom of movement and exposed them to targets and indicators derived from beyond their particular context. This reduced some possibilities for developing partnerships. LEA participants, in particular, felt that their Consortium gains were won against a backdrop of constraint from their accountable responsibilities. First, their overall remit required that they worked with larger constituencies than the relatively small number of schools in each Consortium in this Programme. Secondly, as one Consortium report put it, LEAs were required to engage with schools *"in inverse proportion to the school's success",* whereas schools such as those participating in the Programme may be seeking to build on their successes and gain a competitive edge. Thirdly, LEAs could only engage with schools and research within the remit of their Educational Development Plan.

Universities, throughout the life of the Programme, were preparing their submissions for the Research Assessment Exercise (RAE) – the national review of departmental research performance made every four or five years. Hitherto, this process gave the greatest rewards to traditional, scholarly and theory-based research projects and outputs, recent shifts towards 'user-engaged' research notwithstanding. In at least three Consortia, HE people talked about initial difficulties in having Programme-related work acknowledged among their peers as legitimate RAE-type work. In one Consortium university researchers explained that the amount of time they had to invest in co-ordinating and supporting the Consortium reduced significantly the time they had available for research writing both for journals and for research proposals. In another the response was quite the opposite, in that it was suggested that the Programme would provide opportunities to publish by writing with teachers and generating funded research that guaranteed that aim. These contrasting views are a reminder that universities are far from homogeneous in terms of their relationships to the importance of research and to different kinds of research.

Across the Consortia teachers and Heads reported that the foci of research had to fit within School Development Plans to legitimate the activities in the competition for resources. In at least two Consortia there was advocacy (including from university co-ordinators) to link research activities with emerging performance management arrangements. What this reflected was a response to the accountability contexts in which schools operated, where raising pupil test scores and increasing monitoring of teacher performance affected what research it was possible to do. We discuss elsewhere the issues associated with such a development. Here we note that the inclusion of school-based research into school accountability frameworks may place constraints on the nature of that research.

Time

Time is a resource that affects partnership arrangements in many ways that raise issues for the organisation of research. In this Programme, all partners for different reasons faced pressures on the time they could give to the partnership. In terms of the organisation of research, Universities are resourced and organised in a way that allows them to host a three-year programme of action and many seek such programmes to boost their funded research profile. In this sense locating the resources and management arrangements with the university partner fell within the conventional organisation of research. Universities have budgetary control systems, research roles, specialised resources and organisational forms that allow them not only to sustain continuous activities over a long period but also to link one set of activities (a programme) with another. Though the funding arrangements were perhaps more complex in this Programme than in others, the university partners were dealing with an essentially familiar process.

Schools and teachers, on the other hand, found it difficult to sustain continuous activities. One Consortium developed the notion of 'fallow' periods during which teachers would retire temporarily from the Consortium research activity to devote themselves to more

pressing responsibilities. In another the pressures of OFSTED contributed to a slow start to participation. In each of these cases the university took responsibility to maintain the continuity of Consortium activity.

Though Universities may have the organisational structure indicated above to maintain and support research in human resource terms, they faced similar pressures in finding time to support Consortia activity to that expressed by many teachers. Several HE personnel, said that they had put in much more time supporting teacher research over and above funded and agreed contributions. Some were happy to do this in the interests of furthering the collaborative research they believed in. Others were less sanguine and preferred to concentrate more on funded research and publications that were certain to gain RAE recognition. Yet others sought to combine both kinds of research. Programme management requests for reporting and internal evaluation added, inevitably, to these time pressures.

Diversity and Similarity:
Within Consortia

All Consortia experimented both with teacher engagement in and with research either within single schools and projects and with common themes across all or a number of Consortium schools. The initial period – approximately the first year – allowed for the emergence of research questions and projects and a range of research-related activities and training and the testing out of partnership relations. It also allowed for deliberation over where intellectual leadership should lie and who should set the thematic agenda which developed in the second phase (though in the case of the NE Consortium and NASC the major theme was there from the outset). This was mainly a choice between the university and the school – a debate held in Consortia and at the Programme level (at the TTA and in an annual residential). Significantly, however, an appendix to the TTA specification for Consortium bids set out the TTA Research Committee's own agenda for research. This emphasised research on TTA priorities for classroom action and it was in this context that Consortia prepared the proposals that set the overall prime focus for each Consortia's activity.

The dilemma between the TTA's agenda and individual schools' agenda is one that resonates with past practice in teacher research, where one has to take into account both teachers' unfamiliarity in setting realisable research agendas and their often-resulting reticence to do so; and the long-standing practice of universities to maintain their role in determining research agendas, echoes of which are occasionally evident even in the context of teacher action research. During this Programme, the TTA preference was for research themes to be grounded in the immediate needs of teachers and schools. An early meeting of the programme Steering Group [5.3.98] expressed a preference for a "sharp focus" and a "single, tighter focus" for Consortia. And the Programme Manager observed that "Consortia have worked fastest and most confidently…when they've had a clear combined focus.".

To some extent there was a tension explicit from the outset between the principle of giving (more) control over research activity to teachers, on the one hand, and effective management of collaborative research within a tight time frame, on the other.

Over time there emerged a range of resolutions to the above dilemma. In one Consortium there was an acknowledgement that a diversity of projects *"inhibited the potential for cross-fertisilisation"*. The decision was taken to work to a common theme that could have been seen as an *"imposition"* were it not for the fact that schools were moving in this direction together. This is similar to what happened in other Consortia, though for different reasons. In another Consortium part of the organisation allowed for initial teacher educators to be attached to each school in order to integrate the research and development with the teacher education programme. This proved difficult where schools pursued their own interests which, over time, diverged from those of the HE staff.

In a third Consortium, NASC, though the overall theme was the same, there was a shift from individual school projects to cross-Consortium projects involving less school focused research and more Consortium wide issues that might nonetheless be translated in a single school context. There was more similarity across Consortia in terms of research foci, management and execution than is suggested in Consortium reports. The draft Final Reports of the Consortia and the four Consortium Profiles of the evaluation show variation and diversity across Consortia, but set against a consistency of purpose, strategy and even experience. Hence, one Consortium was able to list what they saw to be examples of overlapping efforts in generating knowledge across the Programme including common methodological experiences; shared experiences in the attempted embedding of evidence-based research in schools; similar challenges in dissemination and change; common experiences with partnerships; and a common rethinking of educational/institutional roles. This is not surprising since all consortia developed proposals in the context of the same specification, responded to formative and summative feedback from TTA, worked within the same funding regime and followed similar resource pressures (resources, time pressure, timescales)

Key points of similarity, though not standardisation, between Consortia, partly arising out of the conditions described above, include:

- A focus on pedagogy as a key variable in learning outcomes, with an emphasis on effective teaching and objectives-based teaching;
- An aspiration to more closely engage pupils in pedagogical interactions;
- An acceptance of pupil attainment gains as a key criterion of success;
- A concern with the nature and effect of teacher and pupil questioning;
- The use of collegial observation, commonly with video-recording;
- Experimentation with the physical organisation of the classroom (pupil grouping) as an aid to improving pedagogical interaction and control;
- Focus on Literacy and Numeracy;
- Linking Consortium schools to existing teacher-education partnership arrangements;
- A common partnership structure within which the university provides research and research training resources;

- A value placed on teachers developing a common 'language' for research;

This does not exclusively describe the work of any single Consortium and each one engaged in a unique set of research and development activities. One alone, for example, based its work on understanding and dealing with pupil disaffection; another uniquely drew heavily from the university's professional research group; another had a particular curriculum focus, thinking skills, which drove the research strategy. Across Consortia there was a balance to be struck between what was unique and what was transferable.

Organisation and methodology in consortia research

This subsection explores how methodological choices were reflected in the organisation of research and how Consortia managed this. In the Interim Report we explored the question of how research is mediated through pairs or groups of teachers – sometimes within a school and a familiar professional community, other times in cross-school groupings. It was suggested there that where research was 'social' – i.e. mediated through a relatively large group whose relations were forged in and through the research – it was more appropriate to sustained questioning and methodological exploration; whereas research conducted in more intimate, collegial settings was more likely to be incorporated into focused professional development activities where questioning gave way quickly to analysis.

We can broaden the focus here to look at the impact of organisation on research and research methodology. As mentioned above, for example, NASC experienced a shift of interest from single-school to cross-Consortium research work. This was partly as a result of developing common interests and partly as a result of insecurity with the individual, school-focused case study approach and a search for greater security in larger (survey-based) data sets. This was spoken of as a "retreat" from 'ideographic' (i.e. context-bound) studies towards what was felt to be more secure ground in 'nomothetic' (i.e. norm-related) studies (Elliot, 2000). This tension was discussed in another Consortium as a tension between 'qualitative' and 'quantitative' research, as the following comment demonstrates:

> *"Quantitative performance data was seen to be more credible despite the fact that the strongest influence on teacher behaviour and attitudes…was their interpretation of pupil responses…"* [Baumfield & McGrane, 2000]

Ideographic, then, was conflated with single-school research; nomothetic, largely with cross-Consortium research. There are two issues here (1) the location of research in single-school or across a number of schools, and (2) working with case study data or with data sets. Both have implications for the organisation of research.

In practice there was a tension between within-school and between-school research. One Consortium reported on the shift from the early school pilot projects to a cross-Consortium focus in this way:

> *"The initial school project foci were not relinquished in most schools…and such ongoing tensions between individual school and collective consortium requirements served to underline the need for flexibility. The route chosen was, from the start, a compromise that inevitably increased the complexities of the project."*

There are, too, organisational implications to the choice of case study or survey-type methods. Case study data more closely resembles the way teachers think and talk – it is frequently couched in a vernacular, jargon-free language allowing for easy acquisition. As we read in one draft Final Report: developing teacher research often meant creating a language and context in which teachers could meaningfully participate. What emerged in each consortium, though in different ways, was the need for teachers to gain confidence in sharing and talking about their research. In the Final Report from one consortium, for example, it was noted:

> *"The experience of doing research provided an 'oasis' for many project teachers giving them increased self-confidence to talk about their practice in informed ways…to develop a language of professional discussion."*

And in another Consortium:

> *"The reluctance to become researchers in the [traditional] terms was exacerbated by a recognition of how difficult 'scientific' research is and how sophisticated the skills and techniques…Instead, the Consortium adopted an approach to research that was in line with teachers' own understandings of the teaching process."*

This approach was closer to case study, which as indicated above more closely appreciates the language teachers use. It also means that the data is more manageable by those who collect and own it. Indeed, it is often only they who can understand and interpret the data.

Survey data makes different demands. There is a need for certain forms of technical expertise (e.g. in the construction of samples, building in validation criteria, knowledge of trialling procedures) in the context of a more managed process. The Consortium immediately quoted above claimed to have reduced a conventional 'paternalism' in HE/school research relations by making the methodology *"contextualised rather than academically abstracted"*. This reduced the capacity for HE researchers to take hierarchical roles, said one of the teachers (we have already seen a widespread preference for equality of status between teachers, university researchers and LEA people). Indeed, it was noted that as the research proceeded a *"weakness of the HE support profile"* was exposed – *"a lack of pedagogic expertise in targeted curriculum areas"*. In another Consortium the evaluation observed a project meeting where the construction of a survey instrument was under discussion. Teachers and University staff alike struggled with the discovery of appropriate forms of interrogation and resolved them together. In the same

consortium one of the University staff members went on to develop his expertise through training in using the statistical analysis package SPSS.

Each Consortium was an experiment in creating alternative conditions for the generation and use of research knowledge – principally about aspects of pedagogical action. The 'alternative' was what was alleged to be the dominant approach to research which made tighter distinctions between those (in the HE sector) who generate and those (in schools) who utilise pedagogical research knowledge.

This Programme sought to realign such arrangements, at least to blur boundaries between creators and users of research projects, at best to erode them. One Consortium put it like this: *"The development of structures which cut across the established organisational boundaries may be necessary to sustain collaborative research consortia"*. The question arises as to what form of management and organisation for research is presaged by this programme and may be appropriate to sustain school-based research. From the evidence the following characteristics of social organisation typified this programme.

- The university remained the administrative 'home' for research. University budgetary systems made convenient locations for financial accountability; universities concerned had pre-existing networks and partnership arrangements with schools as well as administrative resources geared to managing networks. Neither schools nor LEAs were able to sustain the focus or to devote the resources to central co-ordination of the research organisation;

- Consortium management was collegial in that school people had equal weight in decision making with university and LEA people. The organisation had shared ownership;

- The organisation provided systematic access to research knowledge whereas in the past, it was said, access for teachers had been *ad hoc*;

- The Consortium organisation provided what one Consortium described as a *"safe to fail environment"* for teachers to experiment with self- and collegial-enquiry. Another Consortium described this as an *"oasis for many project teachers"*. This was achieved through a culture of peer support, a tolerance for conducting research in private and regulating the exposure of teachers, in particular, to external critical audiences (though one Consortium noted that some school cultures *"militate against the development of a safe ethos"*.);

- The organisation provided for a co-ordinated differentiation of tasks;

- Consortium organisation was built on exchange and interaction and so brought a sense of 'transparency' to constituent organisations, which allowed partners to understand and gain confidence in each other (e.g. allowing for the often gradual involvement of LEAs);

- The form of organisation was, as one Consortium put it, 'small and local'.

The typical Consortium organisation had sufficiently flexible goals to allow for emergent sub-structures and shifting loci of activity – e.g. sometimes school-based, other times cross-Consortium. Nonetheless, at the close of the Programme questions were being raised across Consortia as to sustainability without Consortium funding arrangements. Consortia proved to be the 'temporary structures' noted in the early stages of innovation analysis by Miles (1964) which give rise to temporary gains. There are two principal options which suggest themselves:

(a) The university continues to be the natural home for research and the co-ordinator of research organisation, its funding carrying obligations – as in this Programme – to share responsibility with schools and LEAs;
(b) Experiments are conducted with resourcing schools to manage and co-ordinate research and research careers.

A third option is, obviously, for the LEA to play such a role, though, in spite of the broadly positive experience of LEA collaboration, there is no evidence in this Programme to suggest that this is sought-after. Nonetheless, it is just as feasible as option (b) – in some respects more so – to imagine the LEA managing a Research Unit which housed career classroom researchers. This might even be thought to be a more natural solution than option (a) since it would:

- represent merely an extension of funding, career and co-ordination arrangements already familiar to LEAs, including the secondment of teachers;
- easily be embraced within the philosophy and ideals of LEAs to provide advice and support to teachers and schools; and
- promise a convention of political neutrality which provides adequate protection for the independence of research.

Programme Culture

The TTA worked across and with consortia to create a programme culture – i.e. a context of thought, action and generalisation which happened beyond the confines of any single Consortium but to which all Consortia could usefully relate. This was accomplished mainly through the following mechanisms:

- Annual cross-Consortia residential conferences addressing overarching themes;
- Cross-Consortia symposia at conferences (such as BERA, CARN, EERA);
- The work of TTA Link Officers who were information conduits across Consortia;
- Frequent mediation of plans and reports through the programme managers at the TTA who would, from time to time refer one Consortium to the work of another;
- National meetings of the programme Steering Group, Link Officers and for annual reviews.

- The pursuit of 3 common cross consortia questions on how engagement in and with research was being interpreted in practice;
- Funding of occasional cross Consortia visits by teachers.

This aspiration to generate cross consortia programme learning as well as learning for individual consortia was pointed out by the Programme Manager in speaking of the importance of the link officer role in this process:

> *"...we didn't fund four completely separate Consortia who weren't expected to know about each other. We set up an Initiative to enable learning across them, and so we expected them to be willing to dedicate some communication, thought and management time to understand what's happening elsewhere and understanding the external world interface.*

The fact of a Programme culture which lay beyond an individual Consortium and which enriched experience was attested to within at least two Consortia. One, for example, reported that Programme contact *"validates one's own efforts, enhances self-esteem while offering a broader context in which to ground realism"*. Several reported that knowledge of other Consortia was *"essential"*, one indicating below the rationale for this:

> "*Although the research foci and the management and execution of the four consortia programmes were very different, the educational issues concerning the process of learning and teaching was similar across the board…"*

Given the scope of each consortium's activity and the constraints on time previously mentioned, there was a limit to how many meetings could be planned to share learning and engage with other consortium's ideas. But certain points can be noted. There was evidence of some transfer of experience and methodology across Consortia. The use of pupil logs, the use of collegial observation through the videotaping of lessons and the findings of some classroom research (e.g. the RHINO study[3]) were each spoken of as having transferred from one Consortium to another. However, knowledge of other consortia was not always couched in positive ways. A group of teachers and Heads in one Consortium, for example, talked of themselves as highly integrated with a high degree of voluntarism and they compared themselves with another which they claimed was more fragmented and had engaged teachers as *"conscripts"*. There were teachers in all Consortia however who claimed to be conscripts at one time or another. This did not necessarily affect their experience in the Programme, though they were often more diffident at the outset.

On the whole however, while there was some transfer of methodologies and ideas across consortia, diffusion of the experience of participants was limited to the work of their own Consortium within and across schools. For many teachers even this was a distant context and their concerns were limited to what was happening in their school or department

[3] A study of pupil disaffection using the notion of the pupil who did not truant but who was Really Here In Name Only (RHINO) and present in the classroom.

rather than other schools and other Consortia, though some said that they would have welcomed more contact. Such a local focus for many participants is common in multi-site programmes and the cross-programme development is frequently left to those who are evaluating or theorising about the programme.

However some teachers did seek interaction with other consortia and found benefits in the interactions they were able to make. There were also teachers who moved beyond the confines of their Consortium to attend meetings of the national Steering Group and who sat on a national forum (the National Teachers Panel) promoting the ideas and interests of the Initiative. The TTA sought, through this Programme and the National Teachers' Panel to create opportunities for teachers to enter the policy community and to enter the research process at stages earlier than receipt of evidence. Teachers who were involved in these activities said that they benefited from them in terms of personal development and in terms of developing contextual understandings of research organisation. Some who were not directly involved also said that they welcomed the opportunity provided through this Initiative to "*have a say*" and to let those who have a role in policy and programmes of this kind know a little more about how they worked and the constraints they currently faced.

The residential conferences were clearly valued by many in the Consortia and highlighted for having helped create a *"sense of belonging"*. However there were mixed views of their usefulness. At one such event observed by this evaluation there was an emphasis on sharing experience of the process of Consortia research activity though little opportunity for teachers to share the content of each other's work and the contextual and policy-related constraints which affected what they were able to achieve.

Programme Management

As sponsor and manager of the Programme the TTA (represented by the Programme Manager) elected to play an interactive role with each Consortium and the Consortia at a Programme level. As we have seen, this brought to the Programme a mix of central control and local diversity. Interaction was accomplished in a number of ways. First, TTA Link Officers were appointed, on a contract basis for a number of days per year, to liase with each Consortium, to act as a 'critical friend', to offer support and to serve as a conduit for information between TTA and Consortia. For example, in the first phase, it was the link officer who conveyed to one Consortium that they should not be focusing upon curriculum issues and that they had too many individual projects and needed to develop a more thematic approach consistent with their original proposal. The success of the Link Officers lay in building good relationships with a Consortium and negotiating an appropriate role and style.

Secondly, this interactive aspiration was underpinned by the meetings of Link officers and Consortium co-ordinators, the Steering Group (of which they were members) and the Residential meetings of all consortia.

Link Officers were former headteachers or LEA officers. One of them as indicated earlier was also the Programme Manager. The reason for this double role was explained

by the Programme Managers as giving the Programme Manager the opportunity to know consortia work in depth. It was also a question of economic expediency as the Programme Manager was visiting the site monthly for another project. A third reason was her background in the Consortium's theme. Several participants in some of the other consortia indicated that they thought this gave a bias to reports on the Programme in terms of possible over-reliance on the work of one consortium. This was acknowledged as a possibility by the Programme Manager, though she also indicated that she tried to counteract this in various ways.

In the early days of the Programme, some consoritum people reported tensions between themselves and the TTA as difficulties in implementing their proposals' aims were experienced in some instances, while in others Programme expectations from the TTA did not always match what it was feasible for teachers and the consortia to accomplish in practice. Many of these tensions were resolved as the Programme progressed in a process of mutual accommodation and as people came to acknowledge the constraints under which they each worked and differences between them in interpretation.

For example in one consortium one aspect of the concept of teachers as users of research foundered initially as it was realised that the existing research knowledge base was not easily accessible or specific enough to relate directly to what the teachers wished to research. This did not prevent teachers getting engaged at some level in research activity (e.g. discussing ideas, identifying issues for research and later interpreting meaning of colleagues' research) only that they did not immediately become engaged in 'doing' research.

Secondly, the utility (and feasibility) of gathering large-scale datasets (possibly stemming from the initial conception of evidence-based practice) was unclear. Consortia were unsure quite how to set these up and what TTA's expectations were. The TTA Programme Manager said that the TTA were reminding consortia to attend to what was in their proposals. They definitely wanted to support experimentation and to that extent she said *"we were unclear"*. Her view was as follows:

> *"TTA's aim in funding Consortia to experiment with establishing data sets was to start the process of enabling schools to build cumulative data about teachers and teaching. Schools already had access to a good deal of data about pupils and learning outcomes but very little about teachers and teaching. We recognised at the start that the education system as a whole was at the early stage of development, in this respect, one similar to the one we were in with regard to pupil data in early 80's. We therefore had no formal template or agenda. What we wanted Consortia to do was to consider hoe to bring together teacher and teaching data cumulatively and to experiment with different ways of doing this as they had described this in their proposals. The possiblility, for example, of enabling meta analysis across an individual school or Consortium. The extensive efforts at building open access to data in NASC, and the records of peer observation in Leeds and the efforts to bring together Consortium data with pupil data in Manchester and Salford offered interesting but different possibilities. But*

in most cases original plans had to be scaled back and the benefits of collecting converging data to enable meta analysis only became clear at a very late stage of development. Nonetheless some meta analysis had already taken place and the possibility of funding further meta analysis of this and data from other Consortia is mow being considered. I think it fair to say, however, that whilst a good deal has been learned about ways of building cumulative teacher and teaching data, this relates as much to what not to do or about preconditions for building a willingness to work with such data, as about what can be done."

Thirdly, an issue arose over the extent to which teachers could be engaged in generating research proposals (see goal two). From the outset, both TTA and many HE research personnel realised that it was most unlikely that teachers would want to be involved in writing research proposals given the time commitment and expertise this involves, though several Consortia interpreted the expectation from the TTA to be that teachers should be involved in writing proposals. According to the TTA managers, the intention was to involve teachers in securing research proposals and to generate proposals from issues identified by teachers, not that teachers should necessarily write them this strategy succeeded in securing two ESRC projects in Manchester and Salford. In the event what happened in most Consortia was that HE personnel took the major, if not sole, responsibility for writing the proposals, often with discussion and interaction with teachers over the issues to be researched. In several instances research ideas stemmed from previous work in the consortia. At the end of the day, as one Consortium co-ordinator put it, teachers were not inclined to spend hours of time to write research proposals when in many instances, despite their worth, these were rejected by funding bodies, simply because no funds were available.

In terms of the time and space teachers had to devote to research, which the issue of supply cover could not always address, several teachers commented that the TTA did not initially fully appreciate the reality of what it was like in schools. One headteacher commented:

"In terms of relationship with the TTA, I've only met people from the TTA at meetings and I think, at that particular meeting I am thinking of, we spent a lot of time again talking about the logistics and about the reality of running schools, and I don't think there was a good understanding."

The pressures on teachers and schools was an issue the Programme Manager came to recognise and support (through, for example, extending supply cover, reducing expectations for teacher attendance at meetings and publicly defending and protecting teachers' time).

Finally, there was the issue of quality control and quality assurance. In the early stages of the Programme, several HE Tutors in at least two Consortia said that they found the monitoring of papers that they wished to submit for conferences and later for publication interventive. This reaction may have stemmed from the fact that they were not accustomed to such interactive management in previous funded research. However as

indicated earlier and in the concluding paragraph below as the Programme progressed and ways of working and understanding between the partners developed, the same individuals indicated that, although this degree of oversight of paper presentation and publication was time consuming and led to delays, on the whole, nothing that they wanted to present or publish had been prevented and some had found the process and comments helpful.

Some seeds of caution in building a relationship with the TTA on this Programme were sown by pre-existing relationships with the Agency in respect of core funding for teacher education programmes. More than one university partner talked of their reserve in challenging programme decisions, concerned not to prejudice their departments core funding.

The scenario was an unlikely one besides anything, Programme management was too distant from TTA core funding arrangements, and there was no evidence of any sanction nor would sucha sanction have met the interest of Programme Management who valued a 'partnership' approach. But this was a perception and, perhaps, speaks mostly of the fragility of funding for HE, education departments and a generalised fear of punitive consequence for falling out of favour with a government agency. The Programme Manager put it like this:

> *"The TTA's activities in promoting research and evidence informed practice were clearly part of its remit but were different in kind from many of its other roles. The work was about persuading teachers to take an interest in research and building and recognising their skills in interpreting it. It was about challenging, persuading and influencing HEI's to make research more accessible to teachers, to focus it more to teaching and learning and to involve teachers more extensively in the process. The initial teacher training work was more directive and the resource and inspection processes associated with this had a good deal of purchase on the system.*
>
> *The research related work was organised separately from the ITT and recruitment work and carried out by a very small team. The fact that some HEI colleagues were concerned about how the Consortia work might affect TTA views of their ITT work was therefore apparent to us when those colleagues told us of their concerns, but not if the concern was unspoken. Nor was it always clear to us in the early stages which mentor tutors were also PGCE tutors, since we met only occasionally with colleagues beyond the core contract team. When we were more aware we were able to make useful connections, to spot and unpick misunderstandings much more quickly. But in other instances it took more time for assumptions and misunderstandings to surface."*

The role of the Programme Manager

The interactive nature of the TTA role in this Programme was acknowledged by the Programme Manager, who said *" I have a very active role which I think has been quite a challenging one but not an inappropriately steering one"*. This was illustrated with

reference to the commissioning and publication process that ran parallel to the Programme:

> *"for example, when research teams have produced final reports, TTA hope to enable them to publish that, to fund them to publish that, to have quite a lot of debate about how things are said but not a debate about what is said."*.

In the Programme Managers' view, the kind of research being commissioned by the TTA was different from that commissioned by organisations which provide money for research and leave the researchers to get on with it. *"That's about producing a research grant for an independent product, I mean this is for a product to help in* (improving teaching and raising standards of achievement), *it's got a very specific purpose"*.

The management approach to the Programme had implications for its range of possible outcomes. Management provided firm leadership - said the Programme Manager, if a consortium "*looks to us like failing we will marshal all the support that we can and some of that will include steering"*. But management was also, to some degree, democratic - admitting of critique and dissent, and seeking to neutralise academic power relations to allow for the emergence of a teacher voice. There were values placed on giving voice to teachers as a key marginalised group though within limits of tolerance determined by the maintenance of the productive momentum of the Programme and dictated by the political tolerances and vulnerabilities of the Agency. However, a balance between diversity and standardisation of approach was allowed for and encouraged by the TTA. The Programme Manager described the Programme as an "*exploration that allows experimentation"*, while acknowledging that *"you can't control things as complex as this"*. She described her approach to programme management as "*valuing difference and understanding how to work with it"*. The freedom to accomplish this was given to some degree by the positioning of this programme in the TTA as an organisation. The Programme Manager described it as occupying a 'slightly hidden corner of the TTA – certainly not part of its core business. This was reinforced by the fact that the Programme Manager herself was contracted in by the TTA and was in a sense in but not of the TTA albeit accepting the responsibility to represent the Agency.

Perceptions of the TTA role by the HE research mentors coincided with the Programme Managers' understanding in that they noted some experimentation was allowed but also that there was steering and, in two instances, a veto of what was proposed. The perception of some higher education personnel was that partners were not always equal and that teachers were sometimes more valued partners by the TTA. One Consortium co-ordinator recalled an instance when the Programme Manager *"was encouraging teachers not to be put off by 'high status' professors' -all the time implying that we are out of touch - and we're not"*. Others, especially towards the later stages of the Programme, acknowledged the support of the TTA and Programme Management for their consortium throughout. Some, separating the interactive style from the concepts and process of research, commented that while they sometimes disagreed with TTA personnel, they nevertheless had a relationship that worked for the consortium.

As the Programme evolved Programme management and Consortia began to appreciate more the constraints each other was working under. *"At the outset,"* observed one Head, *"the TTA had a view of what schools should be – but they didn't have a view of what schools were. Of course, they've changed now"*. This Head added that the TTA had become very conscious of the problems schools had – the *"realities" of,* for example, OFSTED, staff changes, stress and serial innovation. And the TTA noted, in the words of the Programme Manager, that

> *"…Consortia learned both about us and from us as well … I don't think that I changed my view of what schools should be -and I don't think the Programme did. What we did do was learn how to communicate much better with the Consortia and schools and they learned the same about us".*

Almost every university person the evaluation interviewed made the point that the TTA and/or the Programme management and they themselves had, throughout the period, become more sensitive to the realities of practice and the policy contexts in which each worked. Initial reactions to an interactive or interventive management style may have been affected in the early stages of the Programme by peer perceptions that obtaining funding from the TTA would limit independence.

Similarly, the Programme Managers reported that Consortia partners in schools and LEAs came to make fewer assumptions about the Agency and became more aware and open-minded about the Programme Management's contribution as the Programme unfolded. Together with other evidence, this points to a 'responsive' management approach with paternalistic overtones, in which freedoms were real but conceded, and in which a careful eye was kept on the run of those freedoms. Programme managers were fierce advocates for teachers, in particular, though advocates on TTA terms.

SECTION 4:THE IMPACT OF THE PROGRAMME ON PUPIL ACHIEVEMENT

As noted above, the principal aim of the Programme was to '*explore how research and evidence can contribute to improving teaching and raising standards of achievement'*. The evaluation explored with teachers the impact of the Programme on pupil achievement. Data was collected from a range of sources, including pupil performance data and teacher and heads' perceptions of whether or not there had been gains in pupil sores which may have been attributable to this programme[4].

Considering the attribution of changes in achievement performance data it is worth beginning with a word of caution. In general, care is needed when interpreting changes in data on pupil achievement over time, or in comparisons of data across schools. There can be many different reasons for changes in performance. Including some or all of the following:

- A school's intake may have changed in character over the period under consideration;
- A school may serve a highly transient population and pupil mobility may be significant;
- Analysis at the school level evens out the progress made by particular groups of pupils and it is known that schools are differentially effective so that any particular school may be more - or less - effective with specified groups of pupils;
- The social circumstances of the school may not be adequately reflected in common measures of social circumstance such as the data on free school meals (FSM) collected for the school;
- The pupil intake may be drawn from a wide geographical area so that generalisations about the social character of the intake, based on catchment, may be inaccurate.

In the case of the Programme, the difficulty is compounded by the co-existence of other interventions, national and local in origin, dealing with management, pedagogy, assessment, subject development, etc., the goals of which included changes in pedagogic practices and the raising of achievement. This effectively rules out the confident attribution of causation to any one particular source.

The necessity for caution in interpreting performance data is borne out when scrutinising, for schools across the Programme, the school performance data that is published annually by the Department of Education and Skills (DfES). This DfES data includes the percentages of pupils achieving (or exceeding) particular scores on standard assessment tests (SATs), the percentage of pupils gaining 5 or more grades A*-C at GCSE, and

[4] The evaluation only collected data on school level performance – not, for example, on classes or on groups of children.

percentages of authorised and unauthorised absence. In addition, for both of the main categories of school (ie Primary and Secondary), the DfES defines a 'Measure of Improvement'. For Primary Schools this measure is the sum of the percentages of pupils achieving Level 4 or above in the English, Mathematics and Science SATs. For Secondary Schools the 'Measure of Improvement' is taken as the percentage of pupils gaining 5 or more grades A*-C. Data on the levels of authorised and unauthorised pupil absence is given as percentages of half days missed.

The following examples illustrate how difficult it is to use variations in any of this data to gauge the impact of the Programme.

- In one particular Consortium, the standard test data 'Measure of Improvement' improved consistently over the period 1997-2000 for two of the schools while for the three other schools there was such year-on-year variation that no such improvement could be discerned.
- In another Consortium, the DfES 'Measure of Improvement' for the years 1997-2000 appeared to have improved relatively consistently in only one school. For the other schools in the consortium there was marked year-on-year variation, with those above and below the LEA and National averages remaining in those relative positions.
- In terms of the percentages of 'authorised absence' from schools, in one particular Consortium where pupil attendance could be taken as one measure of impact of the Programme, over the period 1997-2000 the LEA and national average percentages of authorised absence both declined slightly (although it should be noted that the DfES definition of authorised absence changed in 1998). Most of the schools in this Consortium followed this general trend, some markedly more than others, although one school, which showed the most marked decline in authorised absence, maintained a much higher rate of unauthorised absence than the other schools in the consortium. Nevertheless, two schools showed much year-on-year variation with one of them showing a higher rate of 'authorised absence' in 2000 than they had in both 1997 and 1998.

That identifying causal links between changes in practice and changes in pupil achievement is problematic was clearly recognised by participants in Programme. On many occasions, teachers talked of the intrusion of there being too many variables to clearly identify the impact of research experience on pupil learning or attainment. One particular teacher commented:

> *"It is always difficult to tell with children […] this has been the year of numeracy for us anyway and because we're part of a regeneration area where maths has had high status this year, there have been lots of things that we've done […] But I couldn't honestly say whether it's the research that's impacted on the children or whether it's all the other initiatives that they've been part of this year."* (Teacher)

A teacher in another Consortium made a similar point. He had been working with a class on a particular problem using the notion of 'concept mapping' which he had heard reported at a seminar arranged by the University (an example of engaging with research as evidence) had changed the way he presented ideas to pupils:

> *"There's no validity to the results in research terms. I can't say that presenting the question in this way will improve pupil achievement...I can't, because there are too many variables, and none of them were controlled. But that's not the point – it's the process of thinking about what the conceptual difficulties are for the children which is probably more important than actually what you've done."*

A teacher in another Consortium felt no need to measure impact. She was confident that a change in the way that teachers relate to each other would itself have some impact on children. She and her colleagues had used peer observation, as a result of which they had agreed on certain standardised practices.

> *"I do think it's important that we've actually worked as a team and standardised our approach […]. This worked for us. The children have benefited. Whether you could say that the raising of the standards is as a result of it, I don't think anyone could say that definitely because wasn't that going to happen anyway? But you can't say it hasn't."* (Teacher)

For this teacher what was important was that *"we've all been given a voice, really, and we listen to each other's point of view – and time to analyse our teaching methods…"*.

Another teacher observed that, given the range of intervening variables *"it may take 5 to 10 years to map a rising trend"*.

Many people recognised that even when there were gains in test scores these need to be interpreted carefully. A university tutor, talking about his work with a teacher, said they spoke about when, as a teacher you get feedback and adjust what you are doing in the classroom:

> *"eventually you get the happy ending where the scores go up by about 30%. But, of course, it's an absolutely meaningless relationship…In that school they had a big 'middle' and they felt that the extra effort they made at the middle bumped the scores up."*

The general view that came over was one of scepticism towards directly attributing to the Programme improvements in student attainment, but combined with widespread confidence of positive impact on learning. There was general recognition that the range of possible intervening variables governing pupil acquisition of ideas made many people uneasy about the robustness of any claims they could make. Nevertheless, teachers in the Consortia tended to be much more confident about measuring impact on learning where this is governed by their own judgement.

This is not to say that teachers denied the worth of research to their practice or that it has no impact on what pupils think and do. To the contrary, this was strongly attested to and teachers talked a great deal about the positive benefits of involvement in this Programme on their practice and on classroom life. However, there are two caveats commonly made. The first was that impact of this sort is best noted through the professional judgement of a teacher rather than measured by changes in attainment scores which may be too coarse - grained. While one consortium did make concerted efforts to use local test scores to assess impact they acknowledged that even though these particular test scores did show an increase, there were important limitations in the data. For example, the number of pupils involved was rather small and the test scores were necessarily taken over a limited time span. Nevertheless, such data did fit with other data the Consortium had collected, such as teachers' views about the impact of activities inspired by the Programme. The second caveat, as mentioned above, is that there are just too many intervening variables to be able to attribute student attainment gains to specific inputs. Research interacts with too many other significant factors, including the mere fact of participating in a collective enterprise, to be able to disentangle its precise effects.[5] This is one of the most frequent caveats cited in the literature on educational change and is often presented in reciprocal terms - i.e. that it is not possible in such situations to work back from measured outcomes to make specific judgements about the quality of process.

What is more, several teachers interviewed commented that noticeable immediate gains were typically thought by teachers to be of the kind of knowledge subject susceptible to short-term recall by pupils, whereas longer term learning gains were slow to emerge, perhaps even too slow to be noticed by individual teachers.

While falling short of showing direct impact on achievement, the following examples attest to an enhanced quality of pedagogical interaction and pedagogical relationships as judged by teachers and heads:

- In one consortium, accounts of systematic change in mathematics pedagogy were from the earliest stages recognised collectively as having raised the quality of pupil engagement with the subject matter, and this was in itself described as an important change in pupil achievement.
- In another consortium, two different head teachers identified what they saw as a direct relationship between the Programme and the enhanced progress of specific groups of pupils. One described the progress as *"tremendous"*;
- In another consortium, a very experienced teacher described in detail the impact of their own engagement with extant research on the duration of pupil responses in class, pointing to improvements in the quality of classroom interaction that had been achieved subsequently.

While teachers in the Programme frequently attested to the difficulty of using outcomes data as a measure of the success of research activities, they had no difficulty in

[5] In a context of multiple innovation there is no possibility of random assignment, nor of unambiguous independence of a varible.

confirming the personal value of such involvement to them as teachers and to their conduct in classrooms. As documented elsewhere in this report, research of the kind undertaken within this Programme has helped the teachers involved to make both their classrooms and their practices more transparent to them and their colleagues. A common view was that contemporary working conditions appear hostile to the kind of professionalism that these teachers aspire to and that involvement in the Programme has served to temporarily suspend that hostility and to allow the teachers to re-engage their professional judgement in ways often not allowed for or encouraged under the conventional routine of teaching. The impact of this, while impossible to quantify, has undoubtedly been wider than the classrooms of the particular teachers concerned. As one teacher observed:

> *"There has been no more valuable experience than going into somebody else's lesson in a non-fragmented situation and sharing practices and even if you go in, and if it's not so good a lesson, you learn from that, but it's still a privilege each time whoever's lesson you go into. But good or bad you are going to learn from it and if everyone feels comfortable, um, doing that, it seems to just raise standards really, it does, and it has been instrumental in promoting that as much as anything else..."*

and another said:

> *I suppose really you have to be asking the question would it have happened without the research? I think some of it would have because I wanted to move Maths forward anyway but it just gave us a vehicle to do it and made it real and made teachers see the benefits of it and evidenced it, if you like. I wouldn't have done exactly the same without the research… Those strategies, and teachers actually talking about the strategies, and feeling able that they can talk, and observing each other. All of that has had an impact on teaching and, of course, consequently on learning - because we have showed improvements. As I say, we found it very difficult to show improvements as regards to SATs but we have definitely showed a big improvement in the tests that we used which were obviously weren't standardised. I don't think that's really that important. It's more important that we were engaged in it and we learnt from it and moved on… There's so much hidden benefits that you don't actually have any evidence for but you just know that it's had some sort of effect. "*

SECTION 5: FINDINGS, ISSUES AND IMPLICATIONS

Reviewing issues previously identified

As this evaluation has proceeded it has sought to identify and validate a range of issues that are raised and suggested by this Programme. These were first published as a draft issues framework in the Autumn of 2000 and subsequently taken to Consortia for discussion; later in the form of an internal Interim Report which was subject to critique and response and further followed up through two teacher workshops and a series of telephone interviews with teachers and members of the Steering Group. The Programme managers added their own feedback to each of these reports.

All the issues raised here and in the preceding sections were drawn from the data in that they have had at least one respondent raising them and often other respondents endorsing them; and all issues were an attempt by the evaluation to summarise questions arising from conversations with Programme participants and their reports.

The identification of issues has arisen in a number of ways: First, directly from the evidence itself; secondly, from the juxtaposition of excerpts of data or views which might remain unassociated in the experience of any one consortium; thirdly by the evaluators in interpreting respondent experiences. In all cases the identified issues had to be recognised by respondents to achieve valid status, though this does not mean of course that all participants recognise every issue (see Appendix 1 ‘A note on methodology’)

The first issues framework

The identification of issues is an iterative process. Issues are in a sense, milestones along the way of understanding. Statements of issues are ways of publishing the state of evaluation learning at a particular time so as to allow programme participants to engage with the evaluators. For example, the first publication of evaluation issues identified ten thematic issues, each of which was explained and expanded. This list (without the explanatory paragraphs) was as follows:

1. Time - Timescales - Prioritisation – Cycles
2. Multiple Innovations
3. Release from Teaching
4. Power - Language – Discourse
5. Evidence for what/evidence of what?
6. 'In' and 'With' Research - what other constructions are there?
7. Autonomy and Community - whole-school engagement
8. Relationships between partners
9. Reflective Practice or Research
10. Dissemination or diffusion

It can be seen that most of these relate to the experience of the Programme – principally, how teachers and others engaged in research development ('in' and 'with' research to use TTA terms) under various constraints such as time, language, collegial relations and divergent understandings of the task. Teachers, in particular, had spoken extensively to the evaluation about time pressures, the difficulty of working with supply cover, the unfamiliarity of out-of-classroom contexts, the importance but the difficulty of engaging colleagues, the plethora of multiple change agendas and the isolation accompanying the competitive conditions they were required to work in. None of the issues under these headings were resolved one way or another in the Programme – they remain 'live' issues. It became clear for example, that the language of research (the 'jargon') was an exclusive one that some teachers (and some HE people) found intimidating and expressive of certain power relationships. Others, however, respected the language and felt that coming to terms with it was part of their induction into a research culture and was even empowering. Similarly, there was uncertainty across the Programme as to whether the process by which teachers were generating and encountering evidence could reasonably claim the label 'research' - whether it met the canons of conventional research or simply fell within the familiar umbrella of teacher professional development.

Issues in the Interim Evaluation Report

The internal Interim Report took the identification of issues a stage further. In particular it expanded the framework beyond the immediate experience of the programme to address broader contextual issues and more directly policy-related issues. Though it did not prove possible to negotiate the public release of that report (the principal comment from Consortia was that its approach to generalising issues failed to portray the particularities of each Consortium) subsequent interviews and exchanges at teacher workshops led to an affirmation of its issues-content. The issues in that report were set out in narrative form but those which received some form of endorsement can be summarised as follows in the form of questions:

- *Given that the sponsor of this Programme was the TTA its focus emphasised teaching over curriculum and assessment (i.e. the preserve of another government Agency). Did this place limits on research impact and Programme activities?*

- *Where some of the intention was to alter the research base at an infrastructural level – e.g. ceasing to assume that the 'natural home' of educational research is the university – what were the implications for the professional and, economic organisation of research?*

- *There were differences in the source, kind and use of evidence and these make appeals to different kinds of judgement. What differences were there, for example, between judgements of evidence made by an individual teacher and judgements mediated through a group or a network of teachers?*

- *Teachers were familiar with constructing and protecting teaching spaces – how might it be possible for them to construct and relate to 'research space'?*

- *For the most part research fostered by this Programme looked 'down' and 'in' at teachers and classrooms, but less so 'up' and 'out' at policy and financial contexts. What is an appropriate for purposes of development balance in government sponsored programmes like this between research that works within the policy status quo and research that brings that status quo into question?*

- *A key criterion of success for this Programme was the link (albeit indirect) between teacher research and the raising of standards, defined by improved pupil achievement. Given the difficulty of using outcome measures to measure the quality of a programme, and the instability of judgements based on pupil scores how does the Programme and the TTA meet this accountability demand?*

- *What does the experience of this Programme say about where resources might best be targeted to stimulate teacher engagement with research - what is the appropriate 'unit of change' – e.g. the school, the individual teacher, a group of teachers in a single school, networks of teachers across schools?*

- *What changes in the way research is organised in universities might broaden the constituency of researchers in departments of education to those who typically work in partnership with schools?*

- *Is there evidence in this Programme that teachers and others were discovering new ways of construing and validating research or were they 'reinventing the wheel' of valid research for their own settings?*

- *What counts for research impact on a whole school – change in all departments, different practices across the staff, a changed school ethos, renewed management thinking?*

- *What are the costs and benefits of engaging school management in supporting research development – e.g. research receives status where it is included in a school development plan, but does it become co-opted into management agendas, and does this matter?*

- *Teachers clearly valued the transparency fostered by a research process in relation to their and their colleague's teaching and classrooms. Where that transparency is embraced by performance management, however, might teachers find themselves yet more exposed to accountability?*

- *The Programme was successful in generating teacher research in many forms and some of this flowed from success at creating a supportive and safe programme 'culture'. How dependent are such developments on programmes? (I.e. do we have to replicate programmes as temporary structures to guarantee success?)*

Further refining the issues

What follows are issues and understandings as they have developed and emerged by the end of this process of interaction and 'respondent validation' - some of them pursuing the same questions as above. Some are stated in the form of questions or dilemmas, others as interpretations. These are not definitive statements but contributions to a continuing debate about teaching as a research-based profession and to the ongoing process of policy development for further investment in this area. There are, therefore, set out in the form of (evidence-based) statement followed in each case by a discussion of that statement. They are numbered for ease of reference, not in order to suggest a hierarchy of significance.

1. ***Criteria for judging improvement in teaching***
   "…you have to decide, whoever funds it has to decide, was it worthwhile for the results that that particular school has got, what is the measure of success, is it, um, better results, is it teacher enthusiasm, is it professionalisation, is it openness to research, or, its – that's the difficult question really, how do you measure the success of it, what is the measure of success of it? I don't know."

There was no specification attached to the injunction to 'improve' teaching – other than the suggested (perhaps indirect) link between better teaching and gains in pupil achievements. Rather, the criteria for what constituted improvement was left to consortia.

Discussion: This was one aspect of the reliance this Programme accepted on teacher judgement. Underpinning the aspiration to improvement is the generalised political concern with raising standards, but since the concept of an absolute educational 'standard' is problematic in itself this provides no simple criterion against which to measure progress, nor does it guarantee educational understanding and generalisation of how improvement occurs. The experience of this Programme suggests that any connection between research/evidence, improved teaching and pupil achievement is indirect at best and, though such measures may correlate, the relationships between the measures are not causal. This absence of specification had the benefit of giving Consortia the freedom to develop their own criteria for success (balanced against an accountability framework to account for those criteria) though at the cost of some participants feeling uneasy as to the validity of their claims. This Programme was a context for educational action in which certain important targets were left to the actors rather than dictated by a central authority. If, as a result some Consortium activities and emergent values diverged from national policy (e.g. independent classroom action diverging from a statutory curriculum and standardised testing) they nonetheless gained greater coherence with practitioner values and aspirations.

2. When the focus shifts from teaching to teachers

Here is a clue as to the question we address. Starting from the aspiration to improve *teaching* there was, for some a shift to the improvement of the *teacher* – it became

'personalised'. The shift was from the practice to the practitioner, the agent. These two aims – improving teach*ing* and improving teach*ers* - sometimes went hand-in-hand. The closer, for some, a teacher looked at what they did in the classroom and its consequences the more they were forced to look at themselves, their tolerances and their educational values. Pedagogical research became reflection on professional identity. For a teacher to look critically at what they do, listen to pupils responding in surprising – sometimes dismaying – ways to their teaching, received a colleague's feedback, witnessed the mastery of a more confident teacher, and so forth, meant having to reassess at some level or another their own motivations, self-esteem, cherished values. What the evaluation observed here were teachers beginning to look at the relation between the 'self' and the 'role' and the clues lay in the phraseology of teachers as they said things like *"it just feels right"* or *"I feel different"* and when teachers talked about reflecting on their role for the first time since their initial training.

Discussion: In a number of respects this Programme has been a reaffirmation of certain long-standing principles of curriculum and teacher development, and a testing of them in new contexts – particularly the high status given to the professional judgement of teachers and the testing of educational propositions against classroom realities. The value the Programme placed on giving teachers the freedom and the resource to develop their own enquiry agendas is a step towards teacher autonomy. This Programme encouraged teachers to rehearse their judgement that sometimes focused equally on the 'what' as well as the 'how' of teaching.

The Programme conceived of classrooms as places where educational knowledge can be generated and is interpreted, not just applied, skilled action. Classrooms, to borrow the phraseology of Stenhouse, can be 'laboratories' as well as achievement-zones; teaching can comprise 'hypotheses' and 'experiments' as well as curriculum directives. No wonder, then, that one of the ways suggested to the evaluation for describing this Programme was one of a 're-professionalisation' of the teacher. Previous evaluations of educational innovation have shown that aspects of educational professionalism can atrophy with disuse and need rekindling[6]. So, too, with the exercise of pedagogic judgement over (a) what counts as teaching quality, and (b) what is worth teaching and how, and we have seen such a rekindling here – perhaps re-socialisation is an appropriate description. At one point the term 'professional healing' seemed the most apt description for the strength of feeling with which some teachers talked of the rediscovery of professional community and degrees of professional autonomy. Some teachers in this Programme felt they had a glimpse of a different way of being, a different professional state, a different meaning to their presence in the classroom.

Indeed, the more recent period of the teacher-as-researcher movement spawned a proliferation of studies of teachers' lives and new methodologies for documenting both

[6] What is widely identified as the first major educational programme evaluation – of the 'Eight-Year Study' in the USA – showed just that. Teachers given freedom and autonomy with, for example, a relaxing of college entry requirements over long periods of time still failed to exploit that freedom with new and creative curricula. They needed re-socialisation into creative curriculum thinking.

the life and the work of the teacher. The two proved to be inseparable as a basis for understanding the formation and transformation of teachers' professional identities.

To some extent this can be concealed by the focus on technical aspects of pedagogy (e.g. exploring seating arrangements, teacher and pupil questioning techniques, development of specific techniques such as concept-mapping or visual aids for mental maths, etc.) and the focus on methods (e.g. pupil lesson-logs, video analysis, teacher diaries). It was, too, somewhat disguised beneath the enthusiasm to develop that sense of community which we documented in the Interim Report and the value given to collective identities. And, too, this Programme was not designed specifically to support and explore the transformation of teacher identities. Had it been, there might have been more resource, for example, for university researchers to conduct independent studies of teachers and their work for triangulation purposes. But this dimension may be an area for consideration in any future programme of teacher research.

3. Stable infrastructure

This Programme represented an attempt at re-engineering the structural relationship between professional research and the teacher. It has shown how engaging both 'in' and 'with' research can be located in schools – but under temporary circumstances. In the end, and without Programme scaffolding, Consortia said at the Programme's close that the system returns to its stable state This is not to say, of course, that individuals and even groups were not touched and changed by this experience – clearly many were. Not that the experience of this Programme did not stimulate further proposals for change and for maintaining the intellectual momentum gained. But, it is not clear whether gains seen in this Programme in terms of changing research relationships inside the university itself were sustainable other than in the context of a funded project.

Discussion: The distribution of research resources is determined through the political economy of education. Hitherto this has led to research careers, resources, infrastructure and conversation being centred on the university – partly, historically, to guarantee its independence (i.e. through dual funding mechanisms and through the political impartiality of the university). The school, in spite of attempts since the 1960s to generate research and even research careers there, has dedicated its funding principally to teaching. The familiar and conventional arrangement is one in which the university generates knowledge and the school applies it - i.e. in Programme terms, the university engages 'in' research, the school engages 'with' research.

The question remains, what would a changed professional economy look like? For example, what do school-based research careers look like? How might school based research centres, for example, be funded and managed? What mechanism similar to dual funding might protect the independence of school-based research? How might applied, practice led and policy related research in schools be articulated with the 'blue-skies' research advocated most recently by David Hargreaves? How might teachers cope with the professional risk associated with research which comes to involve critique of school, LEA or government policy? How do universities protect classroom action research if the RAE continues to devalue it as in exercises during the 1990s? This Programme showed

how a temporary and novel infrastructure with novel relationships can be created out of a Consortium arrangement, but, paradoxically, it thereby demonstrated a dependence on what was a temporary and (to stakeholders) expensive arrangement. The tenor of thinking at exit from the Programme was that sustainability was dependent on 'more of the same'. In the end, this Programme drew from existing infrastructures to create new ones - it did not succeed in making links to existing infrastructures and nor did it succeed in changing them. This is characteristic of the 'temporary structures' cited earlier from Miles (1964)

4. The university as a 'natural' home for teacher-research

The experience of this Programme shows the university to be a variegated research environment, and this has implications for the support of school-based research. Both this and the Interim Evaluation Report highlighted issues in the way teacher research was received and supported in the university. In most Consortia universities teams were made up of professional researchers and teacher-educators. Nonetheless, where, for example, research was conducted by PGCE tutors (i.e. grounding a Consortium in school partnership arrangements and making the link between research and ITE) there were issues in connecting with (sometimes elite) professional research in the university department. It was not only schools and teachers who found access to professional research restricted.

Discussion: Recent developments in the university have led to an increased concentration of research funding and activity and a consequent division of labour in departments of education between professional researchers and teacher educators. There is little to suggest that this is due to change – indeed, there is evidence surrounding discussions of the Research Assesment Exercise that it may further intesify. Each has their own contribution to make to supporting research developments in schools but the experience of these Consortia suggests that unusual efforts have to be made to create an integrated university resource. The experience of this Programme raises the question of whether a reconsideration of the organisation of research so as to support the development of teacher research might imply reform of the way research is located and organised within universities. Certainly the recent Research Assessment Exercise signalled willingness to value 'user-focused', local, practitioner research and the results remain to be seen. There has been much discussion about the influence RAE criteria have on the organisation of research in the university, and it may well be that changing the criteria to embrace action research as a basis for claims to 'excellence' on a par with theory-based research, for example, will make university departments of education more accessible to the values represented by this programme.

5. Transparency and accountability

The research generated by this Programme made teachers practise and their classrooms more transparent. Evidence suggests that this was of benefit to teachers and valued by them in supporting their personal development, school development and the emergence of fruitful professional relationships with others – i.e. it supported the 'communities of practice' or 'communities of enquiry' widely aspired to by programme participants. *"It's great to be observed by somebody and then have an opportunity to talk. Its so different to …battling away on their own,"* said one teacher. That transparency, however, can also be

an instrument of accountability under performance management regimes (a number of teachers, heads and university people in this Programme have advocated this)[7]. One school, for example, was planning for research to be *"supporting changes in teaching practices…setting objectives for performance management"*. This issue was endorsed by a number of people in discussions following that report, including members of the Steering Group. One person said that s/he had encountered a similar issue in other contexts where teachers expressed a reluctant to engage 'in' research and preferred to engage 'with' research – i.e. preferred to use it rather than do it. The grounds were that the current climate is one in which a teacher could not be sure of the use to which their research findings might be put – by school heads and others.

Discussion: The issue is not one of the integrity of school managers or others. It is, rather, the dual issue of (a) protecting the independence and critical capabilities of research (i.e. teachers fearful of their transparency making them vulnerable to increased scrutiny may tend to keep their research bland); and (b) being clear about the purposes to which research is put. Research, for example, as a source for management information or to measure the productivity of schooling may not be same thing as research for professional development. Two Consortia pointed to the importance of what one called a 'safe-to-fail' environment for teachers to do research. Such may not easily be compatible with contemporary preferences for low-trust accountability that is attended by penalties for failure. The issue is not clean-cut, however, and depends on the independence of senior management in a school. One head teacher in the NE Consortium, for example, is attempting:

> *"a coherent approach which links [research] even to performance management because that is the opportunity to give staff time to observe each other teaching and give feedback to each other. It's an issue at the moment because the very fact that you say ' performance management', it becomes judgmental and the awful notion that this could be used as part of disciplinary procedures but what we are trying to say to staff is that our interpretation is not that. Our interpretation is this is professional development, this is working alongside a colleague to develop your own teaching and learning…We want to hijack performance management and direct it towards real professional development and Thinking Skills is just one avenue that we are keen to explore."*

Another way of thinking about this issue is that the historical privacy of teaching is no longer publicly tolerable and teachers and their teaching have to be more accessible to scrutiny. Scrutiny may come in the form of low-trust accountability (e.g. external: the imposition of standards backed up with inspection; internal: performance management) or of high-trust accountability (e.g. teachers self-evaluate). This Programme has developed self-evaluation skills among teachers and one question arising is to what extent their early experiments need protecting before they are subject to the potentially harsh winds of external scrutiny.

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[7] *"…where visibility as a conduit for knowledge is elided with visibility as an instrument for control"* as one commentator put it in highlighting the same issue (Strathern, 2000)

6. The appropriateness and implications of methodological choice

Across the Programme questions were raised about appropriate methodologies, many teachers feeling uncertain about the status of research whose conclusions were not underpinned with statistical or other procedural devices. Teachers engaged in qualitative studies based on observation, for example, were sometimes preferred to claim only that they were engaged in professional development. Some people in NASC said that, nervous of the idiosyncrasy of what they termed 'ideographic' and individualised data (i.e. data confined to particular places at particular times) they had "retreated" into group, survey research (not that the subsequent enquiries were not meaningful or did not have impact, which they clearly did).

Discussion: One difficulty is that 'ideographic' data is inherently more complex to manage than, say, survey data. It places more responsibility on the teacher who collected it, for example, to interpret and analyse it – whereas survey data can be analysed by a team where the responsibility can be shared. Methodologies make different demands on teachers and call for varying forms of social organisation – and so demand varying forms of support. Case study or 'ideographic' data is, too, inherently more resistance to research management. Where, for example, the data more clearly 'belongs' to the person who generated it (together with the person it came from) it is more difficult for a third party to interpret it or, thereby, to appropriate it, say, for publication or for management information. There are implications, then, for school management and for traditional 'managers' of research who may find that research which strengthens the sense of autonomy of a teacher-researcher erodes their own management control. More than one Head teacher in this Programme pointed – not in terms of anxiety or dismay – to the possibility that more research in a school would lead to a more questioning staff and that this, in itself, implies different forms of management in a school.

7. Research validity

Teachers in this Programme often expressed anxiety at the validity of their work as research. For the most part these anxieties were bound up with the generalisability of the knowledge they were generating and with a belief that, for example, tests of replicability and significance based on statistical procedures were beyond them. The anxiety was not unfounded. There was more than one occasion when, at conferences, for example, people from this Programme found themselves and their work subject to critique against traditional canons of research. Some teachers were aware of a hierarchy of authority in educational research and that they occupied its lower reaches. Validity - technical requirements to justify research claims - was the instrument of that hierarchy.

Discussion: The Leeds Final Report points to the work of House (1991) supporting the notion that there are alternatives to conventional 'scientifically-grounded' approaches to validation. There is a literature on 'practitioner validation' or 'validation through utilisation' and this might have provided security to those teachers who were anxious of failing against the traditional canon. This has implications for Programme management which, in fact, took the role of patrolling the theoretical boundaries of programme experience and brokered its acceptance in broader research communities - e.g. at conferences, through regional workshops. The Programme could be seen to be exploring

alternative approaches to validity based on the notion of credibility-in-utility - if it makes sense in practice, if it informs teacher action in ways that prove to be useful, then it achieves validity. Teachers retreated from the discipline-based demands of validation against social science canons (such as tests of statistical significance) and into more case-based, professional, tests of what was professionally plausible. This does not diminish professional, case–based claims to validity, nor imply that they escape rigour. It does suggest rescuing rigour from theory derived tests and deriving it instead from a professional knowledge base in education.

Most recently Gorard (2001) questioned teacher research sponsored by the TTA as *"the kind of evidence that we do not need or want in education. The findings are simply not safe."* He complained that there was no sign *"of the surprise that is the hallmark of real discovery"* and continued to argue about unmatched cohorts, uncontrolled variables, etc. There are two issues here that raise questions about how knowledge emanating from programmes like this is managed, represented and validated. First, Gorard makes no allowance for the technical skills and confidence required to adequately portray the experience and its meaning to the teachers involved. What may be banal to skilled observers might well be (often is) revealing for practising teachers. Secondly and more difficult is the validation of research, and here Gorard is asserting the traditional canon and restricting space for possible alternatives. Teachers do not enjoy the professional or resourcing conditions that would allow them to meet such demands. Even if they did the question remains as to whether they would find the demands useful or meaningful.

Questions for further enquiry and discussion

There remain three issues that we offer for continuing discussion. These, to some extent, lie beyond the remit of this evaluation and are less strongly supported with evidence. Nonetheless, their relevance has been evoked by the experience of the Programme and they are offered here as worthy of consideration and possibly for further enquiry. The first is the question of how we might conceive of the professional organisation of educational research; the second concerns when a preoccupation with teach*ing* becomes a preoccupation with teach*ers*, and the third concerns the differentiation (at national level) and the integration (at classroom level) of educational policy.

1. The professional organisation of teacher research

This Programme has experimented with forms of organisation of teacher and classroom research. What does its experience say about appropriate forms of professional organisation that enhances the possibilities of teacher and school-based research? By 'professional organisation' we refer to the way in which people relate in pursuit of common or disparate goals – either individually or in groups.

Teachers and Schools - The Programme spawned a broad range of organisational forms – from 'lone' teacher researchers to pairs working in relative isolation to large groups working quite publicly; from teachers working together in a single school to teachers working collaboratively across two or more schools; and from teachers working alone to teachers working with university-based researchers. A common preference in this

Programme was for teachers working in groups, across schools and in collaboration with university and LEA people to co-ordinated themes. There was, that is to say, a preference for complex, collegial, often cross-school forms of organisation. Participants in this Programme sought and responded positively to collective forms of action within which teachers felt most confident in tackling methodological issues and taking personal risk. Where there were cross-Consortium teams working on a common theme there tended to be a sustained reflection on methodology, for example, and there was evidence of the induction of teachers into research as a complex and problematic process. Based on this alone there would appear to be promise in the sponsorship of teacher/university networks.

Set against this – to some degree in tension with it – is the other preference expressed for including research in school development plans and working within-school themes. Sometimes this was expressed as a desire to secure status for research in a competition for priorities; other times as an expression of staff solidarity and joint commitment in a school. The engagement of school senior managers was often said to be important to the sustainability of research efforts and inclusion in SDPs was the surest route to this. Indeed, there is evidence that the growth of rational management in schools demanded that research can only survive as a resource-based activity where it is included in the priorities of senior managers. Projects conducted within the boundaries of single schools tended to sustain reflection on the complexities of pedagogical change – perhaps more so than on methodological complexities. In terms of institutional coherence there would appear to be promise in the sponsorship of school-based research.

There were, of course, hybrid forms of organisation - in all Consortia individual schools worked on their own versions of cross-Consortium themes and there were instances where school managers joined cross-school networks, contributed to them and found them valuable. There is, nonetheless, a clear distinction to be drawn between funding within school and cross-school research projects and developments. For example, to fund research based in single schools is likely to tend to limit the exploratory potential of research and to emphasise its productive potential – i.e. research can be free of or co-opted into the struggle of schools to raise achievement and competitive edge. Funding networks of teachers, on the other hand, tends to encourage the exploration of ideas – not simply because teachers meet in contexts which are neutral to their own school's policies, but because the necessity to learn about colleagues from other schools sets an enquiring tone to interactions from the start. The very novelty of cross-school groupings extends to novelty in thinking. And, too, it would appear to be easier to guarantee 'safe-to-fail' environments where projects are conducted beyond the embrace of school policy.

Teachers, University Researchers and Theorising - There were principally three approaches to the involvement of university researchers with teacher-research in this Programme based on collaboration over agenda-setting and the conduct of research. One was for the university researcher to provide resources and support to the teacher who pursued their agenda; another was for the university researcher to work and learn alongside the teacher on a shared agenda; a third was for the professional researcher to conduct independent enquiries on an agreed agenda so as to collaborate through triangulation of data. An example of the first of these would be university researchers

hosting training workshops, providing systematic access to research literatures and facilitating school co-ordinator meetings. An example of the second might be a particular University staff members, being relatively new to the research role, joining a Consortium project team in order to learn about research alongside the teachers; an example of the third option might be where university researchers devised and administered a questionnaire which fed teachers' theorising about pedagogical issues. The last of these might include the researcher conducting research 'on' the teacher (e.g. using narrative life-history techniques to explore a teacher's educational values). There was little evidence of a fourth option that is for the university researcher to take sole responsibility for the conception and conduct of the research.

In each case there are distinct epistemological options and different possibilities for theorising about experience. For example, under the first option – advice and support – the university researcher is dependent on the teacher's data and the possibilities for theorising about classrooms are limited by the range of that data and by the inherent difficulties of researchers working with other people's data. Under the second option the professional researcher is closer to the data and can share ownership of it, allowing for greater intellectual engagement with it. Even so, the possibilities of theorising are limited by the range of that data and by the limited questioning of the research questions. The third option in which the professional researcher conducts independent enquiry and researcher and teacher share parallel methodological experiences allows more easily for reflection on the research agenda, provides some reality check on teacher data and encourages more critical reflection as a basis for theorising. The first two do not admit so easily of the exploration of teacher values, though they do not preclude it.

Of these three main approaches to collaboration there was more evidence of the first than of the second; and more evidence of the second than of the third. Whether for reasons of limited time and access, ideology, experience or preference there were few examples of university researchers engaging in the conventional approach to validating and theorising data for example. Nor was there evidence of the systematic exploration of educational values, for example, looking at the limits personal belief and experience place on pedagogical action. Though teachers frequently talked to the evaluation about their values these rarely formed part of the formal record of Consortia and do not feature in Consortia Final reports. Rather the tendency (not in all Consortia) for university researchers to maintain a distance from the action tended to limit the possibilities for theorising at this level and placed limitations too on critical reflection of policy contexts. For the most part Consortium research looked 'in' and down' at schools and classrooms, rather than 'out' and 'up' at policy and institutional contexts. But it might be argued that the Programme was not set up to do the latter - indeed, for the TTA this was a small-scale Programme with boundaries that reduced such expectations.

While, on the one hand, there were, for the reasons outlined above, some limits on the possibility of theorising, on the other hand the tendency to focus on teaching (rather than the teacher) did allow for a sustained address on the key goals of the Programme, to subject teaching to critical scrutiny and change. Theorising, in this latter sense, has focused on the act of teaching and its associated behaviours. University researchers

provided access to research literatures on pedagogy and classroom observation, for example, supporting teachers, as in Leeds, to apply, adapt or develop their own methodological solutions to pedagogical change. These various approached to theorising are, however, not mutually exclusive activities, and what has transpired in this Programme has, possibly, been the early stages of development in specific instances of new theories of pedagogy.

2. Policy negotiation and the role of the intermediary agency

There was a view expressed across the Programme that Programme Managers and the TTA itself had changed and developed in understanding and sensitivity to schools and teacher cultures as the Programme has developed. For their part Programme managers felt that Consortia had learned to accommodate themselves to the TTA and its own aspirations and tolerances. This is evidence of the growth of understanding of individuals and the development of relationships.

This can also be taken as evidence of a structural factor. The TTA is an intermediary agency that stands between government and profession, and as such it works through a mix of sanction, agreement and persuasion. No innovatory programme can accomplish its aims through coercion alone. What was made transparent in this Programme was the process of accommodation and interpretation of national policy. Partnerships bringing together constituencies with such diverse accountability regimes either mutually accommodate or lapse into disagreement and defection. Here, the story was one of mutual accommodation.

One way of seeing the Programme is as a forum within which government interacts with the professions and negotiates its aims. The concept of teaching as a research-based profession has been refined and extended through the course of this Programme and partly as a result of its experience. This Programme has functioned somewhat as an experimental laboratory for policy. Such a role makes particular demands on the management and organisation of such programmes – principally in terms of the need for 'safe-to-fail' environments and for responsive, educational approaches to management – i.e. management which is facilitative rather than supervisory, which values experiment over compliance and which approaches its projects with a sense of curiosity.

Given the history of attempts at the reform of various aspects of schooling and education through varied means - voluntary or statutory; centrally-directed or local; time-limited or evolutionary; coercive or educative - we may learn from this Programme about the role and the promise of governmental executive agencies as sponsors of change. In this case the TTA served as a forum for negotiated solutions and relationships, encouraging for its championing of diversity and teacher development, worrying for the potential sanction of its resource-allocation power as the sponsor of teacher education. There is a broad consensus among observers of educational change that those innovations which succeed in impact and which endure tend to be local, evolutionary, spread by word-of-mouth, derive their agendas from practitioners, meet those practitioners' intuitive understanding of the demands of practice and are educative rather than coercive. This Programme appeared to function comfortably where these criteria were to the fore and, to an extent,

confirm that consensus. There is, nonetheless, the complicating factor of the TTA, as an intermediary agency, being accountable only to Ministers and not, for example, to the professions or parents.

3. The differentiation and integration of educational policy

We have noted that one impact of the fact that this Programme was sponsored by the TTA was a focus on teachers and teaching. The necessity to sustain this focus did not prevent people from looking at other issues but only so far as they did so through the lens of pedagogy. NASC and the NE Consortium, for example, each addressed curriculum questions but approached them through studying the effectiveness of teaching; in Manchester & Salford the complex and multi-faceted issue of school improvement was approached in the same way.

In this way the Programme draws our attention to the differentiation of educational policy leadership through national agencies and other institutions. These manage disparate responsibilities – for curriculum, curriculum development, standards, leadership, school and teacher development and subject development - which were once, to some extent, integrated in joint efforts between schools and LEAs (along with subject associations) and overseen by a Ministry which retained all these functions in-house. Such functions and responsibilities are now in policy terms split, principally, between the TTA, QCA, GTC, National College for School Leadership and the National Educational Research Forum. This proliferation of executive bodies conforms to a rational model of executive action but does not necessarily offer a coherent model for organisational and educational development at local level. Hence, for example, they lead to some fragmentation of effort on the ground, as happened in this Programme, where teachers in the process of development were restrained at times from addressing issues in assessment, curriculum and management, whereas, in practical classroom terms, these cannot be so divorced from integrated problems of classroom action. One of the impacts of this was less on the quality and extent of partnerships and collaborations, more on the way themes could be addressed and on how those themes achieved a 'fit' with the complexities of classroom life. For example, though the following features were discussed from time to time in Consortia and some were addressed to some extent, they were not subject to sustained enquiry as part of Consortium or Programme reflections:

- The development of management systems for classroom-based research;
- The curriculum implications (i.e. knowledge and ethics) of closer pupil engagement in pedagogical interactions;
- The impact on assessment of more searching pupil questioning;
- The validity of test scores as measured against growing teacher understanding of complexities in pupil learning and attainment;
- The systematic development of research careers in schools and the changing nature of teachers' professional identities as a result of research engagement.

The question is not whether this Programme ought to have embraced such questions - it had its own agenda and these were not its main concerns. The question is more to do with

recognising that however differentiated educational policy may be at national level it has to be integrated by the teacher in the classroom who is ultimately responsible for reconciling the policies of each and every agency.

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Appendices

Appendix 1: **Methodology**

Appendix 2: **Consortium Profile, Leeds**

Appendix 3 **Consortium Profile, Manchester**

Appendix 4 **Consortium Profile, NASC**

Appendix 5 **Consortium Profile, North East**

A Note on Methodology

The approach

From the outset the evaluation adopted a multi-site case study approach, explained in the original proposal and justified on the grounds that it had the potential "to integrate the learning from diverse experiences into a single, coherent story so as to support policy development" (Evaluation Tender, pp. 9 and 10). The approach encompassed a range of methods of data collection and a set of ethical guidelines, within which the negotiation of accounts was a prominent and constant feature. Evaluation activities were planned and carried out in three phases - the first, major data gathering in each consortium, the second, theme visits, the third, follow-up and final interviews and teacher workshops. In the last of these, fieldwork was combined with analysis with the aid of teacher profiles, and excerpts from the unpublished interim evaluation report.

Throughout, the evaluation operated interactively both within the team and in relation to the consortia and data gathering and understanding. The following steps were taken:

- the twelve teacher profiles were read by all members of the evaluation team and negotiated with the teacher's concerned;
- the case profiles of each consortia were similarly negotiated with each consortia and modifications made to the accounts;
- the interim themes that were emerging from the data were tested in the field with consortia; the majority of the themes were endorsed in the theme interviews;
- regular meetings were held with the Programme Managers and the Co-Directors of the evaluation to monitor the progress and foci of the evaluation;
- the evaluation team met regularly in each site and periodically as a whole team to discuss issues arising form the evaluation and plan further fieldwork;
- an Interim Report was sent to all consortia and the TTA and issues arising from it were further tested in the follow-up interviews and workshops;
- written comments were received on the Interim Report from the Programme Manager. The Consortia were also asked to send written comments as part of an iterative process of checking the validity of the issues raised. Two did so.

In the final stage of analysis and preparation of the Final Report the procedures adopted were as follows:

- all members of the evaluation team read the whole of the database and highlighted the specific issues relevant to an understanding of the Programme;
- the team then met on several occasions for the purpose of a systematic comparison of "readings";
- final themes were developed and tested in the field, with some being affirmed, some modified and some rejected;
- the team worked in close collaboration to write the Final Report. Responsibility was shared throughout. Initially one person wrote a section. This was then read and

rewritten by a second person with further data and understanding added. The pairs then read and commented on the other sections that they had not initially drafted to cross check understandings and add further data if necessary from the database. Each member of the team then read the whole report for further clarification and editing.

- The Draft Final Report was sent to the Programme Managers and the Consortia (as part of the iterative process of further understanding and validation of the issues raised in the evaluation. The Programme Managers, both in a meeting and subsequently in writing, offered detailed comments. No comments were received from Consortia.

The database

The database from which this report was constructed includes:

- transcriptions of more than 150 hours of interviews;
- twelve teacher negotiated profiles;
- five school profiles;
- field data on 14 meetings (including Consortium management, school co-ordinators, TTA Annual Review, TTA Link Officers, Consortium project);
- field note records of each site visit totalling 80 pages;
- interview data from all schools visited (mostly individual of one hour in length, and occasionally in groups) with over 80 teachers, and heads in the majority of schools;
- interviews with non-consortium teachers in some schools;
- telephone interviews with the teacher profile participants (several more than once);
- telephone interviews with Steering Group members;
- interviews with 8 LEA personnel, 14 HE personnel, two TTA personnel, two TTA link officers.
- documentary analysis of Steering Group papers, annual consortia and TTA Reports, over 30 consortia conference papers;
- draft final reports from each consortium;
- four Consortia case profiles (see Appendices 2-5);
- an unpublished internal Interim Evaluation Report and the collection of views expressed when it was shared with key stakeholders;
- teacher workshops in three of the four Consortia.

The validity of accounts

In this evaluation reports of all kinds were subject to scrutiny as to the status of statements, the basis for the selection of data, the nature of claims. The evaluation accounts represented in this report lay claim to validity in the following ways:

1. The evaluation sought at all times to construct its agenda from questions raised by Programme participants and stakeholders, drawn from: the TTA brief for the evaluation; questions offered and implicitly accepted in the evaluation proposal; interactions with teachers, LEA and HEI and TTA people.

2. Evaluation statements were all grounded in a database. This is to say that all evaluation statements and issues can be illustrated as having derived from stakeholder responses.

3. The evaluation sought to function in part as a learning resource for the Programme. This meant that evaluation accounts sometimes had the intention to develop and extend the understandings of Programme participants, testing out ideas and interpretations which were then be endorsed, adapted or rejected.

4. The evaluation attempted to bring to bear insight about change processes, derived in part from experiences with other Programmes. One effect of this was to raise questions and issues that, whilst they were not of immediate concern to participants, nevertheless drew their attention to salient learning gleaned on other programmes.

5. The evaluation maintained a position that respected the negotiable nature of its accounts, using published ethical principles and procedures to guide the process. It remained open to challenge and amendment against what was fair, relevant and accurate.

Selection and interpretation of data

Selection of data rested on a combination of the perceptions of participants (e.g. what best represented their own experiences) and the judgements of the evaluation team (e.g. over what best represented the experience and learning, especially *across* the Programme). The presentation of examples of data in the final evaluation report was guided by the need for *illustration* (of views, experiences or ways of understanding), for *posing questions*, for *balance*, and for the demonstration of *diversity*. Throughout the evaluation, data were selected and interpreted to produce an account that was comprehensive whilst embracing and manifesting the Programme's complexity. The evaluation recognised instances of the universal tendency for participants in any programme to want a selection of data that casts them in the most favourable light, and sought to respond through negotiation.

In seeking to understand the experiences and impact of the Programme, the evaluation was informed by the principle that it had no right to reduce the significance of any view to a measurement of the frequency of its occurrence. In other words, the evaluation operated on the premise that a view expressed just once by one person could carry as much significance for Programme learning as another view that was expressed several times. By the same token, the evaluation remained cautious about making statements which claimed to be representative of views held across the Programme, operating on the basis that there is no calculus or test of significance (or even voting procedure) which might justify, for example, privileging the view of several people over the view of one.

The evaluation was guided by the idea of authenticity rather than notions of absolute or objective truth. Views presented were accepted as truthful, but subjected to further critical reflection, sometimes to challenge, and always to comparison with alternative views. As far as possible, the evaluation took the plausibility of an account as a

minimum requirement – i.e. that accounts were at least undeniable, if not always thought by all parties to be the best possible portrayal of their activities.

Profile of the Leeds consortium

Summary

This is a Consortium of six primary schools, a university and a local education authority. Its substantive focus came to be on Maths, [Range in bid]. Schools – which were selected on the basis of pre-existing (ITE partnership) relationships - chose their own projects which eventually became focused on mental maths. One school whose chosen focus lay in language use withdrew from the Consortium in its second year. It was at this stage that the other five schools were discovering similarities in their projects. The main focus on research process has been on classroom and pedagogical observation, critically exploring the use of observation instruments and less formalised collegial observation. Some people experimented with teacher diaries, not as data collection instruments, but as what were described as *"working documents…ways of keeping information together and a record of events that helped inform project write-ups"* – with mixed success. Out of the research Consortium teachers explored pedagogy and discovered aspects of teaching behaviours that improved the teaching of mental maths. In the later stages of the Consortium schools developed dissemination packs out of their work and trailed them with each other. The six themes that were addressed were:

- Approaches to questioning
- Visualisation (i.e. the use of visual prompts for pupil learning)
- Teaching styles
- Involving children of all abilities
- Teaching strategies for dealing with errors
- Language use to promote comprehension

The aspiration of the university was from the beginning one of developing what the first Co-ordinator called 'communities of practice' – i.e. cultures of enquiry among teachers. Insofar as Consortium schools met together, deliberated over research process and research literatures, shared their own experiences and learned from and with each other there is a prima facie case for concluding that such a 'community of practice' emerged. This was a critical community in that it deliberated over research tools, literatures and canons and arrived at its own conclusions based on practitioner values.

A Vignette

It is early afternoon at a Teacher's Centre. Five teachers from different schools and a University person are meeting to discuss how they might share what each school has been doing. They exude a cheerful energy and are clearly pleased to see each other and be at the meeting. They all appear to have equal status; all seem easy about expressing their ideas. The conversation flows, often interrupted by laughter as someone recites an experience to which the others can relate. For example, they talk about the difficulties in collecting information whilst simultaneously developing an idea. One teacher says it's like "coming up with a long jump and inventing a metre stick at the same time".

They are aware of each other's work. They discuss data collection. They discuss how children learn, talking through the ideal of the 'numeracy hour' and the reality in practice when plenaries don't work as they should; mental starters done well but plenaries that don't work. That is a possibility for a new agenda, comments the University person.

They discuss each school project in detail; how teachers should select teaching materials, which children would most benefit, what sort of pupil should be the case study as evidence of the successor otherwise of a project. The discussion is animated. When they move to discuss a relevant research paper the tone changes. The teachers listen intently as the University person relates the research paper to one of the school projects. They agree that there is no clear way of categorising pupil activity. The approach suggested by the research paper is one way but by no means perfect. The discussion touches on teaching not being an exact science, that whatever you give to a teacher 2 they all go and change it slightly", trying to develop a common professional language. The group feel that they have developed a common language.

Action on Mental Mathematics

The Consortium went through what Anne Edwards described as its early "*confidence-building phase*" in which it was important for them to pursue their own particular interests. Nonetheless, it was relatively early in the establishment of the consortium that mental mathematics emerged as an area in which the teachers wanted to make a difference and discovered common purpose. Such a focus is some distance from the tradition of children rote reciting of their multiplication tables that the use of the term 'numeracy' might engender (although it might involve something that, to an untrained observer, may sound somewhat like this). Rather, this focus on mental mathematics that was developed within the consortium might involve 'modelling' children's strategies, finding ways of working with their 'errors', or helping them to visualise maths concepts. These were more to do with responding to the way children learn, rather than merely to what they had to be taught.

The overall approach involved action research which served to support independent professional development of teachers as practitioners within a 'community of practice'. In a conference paper Anne described the Consortium aim as "*the development of professional identity and the generation of knowledge as a result of participation in specific communities of practice*" and continued, "*In the Leeds Consortium we have begun to discern how the way that research informs teacher's knowledge communities and allows the generation of new knowledge about teaching has changed over the first two years of the partnership.*"

As one Headteacher puts it, teachers, "*are striving for improvement, but they're doing it in their own isolated bits, and what this [the consortium initiative] did was give you an opportunity, first of all to stand back, reflect, talk about what you're doing, talk to colleagues about you're doing, use professional language to do it, and then think, 'well, yes, tomorrow I'm going to try changing this bit and this bit and this bit …*".

That the consortium was in tune with, and slightly in advance of, the introduction of the National Numeracy Strategy was beneficial. As one school research co-ordinator put it, "it was helpful to have a clear link with a national initiative". Another commented that, *"The biggest place I've noticed it is in the numeracy INSET training. It is very difficult to write into your planning that you are going to deal with errors. But now with the numeracy strategy it is part of their thing for the plenary to deal with misconceptions that we thought, "well, we found that". We felt the strategy was backing us, rather than them just stealing our ideas. It helped with the training definitely…. I think as a school we've taken on the numeracy strategy quite smoothly …".*

The development and organisation of the Consortium

The consortium built on the initial teacher education partnership between the schools and the University and earlier discussions between the LEA and the University. Internally, this was part of Anne Edward's attempt to produce an integrated research strategy for primary education. Her leaving the university left the Consortium without the patronage of a professor – *"it became just a project,"* said John Threlfall, *"valued and supported, but it doesn't link to any other thing. I can make such links in my mind, of course, but I can't necessarily carry them through".*

At the outset – what the initial University project co-ordinator called the *"confidence-building phase"* – it was left to schools in the consortium to work separately on their own themes. It was only with time and increasing interaction that they discovered similarities in the topics they were pursuing. During this phase the impact of the original University project co-ordinator was important in providing ideas for shared analytical frameworks and methodological procedures. As one school research co-ordinator put it, *"A lot of it was directed by Anne – the greatest thing about it was – as, obviously, being a university 'boffin'. Like, she'd name all these people who are writing things – 'oh, I know Judy well, I was having a drink with her the other week…a lot of it was directed our way. We'd, sort of – at meetings – go 'is there anything on -?' she'd go 'there is, actually, yes' or 'what about this?' and she'd send a book title…it was like having access to the university library".*

During this first phase there were regular meetings both between schools and within schools. Between meetings 'homework' in the form of reading was provided by the University project co-ordinator. From the second year the work of the Consortium developed into more of the collaborative style that the initial University co-ordinator was looking for, and it cohered around shared forms to collegial enquiry - in 5 out of 6 of the schools into mathematics education – still within the embrace of the principle of developing 'communities of practice'. A key feature was the use of observational techniques focused on classroom interaction. The sixth school whose focus was on language in pedagogy withdrew in the later stages of the Consortium.

According to consortium members, the TTA had an early influence in encouraging a single focus. Six schools continued into the main phase of the initiative and the main

focus of activity became numeracy – especially mental maths that subsequently became an important feature of the 'numeracy hour' – with that sixth school looking at language. Consortium activities have consisted, in the main, of:

- Collegial observation among teachers in the same school of each other's teaching using observation instruments
- Reading of salient research literature and the adaptation of models of observation and analysis
- Team meetings in each school
- Meetings of School Co-ordinators to discuss progress and strategy
- Workshops and seminars to discuss seminal research ideas and to analyse key research texts
- 'Diffusion' through written reports and workshops of each school's experience to others who then trial the strategy for themselves

One influential strategy has been to seek to adapt published research protocols to the particularities of this Consortium and its school's interests. This includes the Tharp & Gallimore categorical approach to classroom observation - which was extended as the result of the work of one of the Consortia teachers, but which was regarded critically by Consortium teachers for its effect of standardising what they felt had been diverse experiences.

Several of the schools produced a dissemination pack for use by other schools that then trailed it and reported back at the School Co-ordinators meetings. At the same time, and part of the process of doing classroom research during the production and subsequent trailing of these packs, teachers conducted observations of their and their colleague's lessons as examples of typical activity and some of these were recorded and transcribed. The transcripts form the data set of the Consortium.

Early intentions to secure external project funding were unsuccessful and were replaced by an emphasis on in-house research largely funded by the voluntary time of participants. This was accepted as a reality by the TTA said one Consortium member. There has, nonetheless, been some small-scale funding from commercial sources amounting to a several hundred pounds per year which has been used for cover teacher supply. Two schools achieved Investor in People status in order to qualify for funding.

There was a Consortium Management Group devised, initially, to serve as an accountability *"buffer"* between Consortium and TTA and with an explicit role to assure the quality of work. This has always been chaired on a matter of principle by a Head teacher and comprised representatives of the three partners, though the initial intention to include local sponsors such as the TEC did not materialise. There are also the regular meetings of the School Co-ordinators, chaired by the university co-ordinator.

There was a balance between the single interests pursued by participating schools, and the generalisation of experience at the level of the Consortium. Although the 'unit of change' implicit in the strategy pursued by the consortium is the individual teacher in that

pedagogy and pupil learning is seen as contextualised in particular classroom situations and with particular groups of learners, the research and development strategy works through groups of teachers, whole schools and at Consortium level. A distinctive feature of the Consortium is the engagement and commitment of head teachers and the LEA. The role of HE has principally been one of methodological support and feeding the intellectual environment; while the change agenda and the key issues are defined by the teachers and the research process is entirely conducted by them. In the first year, for example, Anne Edwards ran seminars with school co-ordinators working through relevant research papers; this was continued by John Threlfall (who took on the role) as, for example, he chaired regular meetings of school co-ordinators. Early in the life of the Consortium, however, the question of intellectual leadership was tested in a period when Anne Edwards wrestled with the balance between leadership and facilitation, realising that schools needed more of an initial 'steer' than was suggested by TTA concerns for universities to play more of a facilitative role.

Teachers attest to the success of the Consortium arrangement. As one school research co-ordinator put it, *"the Consortium was the real strength. It gave real confidence. There were ideas provided by other schools in the consortium. There was a shared focus with different strands using different methods. There was sharing ideas and strategies…."*. Another said, *"We couldn't have done it without the consortium - when we were not sure of doing it right, when we were concerned that the data we were collecting might not be right. And for support with dissemination."*

The development of the Consortium and TTA/LEA/University relationships

From the perspective of the LEA, the development of the Consortium is part of building and, in some cases, rebuilding relationships. For some years prior to the consortium relations between the LEA and the University had been at a low ebb as a high profile report from a former member of University staff had been critical of practice in the city's primary schools. It was when Anne Edwards arrived in Leeds that she and the LEA decided to renew relationships – and shortly after this that the opportunity arose to bid for the Consortium. Anne and a Senior Adviser from the LEA convened two meetings of Heads and others from six schools (chosen from existing partnership arrangements in ITE) and a bid was prepared. Responding to the initial brief and subsequent negotiations was not entirely comfortable for Anne. At one point the TTA vetoed a research theme on pupil learning. Says Anne, *"they said 'we know enough about learning, now we need to know about teaching' – really, it was nonsensical. The teachers thought it was, too"*. For her part Philippa Cordingley explained, in response to a draft of this Profile:

> *"What I did say, on several occasions, was that we had enough research that explored learning without making the teachers' contribution visible to other teachers; research, as it were, that looked out of teachers eyes to pupils but didn't problematise the teachers' influence. Since we are a teacher training agency the initiative had to focus on learning and teachers. But I couldn't agree more that to do so without focusing on learning would be nonsense. Our language has always been about teaching and learning."*

This was a period of learning and relationship-building for both TTA and universities, however, and mutual understanding improved markedly according to both parties.

During the life of the consortium a highly critical OFSTED/Audit Commission report found the LEA's provision to be unsatisfactory or poor in two-thirds of aspects where judgements were made. The principal OFSTED complaints were of an authority which was failing in its leadership and co-ordination role – failing to manage school places and to support school improvement; failing to support target-setting; poor monitoring of schools and educational welfare support. One particular allegation was a supposed failure to support school planning and what was thought to be poor quality of feedback for School Development Plans through a process called the School Shared Review. OfSTED alleged that the LEA did not know its schools well.

From the viewpoint of the consortium the picture looks different. Certainly, the Consortium is of primary schools and the OFSTED/Audit Commission report claims that there are more serious problems in the secondary sector than in the primary one. But the story here is one of liaison and productive working relationships between schools, LEA and the University. The LEA's Shared School Review underpinned the central strategy of the Consortium to identify improvement targets in numeracy, and the Assessment and Evaluation Unit ran sessions on data analysis and offered to manage data sets produced by the schools. A number of Consortium teachers and a Head (5 in all) have joined the LEA as Standards Officers and Advisers; the Consortium itself was a product of a schools/LEA/HE partnership. The LEA Co-ordinators have always seen their role as the traditional authority one of 'brokering' interactions among teachers and schools in the Consortium. Unable to provide cash, the authority nonetheless invested sustained engagement, time, data, meeting space and meals to the Consortium and continues to monitor its development. LEA hospitality provided some of the 'lubrication' for Consortium dialogues.

The Schools and their projects

The six schools evolved their own foci. In one school, for example, the focus was on children's errors in mental calculation and how the teacher can deal with these. One teacher explained:

> *"…the original idea came up of how children were dealing with their own errors – we found classes where the children get it wrong and just stopping classes that were involved in the project – the children were going back through their ideas and correcting themselves. So that's why that is. To see how the children themselves coped with getting things wrong – what their reaction was, and seeing how the teacher could change that."*

Tackling this issue involved school staff testing (and re-testing) children, with the analysis focusing on classifying the types of error made by children. This developed out of lesson observations exploring how teacher's might model the methods more able children used to master maths concepts so as to adapt them for less able children. The

teachers eventually made observations of classroom teaching of mental mathematics to collect data on how the teacher can deal with the children's errors in mental calculation. Through this they developed various teaching strategies that move beyond saying "No, that's wrong" to children when children make an error. In doing so the teachers formed an overview of all the sorts of mental mathematics strategies that children use together with a list (or categorisation) of the sorts of mental mathematics errors that children (of all levels of attainment) make but that, if the children are given opportunities to correct themselves, would be corrected the second time around. The teachers describe the impact of this work as significant in that their children have become more open at describing, and more able to describe, the mental calculation strategy they are using. The teachers are convinced that the teaching of mental calculation strategies in the school has become more successful. According to the Head

> "*the biggest and most observable change is the way people talk to each other and how the dialogue has developed…. This has risen during the project both with those directly involved and more widely. This has never happened before. It has gone wider than the project. The different way of talking has spread. The school is much more of a learning organisation. It has impacted on other developments. Staff are willing to try things out, to share what has gone well and this affects learning and the way children respond …This project has made a real impact on the quality of teaching and thus had an impact on children. The impact on teachers is long term.*"

In another school the idea was to identify the specific whole-class teaching strategies which are most successful in developing children's acquisition and application of mental mathematics strategies. To investigate this the teachers assessed children's ability to solve a range of mental mathematical problems, they formulated a questionnaire survey of school staff on their attitudes to and understanding of the teaching of mental mathematics and of how they perceived the responses of children in their classes. This led to staff development sessions in methods of teaching mental mathematics in a whole-class interactive way and 'clinical' interviews with a sample of individual pupils to investigate pupil mental mathematics strategies. Classroom observations of the teaching of mental mathematics strategies were also carried out. In the end this all led to the development of a model of teaching mental mathematics in a whole-class interactive way. A 'dissemination pack' produced by the school is designed to support the teaching of mental mathematics and consists of an outline of a teaching approach which utilises more able pupils in explaining their strategies and using these to model strategies to less able pupils, self-evaluation and lesson observation sheet to support the development of the teaching approach in schools which utilise the pack, and a sample of teaching activities with which to employ the teaching strategy.

According to the staff in the school, the impact of the project has been an improvement in teachers' confidence in teaching mental mathematics and thence into wider aspects of the subject. This has resulted in improvements in pupil learning including enhanced SAT scores, improvement in in-house test scores, and in the openness of pupils to offering explanations.

A third school focused on identifying specific teaching strategies that could improve pupils' ability to do mental mathematics. Staff tested children using mental mathematics tests, developed and used their own mental mathematics tests, analysing lesson segments, and thence developed teaching strategies. As a result the teachers are now aware when direct instruction is important, when the modelling of a child strategy is important, and when what the staff call 'cognitive structuring' is important. This has led to improved pupil test scores and improved pupil attitude to mathematics. Staff report that they are more confident about teaching mental mathematics and that their teaching methods have improved (in that they are thinking more about questioning and how to use resources). This, by all accounts, has been rewarding experience from a personal professional perspective for all those involved.

A fourth school started by analysing their pupils' SATs scores, identifying areas of strength and weakness. During discussion of this analysis – and a deliberation of how to persuade children into a 'problem-solving' frame of mind – the School Co-ordinator recalled from a seminar at the university that some people responded (cognitively) to visual images. The staff decided to explore the use of visual imagery in putting across mental maths concepts in the numeracy hour. Feeling that the whole hour was too big a task to research they focused in on the 'mental and oral starter' – the first prescribed 10 minutes of the numeracy hour. Explained the school co-ordinator:

> *"…a ten-minute block which would allow better taping, which would allow more concise transcription of it, it allows better discussion…you get more quality and that, at the time, that made us feel more 'scientific', you know, because we were still very much into our white coats and 'we can prove it' and 'we can disprove it'…"*

The school has a convention which is that all voluntary initiatives are agreed with the staff as a whole, and nothing is adopted which cannot secure the active agreement of all. All members of staff, therefore, we involved in generating and exploring a database. Teachers paired up to observe each other and all met from time to time as a group to review progress and decide on next steps. Collegial observation was cautiously welcomed by one teacher:

> *"We're always observing each other for various things – like OfSTED – you know when you're a student you're always being observed, so it's always a bit nerve-wracking…but I found it very uesful…because it does focus you, you think, 'right, stop, what do I need to teach, you know, to achieve my learning objective…' "*

In a fifth school one focus was on the organisation of the classroom during maths teaching. The school co-ordinator was the Deputy Head, and she was working with colleagues on the notion of 'zonal seating', for example – finding ways of seating children in ability groups so as to rationalise the process of asking questions. She explained:

> *"I have mine in a little arc so my high achievers are at the back and the middle achievers in the middle and then the poor achievers at the front…so when I ask a question, if only the back row have their hands up I can know straight away that I'm only hitting the high achievers with that question…"*

She can't recall where the ideas came from – *"I must have read it somewhere – I mean, nothing's ever really new is it!"*.

This approach came as a departure for the school staff. There had been an overriding preoccupation with maths schemes as staff sought the most suitable curriculum for their needs. The Deputy used the Consortium to open up deliberations about the process of teaching maths, and the research group came to explore many other aspects of maths teaching – the language used to convey maths, the treatment of error, for example. Teachers at the school observed each other's classrooms, met to discuss what they were finding, shared and implemented new ideas – as well as disseminating to other curriculum areas some of the ideas being developed.

Research and professional development

Teachers in the consortium experienced professional development through their enquiry activities. Indeed, both Anne Edwards and John Threlfall question where the boundary between this and research lies and whether this Consortium is best described as professional development. For John, a key issue is whether or not to overlay procedures for rigour and theoretical generalisation on teachers' enquiry activities so that they better meet what the TTA seeks as engagement 'in' and 'with' research. He remains unsure as to the appropriateness of the question as to whether what the Consortium does is research – he feels the question imprecise and better not asked - though he is more certain that it counts as professional development. Anne's view is that this is a teacher development project, in that she feels that teachers had come up with good and useful *"local"* knowledge of pedagogy, but had not discovered the kind of original or generalisable knowledge which had characterised Initiative ambitions, at least in the early stages. Teachers had certainly proved themselves to be competent *users* of research and, through co-observation, had shown themselves to be capable 'doers' of research and had reached levels of awareness of pedagogical issues, but not at a conceptual level that would lead to significant advances in our understanding of classroom issues.

As one deputy headteacher explains,

> *"the research came as a way to talk about teaching and not what materials we were using or what was going to be taught. The main thing was how do we actually teach… to actually have some quality time to talk about how we were actually teaching and how children learn. That was one of the main things … we had quality time to sit down and talk to each other in research groups about each others teaching because we all watched each other teach and we used that as a point for discussion .. ."*

In part this was achieved by creating a shared language. As a school research co-ordinator put it,

> *"the first thing we found was that the group in the Consortium were actually trying to use professional language. The analogy someone used was - if you are a plumber or a carpenter in Dover they'd be able to ring someone in Aberdeen and use pretty much the same technical language … Whereas in teaching you don't."*
> In a similar way, a deputy headteacher explains, *"we developed a common language within the consortium and within the schools that enabled us to talk about research and teaching, which we didn't have…. When we talk about 'continuity management', everyone knows what that is within the consortium. And we talk about 'modelling', and 'remodelling up' and 'remodelling down'. We all know what that means. It's just a way of discussing our teaching and giving us tools to talk about it."*

These are common views in this Consortium (as in others). Certainly Consortium arrangements are regarded as successful, and the co-ordination role of the university as important and valued. Indeed, there is a particular reason, explained on school co-ordinator, why the Consortium worked where, for example, collaboration with neighbouring schools might not have. Neighbouring schools are too often in competition with each other for pupils, where there are falling school roles – relationships are commercialised and it is hard to be open or to share experience. In this Consortium, for the most part, schools are not close to each other. As that co-ordinator explained:

> *"It's nice to work for the same authority, to know those schools vaguely – but they are far enough away to be open and to really talk about what makes effective teaching and what things have gone wrong and what a terrible day you've had. That another benefit of the Consortium – not being a family, but being across the city…you don't get stuck in your own sort of little area".*

Profile of the Manchester and Salford consortium

Key personnel in the Consortium have confirmed that this Profile represents a valid description and analysis (January 2001 and August 2001).

1. Introduction

The Manchester and Salford Consortium comprises six primary schools (originally eight), two universities and two LEAs. The Consortium was born from a previous initiative involving LEA, schools and HEI for the study of effectiveness in urban schools that also aspired to promote action-based research in schools. In establishing links with the University from which the majority of link tutors are drawn, the Consortium draws on a strong tradition of teacher action research in schools. Key features of the particular culture of the Consortium include the facts that:

- the schools chosen were from areas with high social deprivation (L1.072/096)*;
- the schools did not have a tradition of conducting research;
- the consortium had a deliberate aim to explore whether teacher-practitioner research can bring about school improvement in socially deprived areas;
- the consortium operated in an educational context of multiple initiatives in curriculum development, assessment and management;
- most of the schools were about to have OFSTED inspections.

It is within this context that the following brief case profile should be read. The sections that follow offer a brief summary of the development and organisation of the Consortium, key effects attributed to participation and key aspects of process.

* A list of data sources and a key to categories of interview can be found attached at Appendix A.

2. The development and organisation of the Consortium

2.1 The consortium has roots in pre-existing relationships fostered in an LEA-driven school improvement initiative with a strong teacher-reflective (practitioner) element enshrined within it and which combined two universities, two LEAs and over 30 schools (L1.003). The initial intensive support of the LEA could not be sustained as the remit of LEAs – and their relationship to the State centrally - changed through the 1990s to focus towards the end of the decade on "*support and intervention in inverse proportion to* (schools') *success*" (L1.254 and L1.003-067). In the same period there were also changes in the degree of flexibility with which resources could be used within HEIs, so that "*we have not been able to continue to be as flexible in how we provide support* (to schools)" (H2, telephone, 17th January 01).

2.2 The majority of schools in the consortium were chosen to capitalise on other links, for example, a Single Regeneration Budget Area which involved schools across LEA

boundaries (L1.072) and which served children from disadvantaged backgrounds described as having multiple challenges (L1.096). Only one school had Governing-body links with a local HEI and took training teachers on placement (HT6.129&136). Two HEI staff and two Head teachers suggested that the schools did not have an entirely free choice about becoming involved and that subsequently this may have had an effect on the extent to which research activity could be culturally embedded in schools. In one school, the opportunity to be part of the Initiative chimed with a new Head wishing to expedite the amalgamation of two schools and the raising of standards (RC6.015-028; HT6.011), whilst in another, involvement effectively "followed" the head from a previous post in a different school (HT5.009; H2.2).

2.3 The Consortium grew with the help of a strong base of teacher research in the major University involved (H2.2). The project schools began by focusing on issues relevant to their individual contexts. These included foci such as parental involvement in school, raising SATs scores in Mathematics and raising standards in literacy. In the second year 'speaking and listening' was adopted as a secondary unifying focus. This was supported by a monthly meeting held at one of the schools to discuss cross-school progress and joint observation of videos of classroom experience.

2.4 Within the consortium structure HEI link tutors worked differently with the schools to which they were attached. The different approaches included: working with the school to establish research design and process; assisting the school with data collection and analysis; writing and presenting joint papers with teachers at conferences and for publication; conducting the research for the school according to the school's choice of topic. Relationships between teachers and HEIs can take many forms, of course, and one person pointed to other contemporary projects in which teachers were involved, where the parties *"were able to strike a more attractive bargain"* (between researchers and teachers) and in which *"they were volunteer schools"* (H1.10).

2.5 As an organisation (and with particular reference to the first year of operation) the consortium was likened by one interviewee to *"the spokes of a wheel"* with the co-ordinator at the hub. An alternative metaphor offered was that of *"an exploding universe where (the co-ordinator) is trying to pull people back into the project and some sort of task orientation"* (H1.4 and H1.9).

2.6 Several interviewees remarked on changes in the relative role of the partners in the Consortium. Initially, the partnership was led by the LEA and schools, with HEI support. By the end, however, it was characterised as HEI and schools taking the lead with the LEA maintaining a supportive but less active role. One HEI link person observed that the *operation* of the Initiative in the Consortium currently looked much more like a HEI/Schools partnership than a TTA or LEA entity (H2.3).

3. Key effects attributed to participation

3.1 One of the most marked positive effects of involvement in the Initiative was the increased *confidence* of many teachers even where their participation in the

Consortium was very recent. One example of this was a strong claim to *"being valued, finding a voice and being empowered, given credibility"* (RC4.1&2). A second example stemmed from a Research Co-ordinator talking about a colleague who was *"an excellent teacher"* but had recently had an *"awful"* experience during an Ofsted visit, to the extent that she was ready to *"pack the job in"*. For this colleague, participation in the Initiative had *"boosted her confidence…got her back on track within the profession"* (RC6.179-190). The enhancement of teacher confidence was mentioned frequently by teachers and one head teacher made an explicit link to two examples of career advancement for individual teachers (HT6.312).

3.2 A second theme identified was the improvement in teaching for individual teachers and impact on pupils. Examples of the former included paying more attention to details in planning lessons, building in time for the use of questions, concentrating on speaking and listening (RC3.2), and *"thinking about things ten times more"* (RC2.2). The Initiative was also credited with enabling reflection, leading to better teaching. One teacher observed

> "*I don't think you can be an effective teacher unless you are prepared to change and review and reassess…but now I view the importance of that more…or the value of it"* (RC4.2). Another commented that *"for the first time since leaving college (we are) looking critically at our teaching…if the lesson doesn't work the way you wanted it to, rather than just writing it off as a disaster and not doing it again, it makes you more inclined to try it again…or develop it in a different way"* (RC2.2).

For some respondents the Initiative provided time and opportunities for reflection (which they considered to be central to good and effective teaching or a greater sense of professionalism) in a context that did not usually give status to such activity (eg. RC6.266; HT5.035)

Impact on pupil learning was more difficult to assess (RC4.3) yet staff in one school were certain that their increased work as a team and the sharing of a strategy had benefited children (RC4.3). Two Heads (HT2; HT6) indicated that the Initiative had contributed directly to the progress of specific groups of pupils, and one of these described that progress as *"tremendous"* (HT2.212).

However, and on many occasions, interviewees also pointed out that the Initiative coincided with the Numeracy and Literacy strategies, a local numeracy initiative, new events involving parents coming into the school, homework clubs with a mathematics focus, and specific mathematics/IT changes, making it impossible to attribute impact with any precision (eg. HT5.212).

3.3 A third major theme was the opportunity the Initiative provided for teachers to experience genuine professional development in contrast to what were often described as the negative experiences of OfSTED and other scrutiny (e.g. RC4.1). One Head suggested that the Initiative contributed to the bringing about of *"a healthier profession"*.

This was characterised by "*stopping and thinking, 'Well, why are we doing this?' because we are being given things all the time…as a breed we have to stop and think"* (HT6.030). She also commented that "*giving staff time to focus on a particular aspect of raising standards"* had *"developed them professionally…and in terms of team building"* (HT6.093&274). For another Head the Initiative seemed primarily to have been a staff development opportunity that they would be sad to see end (HT2.190).

3.4 A fourth theme was an increased engagement with and in research. Teachers saw research differently as a result of the Initiative touching their school, and one Head pointed to the questionnaire data that existed to support this (HT6.339). Increased involvement in and with research was observed in a number of ways. From a starting point of "…(there was) *a lot less practical research available for teachers to engage with than we thought" (L1.190), "many teachers are now interested and involved in research related to their practice whether in their own school, another school or off the shelf*" (H2.2). Furthermore, "(the Initiative had) *great success in schools in a deprived area – some co-ordinators have been really galvanised"* (H2.2)**.** One co-ordinator described her experience as going from *'I have no time for research' to 'research is a welcome part of my work as a teacher'* (RC4.2). She also described how *"the school will continue to research* (because*) it has developed a research culture that will continue beyond the life of the project, with some HE support"* (RC4.3). Another noted how gaining access to particularly useful web-based materials with the help of University staff was a positive outcome (RC6.297). What would have furthered their research experience, one Head commented, was more cross-Initiative activity: "*I didn't feel there was enough…cross-fertilisation of ideas in terms of other consortia"* (HT6.207).

Sustaining a research culture was seen to be important from the point of view of several heads, one of whom commented, "*we will sustain what we've done so far (from the substance) but in terms of relationships with HE and all those things, if that doesn't continue…that would be an opportunity missed"* (HT6.017). Several HE staff noted that it would be difficult to promote and sustain a research culture in schools with the particular model of participation and partnership promoted in this Initiative. One pointed out that other models, which were whole school focused from the outset and gave much more ownership to schools, would do this more effectively.

An unexpected effect, connected to this theme, was described by one HEI person in these terms:"*the* (Initiative) *was conceived to be developing a research culture within the school. An unintended effect is that it develops a schools' culture within research and in turn, in the normal pattern of teaching and so on, you tend to disseminate in a sense the reality of the classroom you have been working in"* (H1.7)**.**

3.5 A fifth theme concerns time and energy. Teachers said that they had found it difficult to set aside time to devote to their research activities (e.g. RC1, RC2, RC3, RC4). For example, one commented on how they had found such time late at night, and how it competed with marking and other essential lesson preparation (RC4.7), whilst another noted that she still had not resolved this difficulty of finding time (RC1.247). One teacher said that at meetings of the Initiative as a whole she sometimes felt that "*the*

harsh reality of the primary school… (is) *brushed aside…I sometimes get frustrated at people's dismissal of some of the problems"* (RC1.447)

4. Key aspects of process

4.1 The nature of the relationship between teachers and HEI-based link persons seems to have been very significant. One Head alluded to a process of accommodation, where schools and HEI staff had *"learnt quickly"* about the situations and constraints within which each worked. (HT6.175). Another commented that *"the University… worked hard to be very approachable, not to blind people with science, to make it …accessible"*. The approachability and flexibility of HEI-based individuals was highly valued (HT5.115& 173). And a third spoke of the *"excellent"* and "*marvellous"* HEI person working with staff via video (HT2.080).

Research Co-ordinators confirmed this view. RC4 spoke of the "*nice man* (the HEI link person) *who chats*…(who has) *got this easy manner…is very supportive …suggests things and also gives great value to anything I suggest".* This HEI link person had met all the school staff involved. Without this support "*we would have dropped out"* (RC4.3). Another noted the support the HEI staff offered especially around involving the RC in conference presentations (RC1.110). A third RC spoke of the (mostly unpaid) time and effort put in at different times by three HEI staff (RC6.041&599) and how HEI staff, when introducing the use of video for learning about teaching practices, *"…really put the teachers at ease, people who, you know, in some cases had terrible OfSTED experiences were put at ease to just be themselves and not act…"* (RC6.078)

In terms of providing focused research material, one head teacher reported that although it was *"sparse"* during the first year of the project, by the second and third years of the Initiative, HEI staff regularly provided summaries of research-based material to teachers (HT6.235). HEI staff had on several occasions helped school staff to find a methodical way through confusing data and issues (HT6.425-444).

4.2 Staff relationships within the school and their significance for impact formed a second theme in the way the Consortium has worked. The question of who leads at school level was crucial in encouraging participation and several schools chose experienced staff as Research Co-ordinators. In one instance this had a most positive effect in "*facilitating joint agreement on policy*" with all nine KS2 staff and the Head. In this school the Initiative *"changed our pedagogy…from a professional point of view, from a language point of view we now discuss how we teach… plus we are observing each other"* (RC4.2). In another school the Research Co-ordinator began a process of mutual observation and video critique with two other staff, which subsequently spread to others (RC6.114).

By contrast, in a different school, the two staff directly involved are quite young and relatively inexperienced. They came into the research late, following unavoidable changes of personnel. They saw a problem in persuading older and more experienced

staff to participate in a regime that involved detailed critique of videos of one's teaching, because this could seem *"like OfSTED"*, or "*for somebody to criticise"* (RC2.2). They also suggested that the impact of the Initiative might be minimised or even lost as children would go to different teachers, most of whom had not been *"doing research and developing (their) teaching"* (RC3.2). In contrast to the first example above, the teachers directly involved in this school were pessimistic about the prospects of research being embraced as part of a whole-school policy (RC2.2&3)

4.3 Dependable supply cover was a major issue. This was partially an issue of high cost, and the difficulties schools faced in the choice of individuals to whom a class might be entrusted, *"when they are in preparation for SATS"* for example (RC6.328). However it was usually a broader question of continuity and the problems of arranging supply cover that would not jeopardise the progress of a class (HT6.086 and RC1.264). A potential solution suggested by one Head was to have sufficient funding to employ a regular supply teacher who would know the staff in a small number of schools and whom the schools having confidence in the teacher could build into their timetables more easily (HT6.094).

4.4 Ownership of the substantive research focus also emerged as an important facet of the Initiative in this Consortium, and there was virtual unanimity on this topic across interviewees. Head teachers, HEI personnel and teachers said that working on topics/issues with visible internal and local justification was seen as a prerequisite for the success of the Initiative in a time of externally-imposed agendas (e.g. RC4.3; HT6.375-415; HT5.076-111 & 233, H 1, 2). One RC complained of having had no opportunity to discuss her research at staff meetings for 18 months, because *"every single staff meeting has been taken up with literacy training, urgent issues from the OfSTED action plan, or numeracy"* (RC1.026). Similar tensions were apparent for other interviewees. Opportunities for local diffusion or dissemination were often seen as dominated by external agendas at the expense of internal research to improve day-to day practices in the schools.

5. Concluding Comment

Identifying impact is a difficult process especially in a context of implementation of multiple initiatives. If there was a unifying theme to the Initiative in this Consortium, it was one of professional confidence or perhaps the space in which to be self-determining. There were even examples in the data of the Initiative being perceived as healing, or as having produced a restoration of professional self-respect. School/HEI relationships were key in this process. The Initiative provided groups of staff with the opportunity to recapture (or at least feel as if they were recapturing) some control and ownership of their professional lives at a time when many teachers in schools felt that continuous centrally-directed change was eroding their autonomy.

Impact on pupils and pupil achievement was more difficult to track in the context of claims from the multiple curriculums, assessment and management initiatives introduced concurrent with this Initiative. However time and again teachers and heads noted the

difference that conducting research had made to their teaching and their professional life and that this in itself was likely to have had a positive impact on pupils' learning. They also noted in some cases that SAT scores had improved. While not attributing any such gains to the research, given the difficulty of tracking influences in a context of multiple initiatives, Heads and teachers nevertheless commented that greater awareness of and involvement in research was likely to be one of the factors that contributed to the changes in teaching and pupil achievement they had observed.

Data sources:

- Six tape-recorded interviews with research co-ordinators from all six schools
- Five tape recorded interviews with five of the six head teachers;
- One tape-recorded group interview with six teachers in one school;
- Two tape-recorded interviews with two LEA representatives;
- Two tape-recorded interviews with the University-based consortium co-ordinator;
- Five tape-recorded interviews with five other HEI-based people operating as link tutors and/or researchers;
- Study of documentation, some of which copied;
- Two observations of videos of teaching;
- Observation and partial tape recording of Consortium Management Meeting 14th June 2000;
- A number of informal and incidental opportunities to discuss Consortium activity with teachers (both those closely and not so closely involved, LEA representative, and Consortium Co-ordinator)
- Subsequent telephone conversations with key personnel.

All interviews were approximately one hour to one and a half hours in length which, together with informal conversations, yields a data base of over thirty hours of interviews with key personnel as listed above plus observation of classrooms, videos and documentation.

Key

RC1, RC2 etc. = Teachers with role of Research Co-ordinator
H1, H2 etc. = HEI personnel
HT1, HT2 etc = Head Teachers
L1, L2 = LEA representatives

Numbers following these codes refer to transcripts and summaries held by the Evaluation team. Direct quotations are in italics.

Profile of the NASC Consortium

Introduction

The NASC Consortium is comprised of seven schools (six secondary and one special school), the Centre for Applied Research in Education, School of Education and Professional Development, University of East Anglia and the Norfolk Local Education Authority. The research focus of the consortium's work is student disaffection from learning. In the first phase of the programme from 1997-99, teachers undertook 23 school-focused research studies. In the second phase, 1999-2000, research was conducted in four cross-school themes - Classroom Management, Key Stage 4 Curriculum Enrichment, Rewards and Sanctions and the use of ICT to combat classroom disaffection. Thirteen research reports were produced from Phase I, several solely by teachers and others in conjunction with higher education personnel. The second phase also led to joint research reports and publications. Details of the precise research foci and publications may be found in the Final Report of NASC presented to the TTA. In this short profile we focus on key pedagogical and professional issues in the experience and particular culture of NASC to provide a context within which to view the key findings of the evaluation on the practice and potential of teacher research prompted through the TTA Initiative.

Culture

There are a number of factors that characterise NASC that are important to keep in mind when reading this profile of the consortium's experience of teacher research.

- NASC came into a culture of collaboration already developing between the schools and higher education;
- The Centre for Applied Research in Education, School of Education and Professional Development has a strong tradition of teacher research and action research, having started the teacher/action research movement in this country in the seventies. It similarly has a strong tradition of research-based curriculum development and pedagogy.
- The topic of student disaffection from learning was a unanimous choice for the schools, higher education research mentors and local education authority;
- Disaffection was defined as 'disengagement from learning' in order to avoid interpretations of the concept which confined it to 'deviant behaviours'.
- In studying student disaffection the inter-relationship of curriculum and pedagogy was central and several curriculum and pedagogical changes were introduced as a result of the research conducted;
- The consortium was conceived as a programme of activities of teacher research not a specific project

Organisation and Development

NASC was born into collaboration established between the University's Centre for Applied Research in Education, School of Education and Professional Development and the Norwich schools. A headteacher from one of the Norwich secondary schools and the then Director of the Centre for Applied Research in Education, CARE), Professor John Elliott, came together to discuss ways of establishing a contemporary collaborative research culture across the Norwich secondary schools[8]. This was in 1996. The TTA initiative provided a concentrated vehicle and focus to further promote this emerging collaborative culture between the schools and CARE. The Co-ordinator of NASC described the rationale for this approach in terms of both generating interest in research from the ground up and in providing an infra structure of support which could sustain research in schools, whatever external conditions or projects prevailed.

Initially the programme of activities was supported by two management groups. One was a Management and Resources Group comprising representatives from each of the three partners with responsibility for managing the TTA financial resources. The original idea was for the schools to generate their own research initiatives and bid to this group for money for a project within the broad general theme. The second group, responsible for the day-to day management of the programme, was the Research Management Committee. This included the school research co-ordinators and the HE-based research mentors. In the event this dual structure turned out to be somewhat problematic and the two groups combined. Part of the reason, according to the Co-ordinator, was pressure from the TTA, relayed through the first link officer, to *'tighten up the management… to exercise greater control over the work of the teachers'*. This was in response to the fact that 33 outline research proposals were received, which resulted in 23 projects being implemented across the schools, some of which the TTA did not think were closely enough related to pedagogical research. (Co-ordinator) The proliferation of research proposals and experimentation by teachers was consistent with NASC's commitment to funding research initiatives generated by teachers themselves. This was a principle that also extended to engagement in writing external research proposals i.e. when the teachers were ready to be engaged. *'Genuine collaborative research with teachers means giving them a major say and a major voice in the construction of research'* (Co-ordinator)**.** However NASC also recognised that the political context in which TTA was operating in a sense required success in this enterprise. *'And we did, in a sense, capitulate in many respects to that anxiety'* (Co-ordinator).

The Local Education Authority (LEA) was involved from the beginning as required in the tender and a representative was present on the Management Committee with a *'watching brief'* (LEA 3). However the LEA was not *'high profile'* in the early days, taking a more *'supportive'* rather than an active *'steering'* role,' and *maintaining a presence'* (LEA1, 2). The driving force for initial engagement with the Initiative was the Director of CARE and the headteacher noted above who was chair of the Management Committee. This was acknowledged by local education authority personnel, heads and teachers alike. It was Easter, 1999 when the LEA became more directly involved through

[8] The Centre for Applied Research in Education, School Education and Professional Development had an already established national and international reputation for teacher and school-based action research. This initiative intended to build on this experience and extend the scope of teacher research to this cohort of Norwich schools.

paying one of their advisers to undertake a monitoring exercise of teachers' experience of the TTA Initiative. Slightly later (May, 1999), the same adviser took a lead in organising the first of two dissemination conferences. From this point on the LEA became a more active partner - in the collaboration and development of the large-scale proposal to the ESRC for the extension of NASC, in planning and holding the dissemination conferences, the dissemination of research reports (the RHINO report, for instance, was widely distributed to schools in Norfolk) and the setting up of a website to further disseminate the research of NASC.

In the first two years of the programme, a key person was a PhD student, whom CARE had selected to take up an ESRC studentship focused on disaffection. This was in place before the TTA Initiative was announced. In fact it was this student working collaboratively with a number of teachers who effectively co-ordinated and wrote the initial proposal which resulted in the Consortium being funded (Co-ordinator). The schools had already appointed research co-ordinators as part of the collaborative structure formed between the university and the schools. In this way, the Consortium proposal itself was the product of collaborative working with teachers. Once the project was funded the PhD student took the lead in co-ordinating the day to day activities of the Consortium in addition to undertaking his research. The latter took place primarily in one school, where he spent two or three days each week conducting (in collaboration with the pupils) several pupil questionnaires on disaffection from learning.

The LEA interviewees and several HE respondents indicated that the programme was slow to get underway. This was partly because the university took the position that as part of building a research culture in schools, it was important to let the teachers decide what it was they wished to research. The assumption underlying this stance was that they were more likely to engage with the research of others once they had had time to engage in research they chose to do. This led to the proliferation of research projects indicated above. Such variety and freedom of each school was slightly at odds with what the LEA (with an administrative eye on *'transferable outcomes'* and *'action planning')* would have preferred (LEA 3) and what the TTA wanted, i.e. transferable outcomes (LEA 3). *'If there was a tension,* said one of the LEA personnel, *it was a tension between the consortia and the TTA. The LEA has more commitment to product but there was less opportunity for that to happen*.' (LEA3). It was clear to all LEA interviewees that *'UEA has provided the real support', 'the University is running it' (i.e. the partnership*) though see above the strong commitment from the head who was chair of the Management Committee. However the LEA person just quoted above also remarked that' *it is difficult to see what the LEA's role is or could be',* adding that the university has the methodological expertise.

As the programme progressed the differential roles of each of the partners were more overtly recognised and a stronger structure developed with mutual collaboration between different partners in different ways. With an eye on the future and extension of teacher research to all schools in Norfolk, the submission of the ESRC proposal (halfway through the time frame of the project) involved a strong commitment from UEA and the LEA both in preparation and in the structure (including building in LEA advisers as action-research partners). According to the Co-ordinator of NASC there was a sense in which the LEA in terms of actively promoting research was awaiting the outcome of this proposed funding. The University and LEA jointly set up the second dissemination

conference. In the second phase, the teachers, with support from the higher education research mentors, jointly continued to work on research in their schools on the cross-school themes and on writing up their research individually and/or jointly with the higher education research mentors.

Specific foci

The choice of student disaffection from learning as the overarching focus for the Initiative was reported as a unanimous choice. The work of CARE had always been concerned with *'equality of access to the curriculum',' part of the movement from an elite to mass education that's still going on' (*Co-ordinator*)* and the Co-ordinator of NASC had long predicted that one of the outcomes of the National Curriculum would be student disaffection from learning. The LEA were aware that disaffection from learning was an issue in schools through the number of exclusions and truancies and the fact that schools in Norfolk have the lowest number of students entering university in the country. The higher education research mentors were singularly of the view that disaffection from learning was the key issue. *' People wanted to get involved because of the nature of the inquiry'.. 'certainly disaffection was the hook' … 'If the NASC consortium had been on another topic, there may well have been a different response' (HE1, HE2)*

A related and equally significant impetus for the PGCE higher education mentors to join the programme was the existing UEA-school teacher training partnership with the schools. *'I think one of the strengths of NASC has been the already good relationships that the UEA had with the schools and the partnership that's been developed and the link that we had with the students; (i.e. student teachers) and we're facing the same issues because our students are saying to us "how do we cope with disaffected pupils?"(HE2)*

How the topic of disaffection was researched differed initially from school to school. In the school where the PhD student primarily worked, the research topic was disapplication from the National Curriculum, particularly with respect to modern languages and the development of work-related life-wide curriculum for those disaffected pupils. Disaffection from Modern Foreign Languages was also the focus in another school in Phase 1.

Foci adopted in other schools included:

- how to identify disaffection;
- how to move from exclusion to inclusion;
- the experience of the silent disaffected student;
- parental and pupil perceptions of different subjects and their effects on achievement;
- responses of underachieving students to lesson activity and teaching style;
- teacher perceptions of rewards and sanctions;
- the effectiveness of teaching styles and classroom management;
- the use of differentiated tasks and minimum performance targets to encourage 'self-directed' learning.

Several of these foci were further researched in the themes that were adopted for Phase 2. The research on disapplication from the national curriculum noted above, for instance spread to two other schools in the cross-school theme on Curriculum enhancement at Key stage 4 focusing on work-related curriculum. Research on teaching styles and classroom management extended to a cross-school theme, as did the research on rewards and

sanctions. Major curricula changes and policy changes were implemented on the basis of research on these themes. For example in one of the schools the year 10 and year 11 curriculum was modified and the timetable restructured to incorporate a one-day a week work for all students and two days a week work experience for those with literacy and numeracy needs (head school 1). In another school one of the observational tools generated by the rewards and sanctions cross school theme was adopted across the whole school (head school 2).

Link with Higher Education

Each school that was involved in the consortium had a research mentor attached from the university. Some were PGCE tutors and had the subject based experience of working with schools in training new teachers for the profession. Others were from CARE - research associates or research students and, in one case, a visiting scholar from overseas. Each research mentor worked with the school to which they were attached in different ways. In one school, as already mentioned, the PhD student researcher conducted much of the research but liased extensively with pupils and teachers who identified issues and validated questionnaire surveys. In another, a highly motivated teacher started research at the outset into 'quiet underachievers' involving seven other staff along the way with a little support from the HE mentor.

In a third school, the senior teacher negotiated an arrangement with the HE researcher in which the researcher *"had the main role from the research perspective"* and the teacher the role of facilitation. The research was collaborative (they met eight times over a 12 month period) but with a differentiation of roles and they co-wrote the report. The teacher comments: *"I think I was more of a facilitator than a researcher"…"He* {the HE research mentor} *was steering it but it was collaborative. He was in research, I was facilitating it, supplying the objective information to back up his. He was the one doing the real active research"* (teacher 2). She added that she was happy with this arrangement as she did not have the time to do active research herself at that point-"*time is a big issue for teachers and the practicalities of communicating and meeting are always an irritation"*. In a further school, and in the cross-school projects, the presence of the research mentor enabled the teacher researcher/s to reflect more deeply, to ask different questions and in turn for the teacher-researchers to help each other to reflect more deeply. In this sense they, i.e. teachers and research mentors, were co-inquirers.

Choice of Topic

Research community

The choice of the topic of disaffection from learning had four major effects. First it was a powerful catalyst for the building of the collaborative research community that was the aim of NASC. As one of the HE research mentors put it:

> *"I think the community itself is very much speaking and learning together and we see it as a collaborative venture and I think that's the reality of it. It is not just tokenism…. I'm certainly engaging with discussions about disaffection and discussions about this particular programme which I probably wouldn't have had, had it not been the focus of our research here" (HE 2).*

This strong sense of community according to the HE research mentors stemmed from a number of factors: the united commitment to the topic, the spread across levels engaged in the research (e.g.pupils, student teachers and HE mentors were all experiencing disaffection) and joint, collective research -*'it involved every sector of the school education community' (HE3)…'we really have maximised opportunities for creating the community' (HE2).*

Collaboration

Secondly, for some the collaboration itself was the important factor *"people were sharing their views and their research but it was the collaboration which I think was more important" (HE3).* Participation in itself was perceived to be a positive outcome i.e. the range of people discussing together important issues to do with disaffection from learning.

Justification of this area for research

Thirdly, there was the fillip the Consortium gave to acknowledging and justifying research in this area. While individual teachers were addressing the issues and some conducting small scale research, a collective research inquiry raised the level of awareness and recognition of this problematic issue in education and how to address it in the classroom (HE4).

Active involvement of PGCE Tutors in research

A fourth effect of the research focus into disaffection was the active involvement and professional research development of several of the HE research mentors, notably the PGCE mentors. Equally significant a motivator for their involvement, several of them indicated, was the curriculum area focus, particularly in the case of languages, a subject, which was noted by HE1 as*" currently in crisis"*.

Key effects of participation in this programme

Shared knowledge and expertise

The move from phase 1 to phase 2 was characterised as a 'natural' development or evolution', partly a steer from the Co-ordinator's perception of what the TTA were seeking and partly the result of the fact that "people were growing in confidence and saying

> *"well look, I planned something which may be of interest to you - are there other things which we can begin to share and build up this richer community of researchers across schools. That was an opportunity and I think it was a natural evolution"* (HE3)
>
> *…"It's almost going back to the creative curriculum days where you met in cross-school groups to move your curriculum along."(HE3)*

One effect of the move to phase two was the cumulative knowledge building it generated and the confidence this gave individual teachers and heads in implementing policy changes as a result of the research. However this does not mean to say that policy changes were not introduced from a single piece of research within a school, as the evaluation of disapplication from Modern Foreign Language indicates.

Differentiation of roles and time for research

A second effect of the move from phase 1 to phase 2 projects cited by several teachers and the NASC Co-ordinator was to leave the research more to the HE research mentors. It was not that the teachers were not motivated to do research but rather more an issue of differentiation of roles, and time.

> *"As we tighten up the management, we've got the cross school projects, we've used the money in terms of staff support whereas before we kept the money the schools had*[9]*.. it is not that they are less motivated or anything.. They know that there are other people around who will do the job for them. That's fostered a greater dependency on the academic institutio"*" (Co-ordinator).

This was the opposite of the philosophy NASC was trying to promote, i.e. to engage a wide range of teachers in all schools in the city in conducting research to improve their practice.

One of the teachers speaks here about how he saw this issue:

> *"I think for me I'm too busy doing my job, like all teachers, so for me getting involved in NASC had to be something that I wanted to do that would fit the pattern of my work and that would be related to issues I thought were important" (teacher 3).*

This teacher had made use of published research on gender, teaching and attainment and had instituted a process of intervention and review that appeared to produce changes in pupil attainments at Key Stage 3 (KS3), bringing results for boys in line with those for girls. The point he was making about the use of research by others was that it had to be connected to issues he thought important and would make a difference to his pupils. He continued:

> *" this made me think that provided it* (i.e. the published research) *was coming from where I was, that I wanted to get involved in this and if there was fairly quick payback on what we were doing'* (teacher 3).

Development of new methodologies

A third effect was the acceleration and greater sophistication of methodologies, particularly survey approaches. Surveys were a key feature in several of the individual school projects from the outset in addition to interviews and observations more frequently associated with small-scale case study research. Greater awareness of the potential use of surveys and skill in designing them developed throughout the consortium for teachers and HE research mentors alike, occasionally taking preference over singe case research. In the Rewards and Sanctions cross-school theme for instance, the effective integration of quantitative and qualitative data produced some interesting correlations with implications, in many instances, for changes in school practice. In the classroom

[9] This is a reference to Phase 1 where the schools bid to the Management Group for support to carry out their research in individual schools compared with Phase 2 where the money was used to employ cross-school theme co-ordinators.

management cross-school theme, in-depth interviews with teachers formed the basis for the construction of a questionnaire that retained the complexity of the qualitative data and allowed an analysis that did not compromise the interaction between curriculum, teaching and learning. It also allowed for disaggregation of each school's own data for further case -related analysis.

Impact on HE careers

> *"I would say that this disaffection project has been the highlight of my time here. As strongly as that"*.

This comment from one of the HE research mentors, a PGCE Tutor, indicates the powerful effect collaboration in the consortium had had on her. *'Because it has been the only opportunity for collaborative research in the five years that I have been here*'. She contrasted the position of PGCE tutors with other educational researchers who research teaching. With its focus on pedagogy the consortium provided a legitimate vehicle for a direct focus on classroom research

> *"I have got absolutely no problem about saying my main areas of interest in research are about practice in the classroom and about effective pedagogy. So a project like this has been fantastic because its given recognition to that area of research in a way that some more theoretical areas of research don't touch really"(HE1).*

It had also provided opportunities for publication in academic journals.

This view was affirmed by the other PGCE tutors who were research mentors in the programme, one of whom said that it had partly been *about 'teachers giving us the confidence to engage in research'. I have been learning along with the teachers and that has been really important for me' (HE2).* This learning together had created a climate of methodological experimentation and questioning not only about the methodology of research but also about the ethics of doing research, with young people, for example, and the edge of what is possible and what is not. *'It is not just tired old paper methodology.. it is raising interesting questions about reliability and validity etc'* (HE1). For one of the PGCE tutors, it had also led to retraining in specific aspects of methodology.

A different kind of impact of teacher research in HE can be noted in reference to the RHINO project, where the topic was developed further by one of the HE research mentors resulting in an ESRC funded proposal on the invisible child in the mathematics classroom.

Impact on schools, teachers and pupils

The impact on schools, teachers and pupils of participation in the consortium has ranged from increased confidence of individuals in using data to inform practice to co-researching with an HE colleague, to collaboration with school colleagues and with HE colleagues in cross-school themes creating in fact 'learning communities' both within and across schools. Some individuals have also acquired a greater level of greater sophistication in research methods and in interpreting the results of the research, especially in collaboration with HE research mentors in the cross-school survey research.

Improving learning opportunities for students disaffected from learning

The survey results and individual case study research allowed individual teachers to broaden their understanding of the 'disaffected student', particularly in identifying those whose disaffection was covert and to share strategies to redress and improve the learning environment for them. Especially relevant in this context was listening to pupil evidence and reasoning and integrating this into their teaching taking due account of individual differences. The concept of the 'learning community ' extended here to learning from and with pupils. What began as a inquiry into a group of behaviorally deviant students became a dialogue about teaching and learning resulting in a shift of focus towards 'creating 'more *inclusive learning environments* responsive to the needs of individuals' (Final Report, NASC).

Increased professional confidence

Several head teachers spoke of the confidence and self-esteem generated by the participation of staff in the consortium, visible through presentation of their findings and interpretations to groups of teachers, including some from other schools (HT1). This was also evident in presentations at conferences within and beyond the consortium. A second noted how the school research co-ordinator actively involved other staff through sharing papers and ideas and, in one case, the process of observation with other teachers in the school. In fact the variety and range of projects reported on facilitated participation in discussions of pedagogical issues within and across the schools.

Cross-school Collaboration/Research Community

'I think what the project has done is to create a community of individual teachers and individuals in schools who are working together in small teams'(HT3)

The headteacher who made this comment went on to describe how working together in this way overcomes differences in status and school culture. A second headteacher pointed out the importance of the partnership and differentiation of roles in supporting schools while allowing them to still focus on their core activity…

> *"The idea of a partnership between a classroom practitioner and researcher gets around that huge worry about opportunity costs and, you know, each has something the other needs so that is far more likely to get people engaged than simply saying 'why don't you do some research in your classroom. The other thing is that it is very important for classroom practitioners and school managers to feel that what they are researching is actually making them more effective in terms of their core agenda.. the two things are not competing against each other, they're complementary'.*

Re-engagement with business of teaching/Raising educational questions

One of the head teachers (HT3) noted that NASC had provided opportunities for teachers to re-engage with the real business of teaching, something which he said education policy over the past ten years may have discouraged the best practitioners from doing from being

> *"innovative.. and creative… There have been too many people who have been quite clear what the answers are and really, you know, I think there has been a*

neglect in terms of the questions… and understanding of teaching as a complex business… I think the NASC project has at least brought these up to some extent'.

Dissemination

Throughout the programme there were many and different opportunities for dissemination of the research individual teachers were undertaking in liaison with higher education research mentors. Four specific instances are noted here.

1. In one school the research findings from the pupil questionnaires on disaffection and disapplication form the National Curriculum, which had essentially been conducted by the day-to day co-ordinator from higher education in liaison with pupils and staff, were presented to the whole staff. What was intended to be a short discussion turned out to be over two hours as other teachers not directly involved in the research questioned and explored the implications for their pupils.

2. Secondly, several of the teachers presented papers at conferences not only at TTA conferences but also to the wider research community at national and international conferences such as BERA, CARN and ECER.

3. Two major dissemination conferences were held by the Consortium. The first, halfway through the programme presented the work of the consortium to all the Norfolk schools and subsequently as a result of the interest shown, the LEA widely circulated and endorsed the findings from the RHINO study to all schools. This particular study also spread well beyond the area and was presented at a national conference in 2001 sponsored by the TTA and the DfES. The second dissemination conference towards the end of the programme focused more on findings from the cross-school themes.

4. Dissemination also took place in less formal ways as other teachers joined in the research in individual schools and teachers came to learn (through group meetings) of successful strategies in one school and began to implement them in their own, as in the case of a particular observation schedule on Rewards and Sanctions developed in one school that was adapted for peer observation in another.

5 The LEA have set up a website and the previous Chair of the Management Committee worked with one of the advisers to get the NASC papers on to the website. The LEA is also developing a desktop publication on NASC that can be disseminated throughout Norfolk.

6 A special edition of an international journal is being devoted to papers from NASC

End note

In summary, the NASC consortium may be seen in two distinct phases, the first comprising individual school projects, the second, four cross-school themes. Knowledge building in student disaffection from learning and diffusion of ideas and findings was both from inside school-based teams outwards across schools, and collectively from the outset. In some instances individual teachers took the findings that were relevant to them

and changed their practice. In other instances whole school policy changed as in the case of the curriculum enhancement theme which impacted upon the key stage 4 curriculum for disaffected pupils and the rewards and sanctions research which led to policy changes in some of the schools on this issue.

Central to the philosophy of NASC's approach to building a teacher research culture in this consortium were a number of underlying principles:

- high teacher and pupil participation.
- learner-centred education, understanding the learning needs of pupils - 'getting at their experience of engagement, disengagement from the subject matter as that is mediated by teachers' (Co-ordinator).
- integration of engagement in and engagement with research -'*prioritising engagement in as a condition of any useful engagement with'*(Co-ordinator).
- *g*iving teachers an attitude to research and a *'relaxed'* view of what research is i.e. 'trying things out', 'experimenting', 'changing focus', 'gathering evidence on topics relevant to their classroom' (compared with a model teachers had in their mind of what proper research was i.e. tightly focused, precise research questions, working from research literature etc..) (HT 3, Co-ordinator).
- generation of research initiatives from teachers. Underlying this commitment was a major concern with sustainability -'If we can get these schools adopting a different mind set towards research and how it links with development of practice, you have something sustainable on your hands' (Co-ordinator).

This had been the aspiration from the outset - to create a research culture, which might take a different shape when the TTA project ended, but one that once *set in motion would go on and be taken forward'* (Co-ordinator).

So how will this research community be taken forward? What remains now that the TTA funding has ended?

- Many of the NASC teachers are continuing to develop ideas generated in NASC in their own schools; other NASC schools are providing access for funded projects that were generated from NASC.
- Plans for future dissemination noted above will extend the knowledge acquired in NASC to other schools in Norfolk and beyond
- A funded project building upon the NASC experience and the partnership structure with the LEA that developed effectively in the second half of the programme was submitted to a funding agency. Designed into that research project was a set of priorities for the future that included a continuation with the post-14 curriculum key skills in particular, but also the themes of literacy and numeracy and ICT innovation. A further focus was the link between pupil and teacher disaffection noted in the NASC research, but in the new project called motivation. This proposal was not funded but a further proposal drawing on NASC research - as one basis for constructing a distance learning programme to help teachers in the European Union tackle problems of disaffection in their classrooms - has been accepted by the Comenius/Socrates Programme.

What the NASC experience has achieved for both teachers and HE research mentors is a commitment to collaborative research that is not dependent upon award bearing

motivation or structure (though some of the teachers involved did have higher degrees). Co-ordinator). What it also has achieved, through the interaction with the LEA over dissemination and future proposals is an LEA/HE commitment to collaborative development on inclusion and action research. In these ways an infrastructure is developing to sustain teacher research. Motivation of the teacher-researchers who have been involved in NASC for some may be enough to continue researching their teaching and learning. For others, and for cross-school meetings and research that helped build the research community participants so strongly reported, resources will still be required.

Note on Database

This profile has been generated from the following date base:
Interviews with:
The Director of NASC (x2)
LEA officers: the Assistant Director, Senior Education Officer and an Adviser/Inspector
Five university research mentors
Three cross-school research co-ordinators
Heads and school research co-ordinators in all schools
Deputy heads in two schools and twelve teachers across schools (several of whom interviewed more than once in generation of teacher profiles and theme visits)
Theme visit interviews with representatives from all schools
(the majority of interviews were an hour to an hour and a half in length)
Observations of cross-school theme project meeting, group interview with higher education research mentors and school research co-ordinators, teacher workshop exploring issues in interim report and teacher profiles.
Documentation: initial proposal, all project reports to TTA (including final draft report) all written presentations to conferences

Profile of the North East consortium

Summary, background and introduction

This is an account of the North East Consortium. The substantive theme of the Consortium is to develop 'Thinking Skills' in schools and classrooms and the particular focuses have been reflecting on the nature of teaching, on pupil contributions to pedagogical interactions and on the nature of the interaction itself. The chosen approach is classroom action research – i.e. cycles of enquiry and experimentation conducted with colleagues and centred on classroom action. This has been spoken of in terms of *"teacher's craft knowledge"* through what is called *"enactment"* - a process in which *"theories and research findings are tested or realised through practice and a community of practice is fostered"*. It is the 'community of practice' which elevates the process from individual action research to collective action – both in and between schools. [Quotes taken from Consortium publications.]

The Consortium is defined as a partnership of 6 secondary schools 3 local education authorities and the University of Newcastle-upon-Tyne. Although not a formal member of the partnership, the Tyneside TEC effectively became a partner by providing resources as well as the Chair of the Consortium Management Board. 3 of the schools are 13-18 High Schools; 3 are 11-18 schools; 2 are voluntary-aided. Schools in the Consortium have Beacon Schools, City Technology College, Training School as well as Excellence in Cities status. Across the Consortium more than (20?) teachers have won Best Practice Scholarships.

The notion of partnership is important to Consortium participants, meant to signify a blurring of the boundary between 'academic' (i.e. university-based), LEA and teacher cultures – building a *"collegiate context in which to explore how to work effectively across traditional boundaries"* [Baumfield & Butterworth, 2001]. Even so, for some school people in the Consortium the perception of the university taking a leadership role is important. The university, say schools people, provide research support – specifically, as one Head said, they *"number-crunch, do the data analysis for us, transcribe tape-recordings, organise tape-recording of lessons"* as well as organise research seminars and conferences, disseminate research papers, co-ordinate cross-Consortium networking, provide a theoretical platform for teachers to conduct enquiries into teaching and learning and take a lead on writing proposals for external funding. Some teachers and Heads talk of the HE and the schools inputs being distinct but each essential. The university is seen by some schools people as being the source for the theoretical underpinning of Thinking Skills.

The Consortium was founded upon pre-existing work on Thinking Skills both at the University and in the LEAs. The university had familiarity and confidence in the substantive field which was to underpin the Consortium and had established the Thinking Skills Research Centre. In its original proposal the project was able to claim that it would embrace a range of teaching innovations which were related to Thinking Skills-type approaches including accelerated learning programmes (such as CASE and CAME, although their integration in some schools proved to be problematic), and specific Thinking Skills programmes in Geography and History. In one LEA Thinking Skills was included in their Educational Development Plan (the other two LEAs followed suit later) and co-ordinated a Humanities Thinking Skills Network. There were a range of activities already mounted by the University from seminars, award-bearing courses, partnership arrangements and conferences which drew from the Thinking Skills agenda and

prepared the ground for this Consortium. There was, that is to say, a state of 'readiness' for this initiative.

The Consortium provides scaffolding for teachers to use action research to explore teaching and learning. The scaffolding is constructed on a research support process which tests the feasibility of the Thinking Skills philosophy and passes it on to schools and teachers who pass through three "phases" – a 'reactive' phase an 'engagement' phase and a 'proactive' phase.

> *"Phase 1 where engagement with research is reactive in the sense that it is triggered by the question of what is working as the teacher focuses on the strategies and the immediate responses of pupils;*
> *Phase 2 where engagement with research is increased as the emphasis shifts from what is working to why something is effective in the classroom and attention is directed more towards learning and away from the management of the strategy;*
> *Phase 3 where engagement with and in research is proactive and the influence of beliefs and attitudes to teaching and learning are seen to have a powerful impact on how the interventions function to have a long-term effect on pupil performance."* [Baumfield & McGrane, 2000]

Successive cohorts of teachers are coached in each phase by the previous cohort which has just moved through that same phase. Expertise is developed at the research stage and developed through coaching. In practice this has sometimes avoided the necessity of all participants being exposed to the initial enquiry (*"there is a tendency for direct engagement in research to decline as the initiative becomes more diffuse"* Baumfield & McGrane, 2000). Hence, the first cohort of teachers is expected to engage 'in' and 'with' research in the 'reactive' phase; for the second group this is optional; the third cohort is expected to conduct coaching and to engage 'with' research (i.e. probably the research of the first cohort). One Consortium person sees coaching as the element of the process which makes up for common shortcomings in a 'cascade' approach, since coaching (a) attracts people with a sense of commitment to the problem being addressed, and (b) the coaching process is based on collaborative enquiry rather than just knowledge transfer from one person to another.

Through coaching individual teachers and groups of teachers engages in enquiry into teaching and learning in their own classroom and this sustains the investigative thrust of the initiative and provides the data for cross-Consortium deliberations. The development of Thinking Skills provokes a range of questions and issues that become the subject of research. There has, for example, been enquiry across the Consortium about the nature of evidence of improvements in classroom interaction and how evidence interacts with teacher judgement. Investigative themes focused on thinking Skills have included analysis of teacher-pupil interactions (particularly questioning techniques), classroom organisation and the nature of the learning task. Often, the theme of the investigation is given by the concerns and dilemmas of an individual teacher or by a policy initiative in a school. The Thinking Skills enquiry approach enables teachers, says one HE co-ordinator, to *"better read what's going on in the classroom"* – it is an instrument of transparency.

All schools were involved in implementing Thinking Skills and monitoring its impact, and all were committed to the common approach of triangulating data – i.e. of classroom observation, pupil lesson logs & teacher diaries. Specific activities the Consortium engages in include such as:

- Researching the nature of questioning in classroom interactions
- Researching teacher perceptions of teaching and learning

- Exploring the nature of evidence of classroom improvement
- Video-taping lessons for subsequent analysis of pedagogical interaction
- Writing cross-curricula learning tasks to explore inference, use of evidence, etc.
- Collegial dissemination – i.e. through subject-specific and generic (Thinking Skills) seminars and workshops
- Involving newly qualified teachers (NQTs) in enquiry activities

There have been cross-Consortium meetings hosted by participating schools throughout the funding period whose themes have brought together common interests and have disseminated school experience, as well as supporting Consortium members in preparing conference papers about their work. These themes have included: classroom talk, teachers' responses to teaching Thinking Skills and teachers' constructs of teaching and learning [draft Final Report].

A Vignette

It is lunch time in a busy school. Three teachers are eating together in the large, noisy canteen surrounded by children. One is involved in the Thinking Skills project that he has been working with as a Maths teacher for two years. Last year he clocked-up around 50 thinking skills lessons, he says, as though a pilot logging flying hours. With all this experience he finds he has far more control of his classroom, can be more relaxed, subtler in his strategies and more collaborative with pupils. One of the teachers in the group is a PE teacher. He expresses an interest in joining the Thinking Skills project that is currently in operation with Maths, Science and RE. Why PE?

He wanted kids to know why they hit a shuttlecock to that part of the court, or why they ran to that part of the pitch in football – things kids currently do "*by instinct*" but which he'd like them to do through reasoning. He wants them to be able to "*think independantly*". Why is it now that he wants to achieve this? Under the National Curriculum teachers have not had to ask these questions, but he says that this has not been the case in PE. In the early 1990s, for example, when he taught in London there was an initiative called Games for Understanding which sought to teach in practical settings general prrinciples of how to understand the game which pupils then apply in sports sessions. *"It went our of vogue – it went out of fashion"*. Other approaches came into fashion – 'mixed (gender) PE', 'anti-competitive sports' – largely driven by political agendas. He talks of such initiatives as "*rolling in"*, but says that PE teachers have "*got past that, to a certain extent, we're not just jumping on these bandwagons"*. Now he's taking an independent look at Thinking Skills.

"That notion of why do you do certain things – is that a 'thinking skill' – I don't know, it's a gap in my knowledge. It's a gap in my knowledge which I wouldn't mind filling – then bring in another teacher – perhaps."

What is 'Thinking Skills'?

Behind the specific pedagogical strategies that make up thinking Skills lie aspirations towards curriculum change – designed to make classrooms places for experimenting with more complex exchanges than mere transmission and reception of information. This is spoken of by HE co-ordinators as an enquiry-based approach to curriculum – they trace its intellectual roots back to Dewey, Stenhouse and Vygotsky, drawing from them less the curriculum implications of their work than the pedagogical and learning theories. One of the LEA Link Officers – who also traces his educational interests back to Stenhouse (on whose curriculum project he worked) – sees this as *"about curriculum development primarily…taking account of research that's available – and*

some research in schools". He sees the Consortium as a return to classroom action from the overriding concern with curriculum content dictated by the National Curriculum. The HE co-ordinators add that curriculum development is *"an approach to building partnership and professional development"*.

These explicit intellectual debts to theorists of democratic, process and cultural approaches to curriculum sit alongside practical concepts that reflect aspects of behaviourism. There is, for example, an emphasis on learning objectives, *'specific targets'* and "*helping pupils to understand not just <u>what</u> they have to do, but <u>why</u> they are doing it…Only once learning objectives are meaningfully understood can pupils start to evaluate how successful they have been"* [draft Final Report]. Some of the observational work of the Consortium further reflects this in focusing on the measurement of behavioural surrogates for pupil engagement such as measuring pupil response times to questioning.

For the pupil to *'understand the game'* – making explicit what is implicit, whether it be PE or Maths – involves the pupil sharing responsibility for classroom interactions. The aim is to enhance the efficiency of classroom process by making the pupil more aware of the pedagogical process rather than merely serve as its passive target. That sharing is achieved by making knowledge subject to questioning – something which the teacher themselves might model as they investigate their own practice. The pupil is to be invited to challenge ideas – to develop *'meta-cognitive'* awareness, or *'thinking about thinking'* [Baumfield & Butterworth, 2001] and to be more aware of how they learn.

For the PE teacher the aim is for pupils to see and understand the principles of badminton, for example, so that they can act as autonomous decision makers on the court, able to theorise spontaneously about how and why they should position themselves and not rely on instructions from the teacher. The Maths teacher has already taken some of his pupils through such a process. The benefits it has brought him are known in his circle of friends in the school – hence this expression of interest from the PE teacher. One teacher talks of how the Thinking Skills project extends its reach:

"The way people pick things up is by word of mouth – people say, 'look, I've tried this – this works and it has particular results in my class'…being flexible enough to offer it to more people on an ad hoc basis and still working with enthusiasts – but you've got to go beyond enthusiasts."

How Thinking Skills becomes a change strategy in schools

A principal focus in one school is on pupil questioning, for example, that pupils might be invited into sharing responsibility for pedagogical interactions by deliberating more closely over the knowledge being presented to them. This involves many aspects – pupils pausing and reflecting before accepting a piece of knowledge; the use of discovery learning techniques; pupils operating as a self-referencing group (said one pupil, *"I like working in a group than working on my own…'cos you can discuss your ideas and you get more variety of ideas."*); the physical organisation of the classroom so as to encourage group work; the teacher adapting their own style of presentation; the teacher developing personal confidence in his or her own pedagogical abilities. One School Head explained this approach as a *"routine of analysing how they are learning"* – the 'they' can refer to both pupil and teacher. An important element for him was that pupils *"can articulate how they have learned and learning from their mistakes and how to approach things differently"*.

The strategy for accomplishing is a process that takes a teacher through enquiry into his or her pedagogy into an appreciation of pupil learning and the nature of the task set. Thinking Skills, this is to say, starts out with a theory of learning in which the pupil plays a more active role in constructing knowledge; supports the teacher in developing their own theory of teaching which supports this; and examines the appropriate nature of the pedagogical task/interaction. The use of 'coaching' in which a colleague acts as friendly critical observer to a teacher's pedagogical approach supports the teacher in arriving at a personal understanding of pedagogy and how it might be developed in the context of that person's classroom and subject area. This individualisation of the methodology is another element of the approach. Where this also involves 'making the implicit explicit' the process is intended to be shared and experience generalised from the personal. The process is underpinned with analysis of triangulated data using pupil feedback, video-based observation and a review of teacher diaries.

The background of the Consortium

One primary impetus for thinking Skills came from a local TEC that sponsored two conferences and a report on Thinking Skills in the early 1990s. (The Consortium Management Board is chaired by a nominee of the TEC.) The subsequent sustained interest in the approach and a series of local contacts in schools generated through CPD and partnerships made for a solid basis on which to bid for the TTA Consortium. There was negotiation of the shape and description of the Consortium at the bidding process. Philippa Cordingley, overall manager of the Initiative on behalf of the TTA, was the TTA Link Officer for this Consortium – something the HE co-ordinators feel kept them better informed than they might otherwise have been.

The Consortium started with a 24-hour residential conference to which two teachers from each school were invited and it was here that each school's one-term pilot project was negotiated. The aims of the Consortium *"reflected what was thought to be achievable"* – partly given the determination to keep teacher participation voluntary and this 'achievability' was to conceived of *"within existing structures"* so as to ensure the realistic base of the Consortium experiment [draft Final Report]. One of the distinctive features of this Consortium's residentials was a mix of school managers and NQTs (though one aspiration to focus on NQTs fell foul of the pressures on their early induction into teaching). Each of six schools which had expressed an interest (two of the initial schools were subsequently replaced owing to changes of Head) were asked to write a brief proposal for approval by the Consortium Management Board, which met 2 or 3 times each year and managed the funds (working within the university budgetary accountability system). This residential was repeated at the beginning of the next academic year with more school people present to review progress and give more impetus to development. There were, in addition, hosted by each of the schools, which happened about once each term on a theme agreed, by the Board. Each of the three HE co-ordinators took responsibility as link person for one or a few schools.

One of the strengths of the approach has been the resulting diversity of approach across the partnership, though this has made for difficulties in achieving consistency (not coherence, which has been sustained through the focus on Thinking Skills and cross-school themes). Next time, says one, she would be more proactive in the partnership to achieve that consistency – that the university is best placed to carry responsibility for setting targets. Even so, says another, where schools were largely self-determining at the outset and he could say that the Consortium 'belonged' to them responsibility for meeting accountability requirements has gradually passed more to the university. This need to be *"more accountable and meet externally determined targets"* had to be 'reconciled' with *"organic growth in an uncertain process"*.

Each school then engaged in a pilot exercise which provided a base to measure the scale of the ambition and the feasibility of the design. This was also an opportunity to define criteria for judging progress – for validating each school's strategy. Here there has been much discussion across the Consortium with concerns being expressed over the tension between what makes an action or a process or a finding credible to a professional practitioner and what makes it reliable against the canons of investigation. All schools were required to collect triangulated data.

There are distinctions made between development and research activities, some people engaging in both, others only with pedagogical development. One teacher, for example, talked of the impact on her practice of Consortium work:

"Partly on the level of the lessons itself and trying the Thinking Skills out – but also being involved in the research and therefore seeing yourself teach on video in a massive catalyst for

change. For me…getting a class to keep a learning diary for a whole year, that was a massive catalyst for me – just by reading their entries and the interviews. I've interviewed half-a-dozen students a couple of times as well as reading through what they actually say to somebody else about my subject…So, yes, the activities, but also the research about the activities as well."

The role of the HEIs in this process has been to provide an intellectual environment for collaborative thinking and school development. At its heart is the theory and practice of Thinking Skills, long developed through ITT and CPD courses at the university and further sustained during the Consortium with seminars, readings, demonstration teaching, personal support and the like. That the university has been one of the hubs of the Thinking Skills movement (recently hosting an international conference) means that it has not had to devote so much energy to the development of theory to inform the Consortium and has left it to concentrate on supporting a process. Even so, HEI people say they have been able to learn more about "the implementation Thinking Skills" through the collaboration.

LEA involvement

Even with just six schools the Consortium sprawls across three LEAs which are all involved at different levels – Newcastle, N. Tyneside and Northumberland. One LEA has middle schools, which creates its own conditions for the project. It is relatively sparsely populated and so suffers in its Standard Spending Assessment which translates into fewer free periods for teachers, bigger class sizes and more people with more jobs. Where there would once have been three or four Deputies in a High School there is typically now only one. Here, however, a senior officer has a particular interest in Thinking Skills and carries responsibility for developing it which has been part of the EDP since 1995. This LEA has the most extensive commitment. Elsewhere, advisers have less time allocated to support Thinking Skills and the engagement is lower. One of the other two LEAs is committed to CASE and the LEA/Consortium link person is a CASE trainer – this coincides with interest in Thinking Skills and allows a little more engagement. Even here, however, the LEA has assigned someone to develop Thinking Skills across the authority but has not given the responsibility to the Link person. The three LEAs do not meet together, though may meet at Consortium events.

One LEA officer explained one element of the attraction to authorities of Thinking Skills. There has been a relative decline in Humanities as a result of the intensification of curriculum hierarchies which has elevated Science, Maths and English. Schools have closed Humanities departments switching resources to the high-stakes areas of teaching. This has created some *"slack"* which advisers have taken up by switching from subject-specific advice to generic advice – as in Thinking Skills. There is interest across this region in approaches to 'accelerated learning'. For him, this Consortium represents a welcome return to deliberations over pedagogy from the focus on curriculum content which was forced by the National Curriculum. This, itself, and the capacity for Thinking Skills to make pupils more questioning, raises interesting questions about 'standards'.

In concrete terms his LEA's contribution has most significantly been in terms of time, but has also included small resources such as reprographics, meeting space and help with dissemination. There is a LEA group developing a Thinking Skills web-site and the authority has mounted a conference on Thinking Skills. His authority-wide role allows him to take the broad view and he sees the Consortium in the context of other developments. For example, one school lies in a town that has received a large Single Regeneration Budget grant, some of which is dedicated to education and an element of that given over to developing Thinking Skills. This makes it hard for

teachers in the school involved to identify which efforts and which impact comes from which source – in this case Consortium or SRB.

Overall, this LEA Link Officer sees his role as supporting the university and the schools and certainly not in terms of leadership. This he ascribes to the university whose role as co-ordinator he sees as important to the success of the Consortium -*"they've driven the whole thing"*. His own work with the two consortium schools in his authority has not been co-ordinated with the university, and they have found themselves – for the most part – making school visits independently. He remains agnostic as to the benefits of better defining from the beginning working relationships between the various partners, aware that good organisation does not always spell meaningful process.

Four schools

In the event each school chose to apply Thinking Skills in their own way and for their own purposes but within the agreed Consortium framework. In one school, for example, the focus was on the nature and constraints of group work – though this, itself, became just the focus for more wide-ranging concerns over the effectiveness of teaching and the engagement of the pupil. This was the school above which had involved the Maths, Science and RE departments. The school sees itself as a recovering school and one committed to innovation. It has City Technology College status and has recently been awarded City Learning Centre status for ICT as part of Excellence in Cities, which brings in £1m in investment. One of the things they said in their bid was that work closely with University using coaching to look at IT and the School Co-ordinator thinks this is what helped to clinch the deal.

The Consortium project became part of the drive in the school to improve the quality and reputation of its work. Though currently involving just three departments this is seen as a whole-school strategy by the School Co-ordinator who is a member of the SMT. Hence, there is a degree of standardisation built in to the project. He explains that this arises partly from the whole-school investment in the approach, but also from the pupils whose predominantly disadvantaged background makes them less confident as learners and more dependent on structure.

> *"Thinking Skills brings a definite structure. We've taught and we've coached using a set structure. One or two people weren't happy about at the beginning. But we've stuck to our goals and we've said unless we have this structure how can we assess how effective your lesson's been? We've been looking at it…the framing, the group work, the debriefing, the bridging…those different sections across the board so you can start to see the common factors which make for successful framing. And also the things that go wrong – teachers talking for too long, losing the kids half-way through the talking, squeezing out the amount of time that there is for the group work session…'You've been talking for 12minutes – you didn't need to!'."*

The three years of the Consortium has been an opportunity for this school to familiarise itself both with Thinking Skills and with action research – neither of which were prominent in the school. The co-ordinator was an Assistant Principal and project meetings were scheduled with ring-fenced time twice a term and had SMT support. To this is attributed the success the school claims in developing a culture of change management which came to link a range of initiatives together. This school, in fact, moved systematically through the development approach outlined earlier and used this to disseminate Thinking Skills throughout the school. The school strategy was to emphasise coaching to support innovations in the school. The school's view of coaching was that it was a useful generic tool to develop teaching in the school, but only if applied on a

large scale. The school has also been active in contributing to dissemination events beyond the school in the locale, nationally and even internationally.

In another school the focus was on questioning techniques with pupils and the pilot project was initially confined to Geography, History and English with teachers selected for their prior interest in Thinking Skills and for previous contacts with the university team. The aim of keeping research activities within a small number of departments (for the most part involving 5 out of 107 staff in the school) was to consolidate the approach and to begin to build cross-departmental links in manageable ways – before further diffusing it across the school. This is, again, potentially a whole-school approach that has been written into the School Improvement Plan and attracts additional resources from school budgets. It takes its place there alongside CASE and CAME, for example, although the Consortium reports occasional difficulties in CASE teachers integrating into the Thinking Skills project. Thinking Skills has also recently been incorporated into the Performance Management strategy. The latter development is based on the idea that if teachers are already observing each other they might use the Thinking Skills approach to, as the Head explains, *"take the opportunity, not just to have your own performance being measured, but to have feedback on effective teaching…we are drawing it together much more coherently"*. At present, however, it is small and disseminated its experience to other teachers and departments through twilight seminars. This school, too, sees itself as an innovating school, it has City Technology College status and is part of Excellence in Cities for gifted and talented children. It was one of those schools named in David Blunket's speech to the North of England conference in which he praised the Thinking Skills approach and drew much media attention to schools in the Consortium.

Beyond the pilot project the school moved to develop *"a more sophisticated taxonomy by which to measure teacher questions"*, and, by the third year of the Consortium, had shifted again to looking at pupil questions. *"Through a common activity we could explore the types of questions that pupils were using and by repeating the activity measure whether the nature of those questions changed over time"* [draft Final Report]. Throughout the project the school mounted workshops to disseminate to and support teachers and also produced a resource pack and a newsletter. There was a sub-project looking at *"how teachers' thinking is related to teaching thinking"*

At a third school the School Co-ordinator is a prominent advocate of Thinking Skills across the Consortium and has lengthy experience with the approach – she (like others) has presented and published work alongside the university team. Here, the approach has had extensive impetus and achieved greater reach. Out of a staff of 80 first 6 and later more than 20 teachers are actively involved and Thinking Skills has spread to 9 out of 11 departments (including PE, RE and Modern Languages). Here the pilot project focused on teacher-questioning with extensive use of coaching, teachers observing their own lessons on video and the triangulation approach using pupil logs. Again, the school is seen to be a successful and innovating school with Beacon School and Training School status and Investors in People recognition. The special resources dedicated to releasing teachers from timetable are partly drawn from these other initiatives.

The initial pilot allowed the Co-ordinator to affirm to teachers that there would be a significant time commitment and, though individuals might want to opt out, the project would proceed in the school. Her approach, nonetheless, is collaborative with colleagues (of whom she says she is highly protective) and though she takes a lead in project decisions these are shared by all. For this school, residential events are seen to be essential for building relationships and a sense of ownership, and they – as in all schools - share the cost of residentials with the Consortium.

This school, too, has followed the 'phased approach' closely, monitoring its effects on teachers as the constituency of those engaged in Thinking Skills development has widened. The school co-ordinator notes that the most profound impact of research has been on the initial group of teacher-researchers – *"at no time…has the debate about Thinking Skills pedagogy been as analytical and forthright as it was with the first group of teachers"* – and she speculates about whether one reason may be that it is *"harder for newcomers to challenge [their] established beliefs about teaching and learning"*. Even so, where a teacher develops a particular need for personal professional development the school now has the support structures and analytic frameworks developed to provide support for that teacher to engage in reflection at the 'Phase Three' level – i.e. at the level of beliefs about teaching and learning. And, too, the school has discovered that engagement in research collaboratively with colleagues appears to be more effective in the short-term in developing research understanding than where a teacher works alone.

A fourth school became involved since Thinking Skills was already embedded in its practices – they were part of the county-wide network for Thinking Skills - and they were seeking to further develop in that area – more so than to engage in Consortium research. The school also had proven success at bidding for externally funded projects and this was seen as another source of needed resources. Once more, this is a Beacon School and a CTC it has a 'Pyramid Project' – there were many projects teachers had to carry. It was, in fact, the SMT that took the school into the Consortium and delivered it to teachers. However, a new Headteacher and changes of School Co-ordinator made for some loss of impetus and coherence at the outset and there was a resulting loss of negotiation between departments which saw their interests as diverging. In the event, and with teachers feeling already overloaded, it became easier to continue with coaching and teaching development in respect of Thinking Skills than to engage in the research aspect of the Consortium – and this, confined mainly to the Humanities department. So, explains the ex-School Co-ordinator, teachers would devise Thinking Skills strategies, trial them in classes, interact with networks of other teachers and advisers and even present at conferences – *"but it wasn't necessarily done through the route of research"*. What would have made it feel more like research?

> *"Making more of an effort to collect concrete data – much of what we were doing was a gut feeling about how things were going…developing strategies, reflecting on those strategies, but not necessarily imposing any structure on that which is what the university was trying to persuade us to do."*

There were a number of factors that made it difficult for the project to take hold in this school. The county has middle schools, for example, and this school takes children from Year 9. This means there is an *"assessment culture throughout the school"* which puts pressure on innovations. This also means that there is a competitive culture between departments in the school. The fact that it was the Humanities Department which picked up the Consortium project tended to give it lower status than had it been one of the more visible, high-status subject areas like science – *"it was not seen as a particularly critical project"*. And, too, other departments were engaged in other projects which demanded quantitative research methods including baseline testing, and this was seen as antithetical to what Thinking Skills was doing.

The Issue of validity

Early assumptions among teachers were that the validity of what they were accomplishing and the claims they felt able to make rested upon conventional statistical procedures and measures of reliability. *"Quantitative performance data was seen to be more credible despite the fact that the strongest influence on teacher behaviour and attitudes…was their interpretation of pupil responses…"* [Baumfield & McGrane, 2000]. Over time and in response to teachers interacting with experiential data *"qualitative data was influential"*. One teacher, for example, claimed that what he was doing (he was engaged in conventional action research using collegial observation to analyse his pedagogy and develop a Thinking Skills approach) was not research – *"because there's no statistical evidence"*. Even so, he knows that his enquiries have led to improvements – *"it just feels right"*, he says. And, too, he can distinguish between the impact of Thinking Skills on different ability groups.

One instrument for the Consortium to develop its own approach to validation was triangulation where the interaction of lesson observation, pupil logs and teacher diaries provided multiple perspectives on the same events. As these were *"tested"* in the school and at cross-Consortium meetings – i.e. subjected to critical scrutiny – so teachers became more confident in the credibility of their work. *"The exposure to critical audience is important as it requires us to articulate our work to colleagues who do not share our direct experience but are interested in exploring the relevance…in their own context"* [Baumfield & Butterworth, 2001]. The Consortium talks of an iterative approach to validation of experience through the *"testing of conclusions"* at school level and then again at cross-Consortium level in a process of *"challenge and reflection"*.

This suggests the broader question of what *kind* of research is valid and this is addressed in Consortium publications, which emphasise research that has an instrumental value for classroom action. *"Teachers, rightly, have little time for research that is not designed to bring about change and influence classroom practice"* [The NE School Based Research Consortium, undated, unauthored]. It was important, therefore, to use the classroom and not an experimental site for development activities. The approach to research validity rests, then, on (a) authentic context, (b) practical utility for classroom action, (c) enhancing teacher judgement, and (d) persuasiveness to colleagues for social diffusion.

This, together with the determination to encourage developments within existing practitioner arrangements, can make for difficulties in identifying just what is to be validated – i.e. what is a product of the action research effort. The draft Final Report notes that:

> *"In one sense, our efforts to infuse strategies into the existing curriculum and make links with effective teaching and learning mitigated against having neat and discrete categories for analysis. There was much debate around the issue of 'When is a lesson a thinking skills lesson?'. "*

This uncertainty was partly fuelled by questions of what counted as evidence – of, for example, improvement and impact.

HE and teacher culture

The three HE co-ordinators work in the teacher education programme at the university. Their advocacy of Thinking Skills has, for some years, been contiguous with training and has formed some of the basis for partnership arrangements. The project began with their intellectual and

professional journey. One talks of how she turned to Thinking Skills through dissatisfaction with her own teaching and her inability to engage pupils in their own critical reflection. The three came to the university as teachers and see themselves as remaining within teaching cultures, seeing this as a challenge to 'preconceptions about divisions between different cultures and crossing boundaries'- referring to university research cultures. Their position in the PGCE programme distinguishes them from, for example, professional research cultures in the department and is fiercely sustained by their commitment to applied research with and on behalf of teachers. This is reflected in what is said by people in Consortium schools. One head, for example, spoke of the HE co-ordinators as academics

> *"who've got credibility, who have invested in effective research – credible research, research in the classroom. You can't argue with the authority of these figures – this is not academia, this is people who have worked with teachers."*

One of the three is part of the Department team preparing the RAE submission and representing the Consortium within the parameters set by that exercise is a challenge.

As they talk of this it is as though there is more a sense of boundary between themselves and the professional research culture in their Department of Education than between themselves and schools in the region, though they acknowledge that perceptions have changed in the university. This leads to a particular approach to research – says one, *"you don't start with a view. You enter into a relationship… it's a relationship of fundamental equality"*. The question, she says, is for how long one can tolerate that 'messiness' mentioned earlier - a tension between 'developing the process and achieving tangible outcomes'.

The promotion of research as a form of making relationships gives rise to the Consortium's diffusion strategy that is through social interaction, as we heard earlier from a teacher talking about 'word of mouth' transmission. Indeed, some of the early impetus to the project was given by one of the HE co-ordinators who took a demonstration lesson in Thinking Skills, which was videotaped. Some teachers said they had never seen a whole lesson video-recorded – it *"caught on"*, she says.

What is this project about?

At the heart of the project lies Thinking Skills, and for many of the participating practitioners this is unequivocally what the project is about. In one school, the Co-ordinator talked of the benefits in these terms:

> *"I think it's better because nearly all of the children are on task for nearly all of the lesson…I think it's better because during that lesson they're doing a whole variety of different skills including a lot of discussion work with their peers…this 'cognitive conflict' business where they're challenging each other's ideas at their own level and there are multi-levels within the classroom…I think it's better because we're getting groups of children working collaboratively…because we're getting children to listen to other students viewpoints and commenting on those viewpoints…because we're bringing meta-cognition into class…it's about the way they learn about how each other learns, and how they can learn even more effectively…I think all those things didn't used to happen in the normal classroom."*

A Maths teacher reinforces this saying that Thinking Skills encourages children to think their own way through Maths problems and gives them the safety of knowing there are no wrong answers.

This is in conflict with the National Curriculum, he says, but there is a contradiction in the NC. It is required to be teacher-led – but the nature of Maths is an enquiry process. Thinking Skills helps that because it provides kids with a process of exploration of 'wrong' answers.

But Thinking Skills is not always seen to be the primary focus of the Consortium. Thinking Skills, says a HE co-ordinator changing the nuance, *"is the area, but the focus is about improving something in your classroom"*. Thinking Skills is the "catalyst".

> *"Thinking Skills strategies help to make the processes of teaching and learning more explicit and therefore more accessible to inquiry and challenge – and thereby can lead to change and improved practice."*

Many people are committed to that curriculum focus and to the experiment with Thinking Skills. The overall aim (in keeping with the earlier reference to Stenhouse) for this person is, as one School Co-ordinator put it, *"the long-term desire to have autonomous learners"*.

Autonomous learners, however, are not necessarily learners who accept school goals that, for others in the Consortium, are paramount. Here, the struggle to maintain and enhance the position of the school in competition with other schools is the immediate challenge, and one route to that is seen to be success at winning additional resources, carrying projects through to completion and improving published levels of pupil achievement. In the fourth school described above, for example, Consortium participants had to show that the project was *"working"* – in the sense of having noticeable and speedy impact on achievement levels and on pupil self-esteem. It was only in the later stages of the project that the Deputy Head said that he had come to understand that this was cultural change – what the School Co-ordinator described as *"a long slow project"*. In fact, the project extended beyond this school's boundaries, for her, in that it had to co-opt the middle school feeder into that cultural shift. This was *"perhaps a 7-year project"*.

Nor has the sponsor's aim for the project been stable – as the HE co-ordinators put it, *"it couldn't be as it was about gaining understanding of how partnerships might evolve"*. Certainly there has been interest in the curriculum focus of the project and approval of the high profile some Consortium schools received from the Secretary of State's interest in it. And, too, there has been extensive support for the methodological thrust of the Consortium in developing approaches to collegial observation and triangulation with pupils and teachers. More recently, the 'standards agenda' has asserted itself, however, as the HE team note. *"My perception,"* says one, *"is that the focus on hard data and pupil outcomes has become more of a priority from the TTA's end as time's gone on. That's my feeling – that it wasn't such a priority at the beginning."* Another confirms this - *"It was emphasised at the last visitation."*

The Consortium brings enhanced opportunity structures

At another level the Consortium is about creating opportunity structures for individuals. In the university, as we have seen, it has provided a different kind of research space in the university and allowed the HE co-ordinators to legitimate this collaborative partnership approaches to applied research – although it has also carried a cost:

> *"If we'd have followed a more conventional research route, we'd have written a lot more. It's very time-consuming…We were getting grants and we were writing, but then we got this project and it's stopped a lot of our writing, because it takes longer – you can't just go and – hand out the question and write about the findings. You're involved in a much more complex analysis. In a partnership you need to spend a lot of time*

> *identifying shared interests, agreeing a focus, methods and developing a shared understanding. You can't decide to do 'X' using 'Y' methods and you must always reflect and negotiate with partners…"*

There are teachers who have enrolled on award-bearing courses and who have received extensive training and professional development (particularly through the coaching programme). Partly as a result of strengthened partnership arrangements one school, for example, secured 9 *Best Practice Scholarships* and the Consortium has teachers sitting on the National Teachers Panel at the TTA. School co-ordinators have been promoted in schools. One teacher who had previously moved to a non-Consortium school came to the university to be employed as part-time Consortium Research Assistant maintaining contacts with schools. Teachers have presented at national and international conferences and have frequently liased with LEAs to join dissemination events, and there have been many publishing opportunities for teachers. Many teachers have been able to use the project to create a research 'site' and identity alongside their teaching ones.

The Consortium has, too, enhanced opportunity structures for participating schools which have been bidding for various DfEE initiatives – Technology College status, Beacon School status and various other 'centres of excellence' initiatives. For some Heads in those schools the Consortium has allowed them to support within-school initiatives.

> *"We have put a section in the School Improvement Plan itself – one of our priorities is teaching and learning styles and this is one major vehicle for developing staff…but it does sit alongside CASE and CAME…We are bringing it coherently under our performance management umbrella…"*

Inside some schools, too, the Consortium has had an impact on *"the way people talk to each other"*, as one Head put it, *"this has never happened before"*. Besides the research and development activities, schools hold twilight sessions on Thinking Skills, one school developed 'Thinking Lunches' (bag-lunches to discuss Thinking Skills) and their own residential conferences, what one LEA officer talked of *"small but significant events"*. This Head talks of his school as *"much more of a learning organisation…staff are willing to try things out, to share what has gone well"*.

The evaluation

This account is based on a series of visits by three members of the evaluation team to Newcastle. These comprised 12 person-days fieldwork in four Consortium schools, at the university and in one LEA. In addition there have been a number of interviews with teachers by telephone and at observations of a cross-Initiative residential event and at a day conference. Those interviewed included teachers, school managers, a small group of pupils, LEA personnel and university research associates. This profile has been negotiated with and substantially amended by members of the Consortium.

This is not presented as a comprehensive case study of the NE Consortium. It is a profile, written to put alongside profiles of the other three Consortia in this Initiative so as to demonstrate diversity of approach across the programme. The purpose of this account is not to portray or represent either the lived experience of this Consortium or the range of meanings the Consortium represents for its members. The evaluation could not easily accomplish this since (a) the Consortium is diverse and complex in its approach and aims, and (b) the evaluation started half way through the life of the Consortium and had no direct access to its more formative periods.

The evaluation explained at its commencement that there was no intention to make summative judgements as to the success or otherwise of individual Consortia – rather, our primary task is to review the operation and impact of the Initiative as a whole. Our sampling has been guided by the need to explain the Initiative, not its component Consortia. Hence, the evaluation has not been able and nor has it sought to generate an independent database in the North East against which to test some of the claims of this Consortium. For example, without extensive observation-based fieldwork in each school the evaluation would not be in a position to make judgements as to the impact and embededness of Thinking Skills or action research across schools. We were, in any event, asked by Consortium co-ordinators not to engage in such a judgement since this was one of the responsibilities of the Consortium in accounting for its own work.

This is not to say that there will be no judgements implicit or explicit in this profile – though the account has been negotiated with Consortium members and stands, at the least, as a plausible representation. But it is not intended to be a comprehensive account of the NE Consortium and does not claim to portray the experience of its members – rather it is a basis for comparison with other such profiles. Hence, transcripts of conversations with teachers, heads, HEI people and others as well as Consortium documents and the draft Final Report have been lightly sampled to try and capture some of the characteristics of the Consortium as a key element of the programme as a whole and some of the texture of its operation. Sampling was designed to allow for capturing aspects of this Consortium given in this account – its rationale, structure and something of its operation - points of comparison with other Consortia. There is, as it were, a theory of significance that guides such sampling and this informs the evaluation team as it generates profiles of each of the Consortia. For example, the four profiles taken together will highlight comparison and contrast in terms of a pre-existing ‘state of readiness’ for the Consortium; the nature of the partnerships; how research serves the substantive concerns and activities of the Consortium; and specific research issues such as (in this profile) that of validity.