Creating and Sustaining Effective Professional Learning Communities

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GTC
General Teaching Council
for England

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National College for
School Leadership

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Acknowledgments

A project of this kind depends upon a great deal of help and cooperation.

We wish to express our gratitude to the respondents to the survey questionnaires and also to the members of the Steering Group for their constructive comments and support.

Our particular thanks go to the headteachers, teachers, support staff and pupils of the 16 case study schools.

Finally, we are grateful to our sponsors, the DfES, the GTCe and the NCSL, for funding this project.

We hope that all of these individuals and groups find our report to be of practical value.

The EPLC Project Team

The team consisted of five co-directors - Ray Bolam**, Agnes McMahon*, Louise Stoll***, Sally Thomas* and Mike Wallace**; three researchers - Angela Greenwood*, Kate Hawkey** and Malcolm Ingram**; two research assistants - Adele Atkinson* and Michèle Smith*; two Research Associates - Tony Bailey and David Crandall; and the Project Secretary - Kate King*.
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EXECUTIVE REPORT

This report summarises the main finding from the *Creating and Sustaining Effective Professional Learning Communities (EPLC)* project, funded by the Department for Education and Skills (DfES), the General Teaching Council for England (GTCe) and the National College for School Leadership (NCSL) from January 2002 to October 2004.

MAIN CONCLUSIONS

1. The idea of a professional learning community (PLC) is one well worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning.

2. An effective professional learning community (EPLC) fully exhibits eight key characteristics: shared values and vision; collective responsibility for pupils' learning; collaboration focused on learning; individual and collective professional learning; reflective professional enquiry; openness, networks and partnerships; inclusive membership; mutual trust, respect and support.

3. Pupil learning was the foremost concern of people working in PLCs and the more developed a PLC appeared to be, the more positive was the association with two key measures of effectiveness - pupil achievement and professional learning.

4. PLCs are created, managed and sustained through four key operational processes: optimising resources and structures; promoting individual and collective learning; explicit promotion and sustaining of an EPLC; and leadership and management. Furthermore, the extent to which these four processes are carried out effectively is a third measure of overall PLC effectiveness.

5. Staff in more developed PLCs adopt a range of innovative practices to deal with the inhibiting and facilitating factors in their particular contexts. Many of these practices are potentially useful for other schools.

6. *Investors in People* is a useful tool and could profitably be used alongside other approaches in the early stages of developing a more effective PLC.

7. PLCs change over time in ways and in particular aspects that may or may not be planned. The idea of three stages of development – starter, developer and mature – provides some useful insights into these changes and ways of responding to them but needs modifying to be of real help for practitioners and researchers.

8. Although PLCs have common characteristics and adopt similar processes, the practical implications for developing a PLC can only be understood and worked out in the specific conditions – like phase, size and location – of particular contexts and settings.

9. The project's working definition offers a practical basis for staff in schools wishing to promote an effective PLC. In so doing, they should take account of the issues associated with the components of that definition, as discussed in the main report and, in particular, relate the definition to their own context.

10. Staff in schools wishing to promote and sustain an EPLC should monitor and evaluate the development of their characteristics and the implementation of their processes over time, and take appropriate follow-up action to maximise their effectiveness.

11. The *Provisional Model* presented in the full report summarises findings from this study and should prove productive in further illuminating issues associated with EPLCs for practitioners and researchers.

12. Schools wishing to promote a PLC might usefully adapt the *Development Profile,* presented in the full report, for use as a practical self-audit tool, possibly within the framework of their Ofsted self-evaluation strategy.

13. Serious consideration should be given to the possibility of commissioning and carrying out further research and development work along the lines outlined in the full report.

14. Given our substantive general conclusion that the idea of a PLC is one well worth adopting in order to promote school and system wide capacity building for sustainable improvement and pupil learning, we suggest that schools, external support agencies and national policy makers should take forward the findings and conclusions contained in this report.

1. INTRODUCTION AND BACKGROUND

We were asked to find out how feasible and useful the idea of a PLC was and what practical lessons could be learned from experience here and elsewhere. Accordingly, over the 34-month period of the project, we carried out four main research activities:
- a literature review;
- an analysis of questionnaire survey responses from 393 schools – representative of nursery, primary, secondary and special schools across England - including detailed statistical comparisons of key survey items with pupil outcome data;
- case studies in 16 school settings;
- three workshop conferences for representatives from the case study schools and the project Steering Group.

In addition, we carried out an extensive range of dissemination activities, including setting up a Project website.

Our working definition was:

An effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning.

Our overall finding was that the practitioners in the survey and case study schools generally responded positively to the idea of a PLC and, for the most part, to the working definition. Even though not many were familiar with the term, or used it in their everyday professional conversations, most appeared to find it helpful and also to understand what it conveyed. Taken together with the evidence from the survey and case studies about impact on pupil and professional learning, as summarised below, our overall, general conclusion is, therefore, that the idea of a PLC is one well worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning.

2.   WHAT ARE THE CHARACTERISTICS OF EFFECTIVE PLCS?

Our first task was to identify and convey *the characteristics of effective professional learning communities* and, implicitly, *why they are worth promoting*.

The Project findings all confirmed the existence and importance of the five PLC characteristics identified in the literature review - shared values and vision, collective responsibility for pupils' learning, reflective professional inquiry, collaboration focused on learning and group as well as individual, professional learning. In addition, three more characteristics were found to be important: inclusive membership; mutual trust, respect and support; openness, networks and partnerships.

We investigated the question *Are PLCs worth promoting?* in terms of their effectiveness. Being a PLC is clearly not an end in itself. We argued that its 'effectiveness' should be judged in relation to two main outcomes: impact on the professional learning and morale of the staff – teachers, school leaders and other adult workers – and, most importantly, impact on pupils.

The highest mean level of teacher involvement in PLC-style activities reported by survey respondents was for two items: *collective responsibility for pupil learning* and *create conditions for pupils to feel the confidence to learn.* More importantly, some survey findings demonstrated a positive, though weak, link between full expression of PLC characteristics and pupil outcomes – in particular value-added performance. The case study findings supported the conclusion that the more fully a PLC expressed the characteristics, the more they impacted positively on pupils' attendance, interest in learning and actual learning, as well as on the individual and collective professional learning, practice and morale of teaching and support staff.

It is important to recall the overall limitations of the survey, as discussed below in section 9, including the fact that the findings on impact are based on statistical correlations and thus do not in themselves confirm any causal links. Nevertheless these statistical relationships were all positive and none were negative. Similarly, the case study findings were generally positive, especially with respect to impact on staff learning.

3.   WHAT PROCESSES PROMOTE AND SUSTAIN EFFECTIVE PLCs?

Our next two, linked, tasks were to identify and convey:

- *the key enabling and inhibiting factors – at national, local, institutional, departmental/team and individual levels – which seem to be implicated in the initial creation, ongoing management and longer-term sustaining of such communities;*
- *innovative and effective practice in managing human and financial resources to create time and opportunity for professional learning and development and optimise its impact.*

In the light of the literature review and the case study findings, with some support from the survey findings, we identified four key PLC processes for promoting and sustaining an EPLC: optimising resources and structures; promoting individual and collective learning; specifically promoting and sustaining the PLC; leadership and management. Moreover, it was evident from the case studies that the effectiveness of these processes varied between schools, and over time in the same school, for example in terms of their impact on individual teaching-related practice and on leadership and management practice. So, a third dimension of effectiveness – process - was identified

A different mix of facilitating and inhibiting factors, both internal and external, was identified in each of the 16 case study schools, indicating the importance of both external and site-level contextual factors and underlining both the opportunities and the limitations of headteachers' and staffs' capacity to exercise control over factors that are often complex and dynamic. Facilitators included individual staff commitment and motivation, links with other cluster-group schools, focused cpd coordination and site facilities that helped collaborative work and professional dialogue. Inhibitors included resistance to change, staff turnover, central and local policies affecting resources and budgets and staff changes, especially at senior level. Evidence from the survey also indicated related inhibiting contextual factors at the primary level such as a high percentage of free school meals and of English as a second language.

There were many examples of innovative ideas and methods employed to make best use of human and physical resources including a competitive 'Learning leaders' scheme in a secondary school, ensuring that all staff in a nursery school had non-contact time, using regular staff meetings to promote collaborative work and professional learning in a primary school and three-weekly case conferences for all staff working with individual children in a special school.

We were specifically asked to look at *Investors in People* and did so in relation to the case study schools and at the second workshop conference, where it was found to be especially helpful in starting the process of promoting a PLC, but less helpful once schools were quite far along the process of PLC development. In summary, it was a useful, perhaps necessary, but not sufficient method for achieving a PLC.

4.   DO PLCs GO THROUGH STAGES OF DEVELOPMENT?

We hypothesised that a school might be at one of three stages as a PLC – *starter*, *developer* and *mature*. The survey respondents and the case study interviewees accepted these common-sense distinctions. In the survey, *mature* PLC respondents reported a higher, and *starter* PLCs a lower, percentage of staff involvement in key PLC activities: thus, their reports of their schools being at a particular stage were consistent with their other replies, thereby providing some support for the validity of the 'stages of development' concept. Nevertheless, when applying the stringent criteria of statistical significance, there appeared to be some exceptions

to this pattern suggesting that the concept of developmental progress may be less appropriate to some aspects of PLCs than others. From the case studies we found a loose positive association between stage of development and the expression of the eight characteristics of PLCs, especially across the nursery phase and, to a somewhat lesser extent, the primary phase. Evidence from the case studies about differential levels of impact related to the PLC's stage of development was inconclusive.

In the light of these findings, it is reasonable to suppose that PLCs in all types of English school – nursery, primary, secondary and special – are likely to exhibit the eight characteristics identified above, that they will do so to varying degrees and that their 'profile' on the eight characteristics will change over time as circumstances change in each school. However, although the face validity of the three stages of development was supported, they need to be modified if they are to be of further use to practitioners and researchers, as argued below.

5.   WHAT DO PLCs LOOK LIKE IN DIFFERENT SETTINGS?

A key part of the three tasks was to find out what these characteristics and processes *look like in different kinds of school setting*. Context and setting are crucial to any understanding of how these characteristics and processes play out in practice. For example, the survey found that primary schools were generally more likely than secondary schools to exhibit the eight characteristics to a greater extent, but not in all cases. These differences between primary and secondary schools were, broadly, confirmed in the case studies, which also indicated important similarities between nursery and special schools. For instance, nursery, primary and special support staff typically worked most closely with teachers whereas the demarcation between teaching and support staff was most apparent in secondary schools. In the latter, the departmental structure often produced small PLCs, with their own distinctive ways of working together, although one-teacher departments in smaller secondary schools faced quite different issues. Location was also sometimes crucial, for example staff in relatively remote schools found it difficult to share experience beyond their own school.

6.   DEFINITIONS AND PRINCIPLES OF EFFECTIVE PLCs

Our fourth task was to:
> generate models which illuminate the principles of effective professional learning communities and assess the generalisability and transferability of such models.

We began the study with a working definition, presented above, that found broad acceptance with practitioners. In the light of our findings, we now summarise our current thinking on the somewhat problematic issues embedded in the working definition.

The term 'professional' was rarely explicitly challenged in the case study interviews but it figured prominently, and often controversially, in discussions at various dissemination events about the related issue of PLC *membership*. Thus, one key issue was to do with who was, or should be, thought of as a member of a *professional* community in a school. The literature on PLCs, most of it American, tended to assume that only teachers were members. This was always unlikely to be true in England, especially in nursery and special schools where, our data confirmed, teaching assistants and support staff of all kinds were, more often than not, integral to teaching and learning. Moreover, '*Investors in People'*, quite well established in our sample and more broadly across the country's schools, also included support staff in its

definitions and standards. Finally, the introduction of the Workforce Agreement made it essential that support staff be considered directly as potential PLC members and this continues to be the case.

This immediately raised the question: who counts as a *professional* and by what criteria? We take it as axiomatic, first, that teachers and headteachers are trained, qualified, paid and held accountable for the standards of teaching and learning in a school and, second, that support staff are entirely legitimate members of a professional learning community. We were advised on several occasions that it was more productive to focus on people 'being *professional*' rather than 'being *a* professional'. We agree and, therefore, suggest a way forward that depends on the adoption of professional standards as the basis for deciding what counts as professional behaviour by any and all members of a PLC.

Teachers and headteachers now have professional standards in the form of the GTCe *Code of Professional Values and Practice for Teachers* and the NCSL's *National Standards for Headteachers*. We suggest that these two sets of standards should be used to inform the work of a school staff seeing themselves as a *professional* learning community. We also suggest that appropriate professional standards be developed for support staff and that, when this is done, each school staff should ensure they are mutually consistent.

Our findings lead us to conclude that the view of professional *learning* adopted in our research rationale is broadly satisfactory. In summary, we assumed that it was focused either directly on promoting effective pupil learning or indirectly on creating conditions to enable effective pupil learning to be promoted. Such learning might arise from both intended and incidental opportunities and might be individual or collective, whether involving a group within the PLC or all members. We conceived learning from such opportunities that improved practice as entailing transfer of learning plus additional learning in and on the job in order to integrate whatever had been learned into skilful performance in the job setting. This would normally require support, for example through coaching or observation with constructive feedback on practice. Our research found the transfer of practice to be one of the least developed processes of PLCs.

When the case study interviewees spoke of their school, department or group as a *community*, they were usually referring, implicitly or explicitly, to such key characteristics as *inclusiveness*, *shared values*, *collective responsibility for pupil learning*, *collaboration focused on learning* and, most of all, a sense of experiencing *mutual trust, respect and support*. We suggest that this is a useful way of summarising the community dimension of a PLC in schools.

However, there is a further important aspect of PLC membership – namely *pupil voice* – that we only touched on in this project. It became clear as the project progressed, especially from the workshop conferences, that staff in the case study schools were, to varying extents and using a range of different methods, seeking to take account of pupils' views and opinions about their own learning and about the school more generally. This was true of all types of school, including nursery and special. Hence, we suggest that this aspect be included in future thinking and practice about the membership and operation of PLCs.

A further key component of the working definition relates to an issue that has already been discussed above – the *effectiveness* of a PLC. In summary, we suggest that a PLC's effectiveness should be judged on three criteria:
- its ultimate impact on pupil learning and social development;
- its intermediate impact on professional learning, performance and morale;

- its operational performance as a PLC.

Our findings on *sustaining a PLC* indicated that this was relatively weak in most of the case study schools, although the limited time frame of the project made this more difficult to explore. In part, the relative weakness was because a number of the issues involved are often intractable and beyond the control, or even influence, of headteachers and senior staff. The most dramatic examples were the closure of one school, due to falling rolls, and the departure of the head in another, but there were several more typical occurrences, notably those arising from key staff changes, especially at senior level. Succession planning and management are familiar and notoriously difficult tasks, especially to those responsible for appointing headteachers. We found in our case study schools that, on the whole, neither governors nor LEAs were much involved in directly supporting PLCs as such, so it is unclear how far those appointing a new head would take this aspect of the school's work and culture into account. It seems unlikely that they would, for the simple reason that the idea of a PLC, still less the terminology, is not yet familiar or widely used.

This also had consequences for new staff coming in as replacements for key staff. Of course, there is always a balance to be struck between maximising the value of 'new blood' and ensuring that successful practice is maintained. There were some very good examples of induction arrangements that achieved this, but the overall concept of a PLC was rarely used as the rationale. Moreover, we also found that neither the impact of professional learning nor the process of PLC operation were normally monitored or evaluated and neither, therefore, was follow-up action taken to maximise their effectiveness. Clearly, the implied question here is: *How necessary is it to make explicit use of the idea of a PLC, and the terminology, and to seek a shared understanding of it in order to promote and sustain a PLC*? We suggest that it is very necessary.

In seeking to arrive at a revised or updated definition of a PLC, we were conscious of the various issues raised in this section and that each school's context and setting must be taken into account. It was in this spirit that, at our first workshop conference, an eminent American researcher in this field expressed the view that each school staff will probably need to formulate its own working definition of a PLC. We agree and, accordingly, we suggest that the working definition should stand as a useful trigger for this to happen.

7. A PROVISIONAL MODEL AND A DEVELOPMENT PROFILE

Earlier models used to frame the research were based, in part, on the idea that PLCs may progress through three stages of development. Although this idea is a useful starting point, the distinctions are somewhat crude. We, therefore, suggest that a revised model, together with a development profile, both based on the eight characteristics and four processes found to be important in our research findings, might offer a useful basis for practice and research. Hence, we now propose the *Provisional Model of a School Operating as an Effective Professional Learning Community* as represented in Diagram 6.1 in the main report.

Each of the model's dimensions may be exhibited to a greater or lesser extent and so the third aspect of PLC effectiveness proposed above may be usefully thought of as having 12 dimensions. Hence, we also propose an extension of the model in the form of a *Development Profile* that reflects the dynamic and changing nature of a PLC. As indicated below, we suggest that such a revised model would benefit from trialling in a research and development project. In the meantime, schools may wish to adapt it for use as a self-audit tool, perhaps as

part of their self-evaluation strategy under the new Ofsted arrangements. If they do, we suggest that it would be useful to rate the effectiveness of each of the twelve dimensions on a simple but practical high/low scale, as outlined in Table 6.1 in the main report.

8.   IMPLICATIONS FOR THEORY BUILDING

A PLC may usefully be seen as a complex metaphor, one that is multi-dimensional and which needs to be 'unpacked'. The findings should, we hope, inform this 'unpacking' process and thus contribute to theory building as the basis for future research. In summary, they supported the importance of the five main characteristics identified in the initial literature review - shared values and vision, collective responsibility for pupil learning, reflective professional inquiry, collaboration and group, as well as individual, learning. They also indicated the importance of three further characteristics – inclusive membership, networks, partnerships and openness and mutual trust, respect and support – and four operational processes – leadership and management, optimising resources and structures, promoting individual and collective professional learning and promoting, and evaluating and sustaining the PLC.

Furthermore, PLCs and the ways in which they exhibit the twelve dimensions look very different in different phases of schooling and in different contexts and settings. They also change over time along these dimensions, sometimes as a result of deliberate planning and action by heads and senior staff but also in unplanned ways and as a result of factors beyond their control. Although it may be helpful initially to see this as progression through three stages – *starte*r, *developer* and *mature* – it is probably more productive to see it as a continuum made up of the twelve dimensions in the *Provisional Model* rather than as three, uni-dimensional, discrete stages. As indicated in the *Development Profile*, a PLC may progress or regress on any one or more of the dimensions in a given time period. Hence, the importance of headteachers and senior staff both of having a coherent and explicit concept of a PLC, of deliberately sharing their understanding with colleagues in order to seek their interpretations of its implications, and of monitoring and evaluating its progress on each dimension so that appropriate action can be taken. Of course, a school staff that, at a particular point in time, locate their school at the high end of all or most of the 12 dimensions might find it helpful to see itself as having a more *mature* profile at that time, while one that rates itself at the low end could see itself as having an *early starter* profile.

The idea of a PLC undoubtedly overlaps with the earlier concept of a 'learning organisation' and with work in the school improvement tradition. We suggest that the concept of 'community' offers the possibility of new insights especially in conjunction with the associated characteristics of inclusive membership, mutual trust, respect and support, and the particular emphasis on the collective learning of professionals within the community. Certainly this is worthy of further investigation. We also suggest that the concept of sustainability illuminates current discussions about capacity building and school improvement more generally. The rapid nature of change facing schools indicates that it is unhelpful to think in terms of specific changes being institutionalised: rather, continuous and sustainable professional learning and improvement, sharply directed at pupils' learning, are required.

Unsurprisingly, relatively few of our case study respondents used the term 'professional learning community' explicitly to inform their practice in schools. Yet most of them, especially those in senior positions, embraced it readily as a term that captured the essence of what they were trying to do. More importantly, hardly any used the idea of a PLC as a basis

for staff discussion or to monitor and evaluate progress in the school. Our suggestion is that they should and that this is worthy of further investigation in the context of sustaining an EPLC.

9. IMPLICATIONS FOR FUTURE RESEARCH AND DEVELOPMENT

This was an exploratory study of a relatively sophisticated and complex approach to capacity building and school improvement. Its limitations will be apparent. One survey questionnaire, designed to be completed by the headteacher or cpd coordinator, in consultation with other staff, was sent to each school. Although the response rate was low, the responses were judged to be representative. Clearly, in any future study, it would be helpful to collect survey data from other staff and, ideally, to increase the response rate (though the latter would continue to be problematic). The case study data were collected in 16 schools of various types. Although they were selected with great care, they are not, of course, representative of all schools in England. The case study headteachers undoubtedly became more aware of the nature of an EPLC from our feedback, especially via the three Workshop Conferences but in our judgement, there was insufficient time for this to make a significant difference to their schools and so the Hawthorn effect can be discounted. Overall, the findings from this study should be regarded as indicative rather than conclusive and they certainly do not offer easy solutions or quick fixes. Nevertheless, we believe them to sufficiently robust as to represent a significant step forward in understanding the idea and potential of a PLC for schools in England and to be potentially valuable in informing future research in this field.

Some important issues about becoming and developing a school as a PLC were not fully explored in the survey (*eg* extent of mutual trust between staff, leadership at all levels). Further development of the survey instrument would need to examine these aspects and it is also possible, if this were done, that new factors would be identified that support more fully the twelve dimensions of the *Developmental Profile*. The development of a new survey instrument to provide feedback to a larger sample of schools should also be useful in this context. This would require the development of the analysis and format of feedback provided to schools. Further analysis and modelling of pupil outcomes (eg in specific academic subjects and pupil attitudes) in relation to PLC characteristics and operational processes would also be productive.

In addition, a more refined version of the *Development Profile* could usefully be the focus of a follow-up research and development project. This would be designed to build upon the research findings in order to provide practical, self-audit instruments and tools for schools wishing to promote and sustain themselves as an EPLC, using an enquiry-oriented approach. These instruments could be developed to promote the Primary and Secondary strategy approaches to CPD and school improvement and the shift to self-evaluation by Ofsted. This study could also investigate further key questions like: '*How far it is necessary for schools to have a secure starting base, for instance in terms of pupil behaviour or a critical mass of committed staff as a necessary take-off platform*?' and '*How might governors become more integrally involved in developing and sustaining a PLC*?' At the third workshop conference it was suggested that sets of practical 'Source Materials' should be developed, providing structure but not telling people 'How to do it'. One possibility would be to explore the potential of a simulation game. Such materials could be based on the rich data from the case studies and generate key professional discussion points for schools wishing to use the *Development Profile* to promote a PLC.

As also mentioned earlier, the timeframe for the entire project was 34 months, and the case study period took place over an 18-month period. While it was possible to get a retrospective sense from *mature* PLCs about how they had developed over time (as illustrated in Chapter 4 of the main report), we could not explore in depth their continued development or fluctuations. It would, therefore, be valuable to be able to return to the same schools in a few years to see what has happened to them in the interim period and whether the dimensions that seemed to be developing are still doing so.

10. CONCLUSION: MESSAGES FOR KEY STAKEHOLDERS

At the outset of the Project, the idea of a PLC was relatively new in this country; it is now central to the NCSL's revised National Standards for Headteachers and the DfES' Core Principles for raising standards in teaching and learning. In many ways this was a pioneering study, at least in this country. The practical implications of a concept that has gained wide currency have been investigated for the first time on a national scale using a mix of quantitative and qualitative methods. It is, by its very nature, an exploratory study but we believe the findings have significant messages for policy-makers, practitioners and researchers. The main message was contained in our first conclusion: that the idea of a PLC is one well worth pursuing as a means of promoting school and system wide capacity building for sustainable improvement and pupil learning.

The key messages for schools will by now be clear. Essentially we suggest that all actual and potential members of a PLC – headteachers, teachers, heads of department, LSAs, other support staff and governors – should seriously consider adopting the PLC approach and the methodology proposed above. The complementary message for external support agencies, LEA staff, initial trainers, cpd trainers and consultants, and those involved in leadership development is that they, too, should consider the implications of these findings for their own work in supporting people in schools as they seek to promote and sustain a PLC. Finally, we recommend policy decision makers at national level and especially our sponsors – the DfES, NCSL and GTCe – to take forward these ideas.

Chapter 1.   Introduction

This report presents the outcomes of the *Creating and Sustaining Effective Professional Learning Communities* (EPLC)[1] project, funded by the Department for Education and Skills (DfES), the General Teaching Council for England (GTCe) and the National College for School Leadership (NCSL) from January 2002 to October 2004.

At the outset of the Project, the idea of a professional learning community (PLC) was relatively new in this country; it is now central to the NCSL's revised National Standards for Headteachers (www.ncsl.org.uk) and the DfES' Core Principles for raising standards in teaching and learning (www.dfes-uk.co.uk). Of course, the importance of professional development for raising standards through school improvement and through individual teacher development has been widely accepted for some time. Indeed, as the literature review in Chapter 2 demonstrates, the progress of educational reform appears to depend in crucial ways on teachers' capacity, both individually and collectively, to enhance pupils' learning. The rationale for the broader concept of a professional learning community is that, when teachers and other school staff work together collaboratively with a clear focus on learning, the school's overall capacity to raise standards is enhanced. Moreover, effective professional learning communities seem more likely to generate and support sustainable improvements because they build the necessary professional skill and capacity. It was these ideas that the Project set out to investigate.

1. PROJECT AIMS

The overall purpose of the Project, as stated in the original specification, was to draw out credible, accessible and practically useful findings - for policy makers, coordinators/providers of professional development and school leaders (managers) - about schools as professional learning communities; and for teachers about the cultures, behaviours and structures that enable them to play an active role in the creation and sustenance of learning communities.

The Project's broad aims were to
   a. identify and convey:
   - the characteristics of effective professional learning communities and what these look like in different kinds of school setting;
   - the key enabling and inhibiting factors – at national, local, institutional, departmental/team and individual levels– which seem to be implicated in the initial creation, ongoing management and longer-term sustaining of such communities;
   - innovative and effective practices in managing human and financial resources to create time and opportunity for professional learning and development and optimise its impact;
   b. generate models which illuminate the principles of effective professional learning communities and assess the generalisability and transferability of such models;
   c. produce and disseminate findings sufficiently compelling to practitioners to mobilise further their practice around effective professional learning communities;
   d. inform leadership preparation and development programmes, and initial, induction and CPD programmes, including those for Heads of Department and Special Educational Needs Coordinators (SENCos).

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[1] A list of abbreviations used in this report is included in the Appendices.

In consultation with the Steering Group, the following working definition was adopted:

> *An effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning.*

In accordance with the original specification, we also hypothesised that schools might be at one of three stages of development as a PLC: starter, developer or mature. This definition and the hypothetical stages were investigated in the project.

The term Effective Professional Learning Community (EPLC) was originally chosen as the project title and was therefore used for our early dissemination materials and the Survey Questionnaire. Hence, Chapter 3 uses the term EPLC in this sense. However, when we came to carry out the case studies, our deepening understanding led us to prefer the term professional learning community (PLC) because, as explained in Chapter 4 (section 3d), we assumed that all schools exhibit some PLC characteristics. From then on we tried to use the term EPLC only when specifically referring to or discussing aspects of effectiveness in a PLC.

2.   METHODOLOGY

The aims were explored through four sets of research methods - a literature review, a questionnaire survey, case studies and workshop conferences.

a. The Literature Review and Draft Framework

To prepare the Project bid, an initial literature search led to the development of a draft framework of characteristics and outcome indicators, which served as a preliminary model for organising our thinking about the broad factors likely to influence the creation, development and sustenance of an effective professional learning community. This draft framework was further informed by the ongoing literature review and developed in consultation with the Steering Group and groups of practitioners as part of the process of revising and finalising the research design. The revised framework (Appendix 1.1) was used as the basis for the research design.

The broad aims of the literature review were to:
- identify models and characteristics of effective professional learning communities;
- take account of different disciplinary perspectives for understanding professional development and learning; and
- take account of experience and models in other professions.

Five broad questions were used to structure the review:
- What are professional learning communities and how has the concept developed?
- What makes professional learning communities effective?
- What processes do professional learning communities use, and how do they contribute to the development of an effective professional learning community?
- What other factors help or hinder the creation and development of effective professional learning communities?
- Are professional learning communities sustainable?

Our rationale for answering these five broad questions, and for achieving the overall purposes of the project, had two dimensions:

i.   in making judgements about 'rigour,' 'robustness' and 'reliability', we tried to use accepted research criteria, indicating the strengths and limitations of the literature as appropriate;

ii.   in making decisions about the research framework and the research instruments we used informed professional judgements based on the best available evidence, bearing in mind its strengths and limitations.

The resultant summary literature review (Stoll et al, 2003) suggested that PLCs are characterised by:
- shared values and vision;
- collective responsibility;
- reflective professional inquiry;
- collaboration;
- group, as well as individual, learning.

These findings informed our research instruments and procedures in the questionnaire survey and case studies.

b. The Questionnaire Survey

The questionnaire was designed by the project team in consultation with the Steering Group, international colleagues and a number of teacher focus groups and was then piloted with a sample of schools. It was revised in the light of feedback obtained at different stages throughout this process.

The revised questionnaire had three parts:
- part one contained items designed to gather opinion about professional learning in the school;
- part two explored perceptions of the features of a PLC in a school and the facilitating and inhibiting factors for such communities;
- part three investigated factual items about the range and extent of professional development activities in the school.

The final version of the questionnaire was administered to two samples:
- 800 nursery, primary, secondary and special schools (one questionnaire per school) in the summer term 2002;
- 1500 primary and secondary schools in January 2003.

The questionnaire was administered to two samples because the response rate for the first sample was too low to provide sufficient data for statistical analysis. Usable replies were finally received from 393 schools. This final response rate of 17% was disappointingly low but, nevertheless, was one judged to be representative of nursery, primary, secondary and special schools across England. Details are contained in chapter 3 and Appendix 3.2.

Data analysis focused on three key areas/tasks:
- basic descriptive data on the characteristics of professional learning communities;
- factor analysis techniques to identify and examine key factors related to the processes of developing PLCs;
- comparisons of key PLC indicators with selected pupil and teacher outcome data using multilevel analysis.

c. Case studies

The survey provided some very rich data but these were snapshots of perceptions at a particular point. These data were supplemented by case studies conducted in 16 school sites. Our target was to identify 16 case study sites in the categories 'early starter', 'developer', 'mature'.

As described in Chapter 4, the survey returns from the first sample were used as the starting point for selection. We prioritised those returns where the respondent had indicated willingness for the school to be included as a case study site. We also checked that the responses to individual items in these survey returns were consistent with the respondent's identification of the school as being at a particular stage of development as a PLC. The main criteria for selection were:

     a. school type: nursery, primary (ie elementary), secondary, special

     b. stage of development as a PLC: 'starter', 'developer', 'mature'

We also sought to ensure that the 16 sites selected would, between them, display diversity according to the additional criteria specified in Chapter 4.

d. Workshop conferences

An integral part of the project was a series of three, one-day, residential, workshop conferences for representatives from the 16 case study schools and the Project Steering Group. These aimed to supplement site data collection, review emerging case study findings and promote systematic sharing of practical experience about PLCs. They each lasted 24 hours and took place in July 2003 (Bristol), November 2003 (Birmingham) and July 2004 (Bristol). These conferences provided invaluable opportunities for enhancing the research and for strengthening the credibility of the findings in the eyes of practitioners and policy makers. For example, the concluding discussion in the November workshop reviewed the findings so far on the characteristics of a PLC. The representatives from the participating schools and Steering Group suggested important additional characteristics that were investigated in subsequent case study visits and are reflected in the findings

3.   OUTLINE OF THE REPORT

Following this Introduction, the report is presented in five substantive chapters. Chapter 2 contains the literature review while Chapters 3 and 4 present, respectively, the survey and the case study findings. Chapter 5 summarises and synthesises the overall findings and Chapter 6 presents the study's main conclusions and implications. The report is intended to be self-standing so essential tables and research instruments are included in the Appendices. More detailed tables and case study findings, together with a summary of the three workshops and their outcomes, can be seen at the project web site: www.eplc.info.

Chapter 2.   The Literature Review

1.   INTRODUCTION

As stated in Chapter 1, this literature review is structured around five broad questions:

1. What are professional learning communities?
2. What makes professional learning communities effective?
3. What processes are used to create and develop an effective professional learning community?
4. What other factors help or hinder the creation and development of effective professional learning communities?
5. Are effective professional learning communities sustainable?

In establishing the scope of the review, several considerations were relevant. First, since literature specifically focused on PLCs has largely been published since about 1990, this was our starting point for that aspect of the review. However, we also had to make judgements about which key antecedent ideas had contributed to the development of the concept and practice of PLCs: hence, earlier studies are referred to as appropriate. Second, what appears here is a final, updated review. It should be noted that the most recent references did not appear in the initial review and, therefore, did not shape the early data collection instruments. Furthermore, as new understandings about professional learning communities have emerged in the last couple of years, these areas have also been elaborated in more detail than in the initial review completed in March 2002. Third, until the last few years, most of the directly relevant research had taken place in North America, and this is reflected in the studies reviewed here. However, once again, studies from other countries are included as we judged appropriate. Fourth, it should also be noted that the literature examined was of different types. Some was based on careful empirical research that aimed to understand PLCs, often also trying to develop knowledge that could subsequently be applied to improve practice and policy (Wallace and Poulson, 2003; Bolam, 1999). Some, however, either proposed theory about professional learning communities or provided recommendations for improving practice with limited evidence to back these up. Accordingly, we have tried to use accepted research criteria in making judgements about 'rigour,' 'robustness' and 'reliability', indicating the strengths and limitations of the literature as appropriate.

2.   WHAT ARE PROFESSIONAL LEARNING COMMUNITIES?

In this section, we examine what the literature has to say about the term professional learning community, then look at how the concept has developed and 'unpack' the different words.

a. Defining 'professional learning community'

There is no universal definition of a PLC. 'Professional learning community' may have shades of interpretation in different contexts, but there appears to be broad international consensus that it suggests a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way (Toole and Lewis, 2002); operating as a collective enterprise (King and Newmann, 2001). Summarising the literature, Hord (1997, p1) blended process and anticipated outcomes in defining a *'professional community of learners'* (Astuto et al, 1993) as one:

. . . in which the teachers in a school and its administrators continuously seek and share learning, and act on their learning. The goal of their actions is to enhance their effectiveness as professionals for the students' benefit; thus, this arrangement may also be termed communities of continuous inquiry and improvement.

The notion, therefore, draws attention to the potential for a range of people, based inside and outside a school, to mutually enhance each other's and pupils' learning as well as school development.

b. How the concept has developed

The concept of professional learning community seems to have emerged from a variety of sources. At one level, it is connected with notions of enquiry, reflection and self-evaluating schools. In this respect the idea of an effective professional learning community is not new, given that certain key features were evident in the work of education writers in the early part of the last century. For example John Dewey was committed to the view that:

…educational practices provide the data, the subject matter, which forms the problems of inquiry.(Dewey, 1929)

A generation or so ago, Stenhouse (1975) argued that teachers ought to be school and classroom researchers and play an active part in the curriculum development process. Schön (1983) was influential in advocating the notion of the 'reflective practitioner'. From the school-based curriculum development movement of the 1970s, there emerged a series of projects and activities on the 'thinking school', the 'problem-solving school' (Bolam, 1977) and, perhaps most notably, the 'Creative School' (CERI, 1978). Later, in the 1980s came the shift to the self-reviewing or self-evaluating school (McMahon et al, 1984).

The actual term 'professional learning community' appears to be one that has emerged from those working within the profession and those supporting schools, for example, in a research review for practitioners by Hord (1997). Most references to 'learning community' are related to learning through community service, ICT, HE and other community learning. 'Professional community' by contrast, is a body of research starting in the 1980s largely concerned with schools and departments as mediating contexts for teaching (Talbert et al, 1993; Kruse et al, 1995):

. . .teachers' responses to today's students and notions of good teaching practice are heavily mediated by the character of the professional communities in which they work . . .schools differed strikingly from one another in the strength of their professional communities – reporting clear differences, even within the same districts, in levels of collegiality, faculty innovativeness, and learning opportunities as perceived by teachers (McLaughlin and Talbert, 1993, p.8).

In developing their framework for professional community, Louis et al (1995, p.4) explained that they used the term:

. . . to emphasize our belief that unless teachers are provided with more supporting and engaging work environments, they cannot be expected to concentrate on increasing their abilities to reach and teach today's students more effectively.

Seashore and colleagues (2003, p.3) elaborate:

By using the term professional learning community we signify our interest not only in discrete acts of teacher sharing, but in the establishment of a school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically

examining practice to improve student outcomes. . . . The hypothesis is that what teachers do together outside of the classroom can be as important as what they do inside in affecting school restructuring, teachers' professional development, and student learning.

c. Unpacking the concept

It is not insignificant that the word 'learning' appears between 'professional' and 'communities'. For example, while her main focus was on teaching and its impact on student outcomes in Tennessee elementary schools, Rosenholtz (1989) distinguished between 'learning enriched' and 'learning impoverished' schools. As McLaughlin and Talbert (2001) point out, not all strong professional communities have an orientation to practice that is conducive to change or even concerned with improvement, and Little (1999) distinguished between schools with strong teacher communities in which the professional culture was either that of 'traditional community' (where work was co-ordinated to reinforce traditions) or 'teacher learning community' (where teachers collaborated to reinvent practice and share professional growth).

At the heart of the concept, however, is the notion of community. The focus is not just on individual teachers' professional learning but of professional learning within a community context – a community of learners, and the notion of collective learning. Westheimer (1999, p.75) highlighted five features most commonly identified by contemporary theorists exploring community: shared beliefs and understandings; interaction and participation; interdependence; concern for individual and minority views ("*Members of a community, while sharing interests and a commitment to one another, don't always agree*"); and meaningful relationships. Central to the notion of school community is an ethic of interpersonal caring that permeates the life of teachers, students and school leaders (Louis, Kruse and associates, 1995; Hargreaves with Giles, 2003).

The community focus emphasises mutually supportive relationships and developing shared norms and values whereas the focus in the literature about professionals and professionalism is towards the acquisition of knowledge and skills, orientation to clients and professional autonomy. This can lead to tensions not least in matters concerned with the regulation of teacher behaviour (Louis, Kruse and associates, 1995; McMahon, 2001) and the operation of any performance-related pay systems. In a North American context, Fullan (2001) concluded that effective schools had established professionally collaborative cultures and argued that attention should shift from focusing on individuals (eg. merit pay, career ladders etc) to developing schools as professional learning communities.

Further queries are raised about the concept. How inclusive is the community? Should it include all staff in the school or just teaching staff? Huffman (2001) suggested that more mature professional learning communities involve all their stakeholders in building vision, but those primarily involved are those in school. Much of the literature considers only teachers (including school leaders) to be members of *professional* learning communities. For many schools, however, especially those in certain contexts and those with younger children or large numbers of pupils with special needs, the role of other staff employed by the school can be equally critical. With a new workforce agreement between the English Government and all but one of the teaching unions (ATL et al, 2004), and a national emphasis on remodelling working patterns and deployment of staffing (NRT, 2003) it has become increasingly important to understand the contributions of the different members of professional learning communities.

The organisation of many schools also makes it likely that professional learning communities may be operating at a number of different levels. For example, McLaughlin and Talbert (2001) found strong and weak departmental teacher learning communities in their study of 16 high schools, but also found school-wide learning communities in three of the schools.

3. WHAT MAKES PROFESSIONAL LEARNING COMMUNITIES EFFECTIVE?

In this section we describe five characteristics of professional learning communities highlighted in the literature, and question whether professional learning communities go through different growth stages. Finally, we look at the impact of professional learning communities. It should be noted that many others researching and writing about the characteristics of professional learning communities (PLCs) from whom we derived our characteristics list were implicitly at least assuming that if the characteristics were present, these communities were 'effective', for example, by being "much closer to exemplary PLC practices" (Cowan et al, 2004).

a. What are the characteristics of professional learning communities?

Professional learning communities, as described in the literature, appear to share five key characteristics or features:

Shared values and vision. Having a shared vision and sense of purpose has been found to be centrally important (Andrews and Lewis, 2004). In particular, there is "an undeviating focus" on all students' learning (Hord, 2004) because individual autonomy is seen as potentially reducing teacher efficacy when teachers cannot count on colleagues to reinforce objectives (Newmann and Welhage, 1995; Louis, Kruse and Associates, 1995) suggest that a shared value base provides a framework for "shared, collective, ethical decision making?"

Collective responsibility. There is broad agreement in the literature that members of a professional learning community consistently take collective responsibility for student learning (King and Newmann, 2001; Leithwood and Louis, 1998; Kruse et al, 1995). It is assumed that such collective responsibility helps to sustain commitment, puts peer pressure and accountability on those who do not do their fair share, and eases isolation (Newmann and Welhage, 1995).

Reflective professional inquiry. This includes: 'reflective dialogue' (Louis et al, 1995), conversations about serious educational issues or problems involving the application of new knowledge in a sustained manner; 'deprivatisation of practice' (Louis et al, 1995) frequent examining of teachers' practice, through mutual observation and case analysis, joint planning and curriculum development; the seeking of new knowledge (Hord, 2004); tacit knowledge that is constantly converted into shared knowledge through interaction (Fullan, 2001); and applying new ideas and information to problem solving and solutions that address pupils' needs (Hord, 1997).

Collaboration. This concerns the involvement of staff in developmental activities with consequences for more than one person, and goes beyond superficial exchanges of help, support, or assistance (Louis et al, 1995) for example, joint review and feedback (Hord,

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2004). The link between collaborative activity and achievement of shared purpose is highlighted (Newmann and Welhage, 1995).

Feelings of interdependence are central to such collaboration: a goal of better teaching practices would be considered unachievable without collaboration, linking collaborative activity and achievement of shared purpose. This does not deny the existence of micro-politics, but conflicts are managed more effectively in some professional learning communities. Indeed, as Hargreaves (2003, p.163) notes:

> *Professional learning communities demand that teachers develop grown-up norms in a grown-up profession – where difference, debate and disagreement are viewed as the foundation stones of improvement.*

Group, as well as individual, learning is promoted. All teachers are learners with their colleagues (Louis et al, 1995). In Rosenholtz's (1989) 'learning enriched schools', "professional self renewal" is "a communal rather than solitary happening". Collective learning is also evident, through collective knowledge creation (Louis, 1994), whereby the school learning community interacts, engages in serious dialogue and deliberates about information and data, interpreting it communally and distributing it among them.

It is also suggested that the various characteristics are intertwined and do not operate separately (Louis et al, 1995; Hord, 2004).

b. Do professional learning communities progress through different stages over time?

School improvement and change literatures identify different phases of change (Fullan, 2001; Miles, 1998). Those studying the business world have also identified predictable and sequential patterns of stages of organisational life cycle change (Quinn and Cameron, 1983; Mulford, 1998). It is unclear, however, whether these would apply to the development and sustainability of learning communities where a key goal is continuous learning rather than the implementation of a specific change initiative. Mulford (2004) suggests that the success of organisations depends on their stage of development. Effectiveness might be considered in terms of evolution over time, such that some schools are at a very early stage of developing the characteristics of a professional learning community (early starters), others are further along the process (developers), while some are more established (mature). Dalin (Dalin with Rolff, 1993) mirrors this in his discussion of school's life cycles.

Research on senior management teams (SMTs) (Wallace and Hall, 1994) highlighted how teams perennially evolve as their members' experience of working together unfolds. The group learning curve was especially sharp when the membership changed. Mutual trust developed slowly, and was fragile and easily undermined if one or more members transgressed the norms of SMT colleagues. Similarly, it seems probable that professional learning communities are fluid, rather than fixed, entities, perennially evolving with accumulating collective experience.

Studying this level of detail of the change process professional learning communities go through is at a relatively early stage internationally, but a project in the United States has been exploring how professional learning communities progress through different phases. The researchers looked at progression from initiation to implementation to institutionalisation, as a means of reflecting the growth in schools seeking to become professional learning communities, and mapped their five characteristics against the phases. For example, for shared values and vision, during initiation they found the emphasis was on

espoused values and norms. Moving into implementation, there was a shift to focusing on students and high expectations. In the less frequent cases of institutionalisation, shared vision actually guided teaching and learning (Huffman and Hipp, 2003).

If a conception of professional learning community is adopted that allows for ineffective, starter, or cruising (Stoll and Fink, 1996) professional learning communities, then effectiveness cannot be directly created. What can be done is to create conditions that facilitate the development of effectiveness, and facilitate it from different starting points.

c. What is the impact of professional learning communities?

Impact cannot be considered separately from purpose. Professional learning communities are a means to an end: *The goal is not to 'be a professional learning community*.(Morrissey, 2000). A key purpose of professional learning communities is to enhance staff effectiveness as professionals, for the ultimate benefit of students. .

Little (2001) reports that research has steadily converged on claims that professional community is an important contributor to instructional improvement and school reform. Lewis et al (1995) found that in schools with a genuine sense of community there was an increased sense of work efficacy, in turn leading to increased classroom motivation and work satisfaction, and greater collective responsibility for student learning. In Australia, Andrews and Louis (2004) also found that where teachers developed a professional learning community, it not only enhanced the knowledge base of the group, but also had a significant impact on their work in their classrooms. Bryk and colleagues (1999), however, caution that the path between professional community and instructional improvement is not necessarily direct, because instructional improvement may be only one of many purposes of the school. They note how a high performing school with a long history of providing challenging intellectual work for its pupils, that develops into more of a professional community, might be orienting its professional interaction towards conserving existing practices rather than changing them. In contrast, in high poverty settings, like Chicago where their study took place, preserving the status quo would be "*likely to perpetuate substandard practice in many cases*" (P758). Bryk and colleagues' findings lead them to suggest that "*if professional community in fact fosters instructional change, it does so by creating an environment that supports learning through innovation and experimentation*"(p.771). In this they make links to the literature on organisational learning (Silins and Mulford, 2002). In a recent research study, Seashore and colleagues (2003), also suggest that while professional community has a role to play in changing classroom practice, its effects may be less than those suggested by some previous studies. They concluded that a possible explanation for this, put forward by Toole (2001), was that teachers' individual mental models – the "schemas" or maps they draw on to guide their professional practice – determine whether individual teachers are actually ready to change, whilst professional community has more power in determining whether such pedagogical changes will persist over time schoolwide.

Looking specifically at work-based learning and other forms of professional development, until recently there has been limited, hard research evidence about their effects on student learning (Analytical Services, 2000) with the exception of those with very specific aims (Joyce et al, 1999). There are some indications, however, that there may be a link between professional learning communities and enhanced student outcomes. A 'learning-enriched' teachers' workplace appears to be linked to better student academic progress (Rosenholtz 1989) and Louis and Marks (1998) found that in schools with positive professional communities students achieved at higher levels. This they, note, is ultimately explained by

teachers in classrooms focusing on 'authentic pedagogy' – higher quality thinking, substantive conversations, deep knowledge and connecting with the world beyond the classroom. In a study of high schools, Wiley (2001) has found that individual student achievement in maths is positively affected by an increase in the amount of learning in a school resulting from professional community, but this is only the case in schools where teachers experience above average transformational leadership. The effects are also particularly strong in disadvantaged areas. Lee and Smith (1996), in a longitudinal follow-up study of 820 US high schools and almost 9,904 teachers, found that achievement gains for eighth and tenth grade students (in maths, reading, science and social studies) were significantly higher in schools where teachers took collective responsibility for students' academic success or failure (one of the key characteristics of professional community). In the Netherlands, the researchers who carried out a study exploring the link between departmental professional community and mathematics test scores of 975 students in a sample of representative junior high and senior high schools concluded that shared goals, joint decision-making, shared responsibilities, consultation and advice were important but insufficient to improve educational practice and, consequently, student achievement (Visscher and Witziers, 2004). Rather, effects resulted when departments:

> *. . . consistently translate their shared vision and willingness to cooperate into a system of rules, agreements and goals regarding teaching and instruction, and evolve their professional activities around this by obtaining data on student performance, which in turn serves as a feedback mechanism for improving teaching and learning. This differs from a 'softer' approach stressing reflective dialogue, sharing materials, shared vision and the inner value of professional development.* (p. 798)

It has been argued, however, that: "the value of community needs to be disentangled from instrumental values of improving measurable student outcomes (eg. achievement)" . . . because: "*Community is really about the quality of day-to-day life in schools*" (Furman-Brown, 1999) . It should be noted, however, that the aggregate of extensive research in the school effectiveness tradition suggests that intermediate variables like the professional relationships between staff and extent to which they work collaboratively are significant but account for less process (Creemers, 1994). variation in effectiveness than other in-school factors directly related to the teaching and learning

4.   WHAT PROCESSES ARE USED TO CREATE AND DEVELOP PROFESSIONAL LEARNING COMMUNITIES?

Creating and developing professional learning communities appears to depend on working on a number of processes inside and outside schools. These are described under four headings: focusing on learning processes; making the best of human and social resources; managing structural resources; and interacting with and drawing on external agents. We draw not only on specific professional community literature but also that related more broadly to professional development, school improvement and the management of change (see Hopkins, 2001 and Miles, 1998 for summaries) and capacity building (Harris, 2001; King and Newmann, 2001; Stoll, 1999).

a. Focusing on learning processes

Formal professional development opportunities
A professional learning community cannot be built solely through providing professional development opportunities for staff. Nevertheless, if the community is to be intellectually vigorous then members need a solid basis of expert knowledge and skills and there needs to

be a strong emphasis on the professionalisation of teachers' work through increasing expert knowledge. The centrality of continuing professional development (CPD) to the improvement of educational performance is evident from the importance attached to it over several decades (Bolam and McMahon, 2004).

The DfEE adopted a broad definition of professional development in the White Paper on Learning and Teaching

> ". . . *any activity that increases the skills, knowledge or understanding of teachers, and their effectiveness in schools.*" (DfEE, 2001) This was elaborated further to highlight activities regarded as particularly useful:
> "*Teachers' prime concerns are their subject knowledge and pedagogical skills – they say they learn best from observing other colleagues; collective enquiry into school improvement; taking part in coaching or mentoring; high quality training on specific skill areas, with excellent teaching materials and direct support to apply learning in classrooms*".

In recent years the Government has invested considerable sums of money in teacher professional development in England and Wales. This money has been spent on a range of specific initiatives (eg. training for literacy and numeracy and ICT) as well as the Standards Fund and the five days that can be used for professional development.

The proposals for CPD outlined in this White Paper (DfEE, 2001) marked a change in focus in that there were a number of initiatives (eg. opportunities for secondments and sabbaticals, best practice research scholarships) which had specific funding for which teachers could apply. Two limitations of the previous strategy were that individual teacher development needs may have been neglected and that access to development was often very dependent on the capacity and circumstances of the particular school. Reporting on research on CPD in secondary schools McMahon (1999) concluded that provision for the majority of teachers consisted of short training courses that could do little more than raise awareness of issues; that follow up activities or coaching was very rare, although transfer and development of curriculum and instructional skills depends on ongoing peer coaching (Joyce et al, 1999); that professional education in the form of longer award bearing courses was being neglected and that the quality of school support for CPD was very variable. However, there were also many examples of teachers reporting powerful learning experiences both inside and external to the school (*eg* an opportunity to shadow a senior manager; a period of secondment for academic study). A later study of teachers' perceptions of CPD (Hustler et al, 2003) confirmed that most teachers felt that over the previous five years CPD had been driven by school development needs and national priorities and these had taken precedence over individual CPD needs. However, the research findings also revealed the importance of the school and local context for CPD. Some schools had developed good systems for professional development which influenced teachers' perceptions although orientations to CPD were more likely to be shaped by the department or group to which a teacher belonged. Factors which helped teachers to develop a positive orientation to CPD were if they had positive views about the profession, and if they could see career progression possibilities linked to CPD. The role of the school CPD coordinator was crucial here.

Work-based and incidental learning opportunities

Professional learning is widely believed to be more effective when it is based on self-development and work-based learning, an idea supported by specific theories like experiential learning (Kolb, 1984), reflective practice (Schön, 1984), process knowledge (Eraut, 1994), cognitive and problem-based professional learning (Grady et al, 1995) professional

socialisation (Hart and Weindling, 1996) and learning of skilful managerial performance and associated learning support (Wallace, 1991).

Practical tools for implementing these ideas include professional development profiles (General Teaching Council, 1993) action research (McMahon, 1995), action learning (Wallace, 1991), coaching (Joyce and Showers, 1988) mentoring and peer-assisted learning (Daresh and Playko, 1992) best practice scholarships (DfEE, 2000) professional development bursaries, sabbaticals, and individual learning accounts.

Opportunities for adult learning are plentiful in schools, either through formal programmes or courses (eg. induction programme, professional development days) or more informally through day to day work with students and peers, for example joint planning or teamwork at both group and whole-school level (*eg* problem solving and creative activities within departments, key stage and pastoral groups, strategic leadership groups, teams developing whole-school policies or leading school improvement activities). Interestingly, Nias et al (1992) reported that the teachers in their study did not consider the workplace a centre of learning for themselves although the researchers were conscious of learning taking place. One outcome of a school determining to build a professional learning community should be to underline the importance of workplace learning and reflective practice (Claxton, 1996). The national Best Practice Research Scholarships scheme is one example of learning closely linked to the workplace. The evaluators (Furlong et al, 2003) concluded that most projects were clearly linked to school, LEA and national priorities and that they were a valuable form of professional development. There was evidence that teacher scholars gained confidence in their own professional judgement and became more knowledgeable and informed in their discussion of classroom practices due to greater use of reading and systematic collection of evidence. The evaluators concluded that mentoring was vitally important to the success of the projects, in their sample the majority of mentors were from higher education institutions (HEIs), illustrating the importance of seeking support outside as well as within the school.

Self-evaluation and enquiry as a learning source
With a broader definition of professionalism, and increased accountability, data analysis and use is now an important part of teachers' jobs. Dudley (1999) highlighted the difficulties faced by teachers when they try to use data to improve their teaching. There is evidence to suggest that the use of evidence may work and that it deserves further exploration as a means of promoting both professional development and school improvement (Joyce et al, 1999; Sebba, 1997). Furthermore, the positive impact of shared good practice in teachers' use of data to inform teaching strategies has been reported by Thomas and colleagues (Thomas et al, 2000) and this issue merits further investigation.

As more data and evidence becomes available to schools, the development of 'inquiry-mindedness' in relation to analysis and use of student and other data appears to take some time (Earl and Lee, 1998). In some schools that function as learning communities, it gradually begins to: "*mature into an accepted, iterative process of data collection, analysis, reflection, and change*" (McLaughlin and Talbert, 2001).

From individual learning to collective learning: transfer of learning and creation of knowledge
Learning within professional learning communities involves active deconstruction of knowledge through reflection and analysis, and its reconstruction through action in a particular context (Mitchell and Sackney, 2000), as well as co-construction through collaborative learning with peers. Lave and Wenger (1991) and Wenger (1998) propose that

when learning in communities of practice, participants gradually absorb and are absorbed in a 'culture of practice', giving them exemplars, leading to shared meanings, a sense of belonging and increased understanding.

Little (2002) has analysed records of "*naturally-occurring interaction among teachers*" to investigate "*the enacted practices of professional community in the everyday work of the schoo*l". She proposes "*a provisional conceptual scheme to help unpack the relations among teacher community, teacher development, and the improvement of practice*". This she organises around "*three central concerns*":

1. *Representation of practice* – how the practice of the community comes to be known and shared through, for example, talk, gestures and material artefacts.

2. *Orientation of practice* – whether, teachers working collectively actually can "ratchet up" the quality of learning and teaching, and how interaction opens up or closes down teachers' opportunity to learn:

    . . . ongoing interactions both open up and close off opportunities for teacher learning and consideration of practice – in the same groups and sometimes in the same moments. Even within these groups that would reasonably be considered collaborative, innovative, and committed to improving practice, teacher learning seems both enabled and constrained by the ways that the teachers go about their work. The force of tradition and the lure of innovation seen simultaneously and complexly at play in the teachers' everyday talk. Habitual ways of thinking or acting coincide closely with moments of surprise ("aha"); the impulse to question practice resonates against the press simply to get on with it. If we are to understand more fully what distinguishes particularly robust professional communities, we may have to understand the interplay of the conventional and the creative in all of them (Little 2003, p.245).

3. *Norms of interaction* – how participation and interaction are organised and how this enables teacher learning and the reform of practice.

Teachers tinker with their practice (Hubermann, 1983). Even when there is an expectation (or hope) that they will replicate intended practices, they have a tendency to adapt them (Berman and McLaughlin, 1977) to fit their own context. The question is whether 'transfer of good/best practice' is ever appropriate or even feasible or whether, in effective professional learning communities the intention is and modus operandi should always be exchange (a commitment to reciprocity between two staff members where one is an 'originator' and the other a 'receiver') and practice creation (two individuals that "create new practices that are inspired by and energised by their dialogic encounters") (Fielding et al, 2003). In addition, what mode of transfer is most likely to ensure that mediocre practice is not shared or co-created?

What distinguishes professional learning communities is their emphasis on group or collective learning. King and Newmann (2001) highlight the link between the individual and the collective:

To be sure, high quality instruction depends upon the competence and attitudes of each individual teacher. But in addition, teachers' individual knowledge, skills and dispositions must be put to use in an organized, collective enterprise. That is, social

resources must be cultivated, and the desired vision for social resources within a school can be summarized as professional community.

The organisational learning literature offers some insights on the connections. Louis (1994) argues that what distinguishes organisational learning from individual learning is an additional step of collective knowledge creation. As the school community interacts, engages in serious dialogue and deliberates about all the information it has and data it collects, they interpret it communally and distribute it among themselves. Critical understandings of the link between individual and collective learning in relation to professional learning communities, however, appear to be more sparse, although, drawing on social learning theory, Smylie (1995) suggests that individuals and groups need access to multiple sources of learning and that creativity and innovation may be constrained if teachers only have access to others with similar ideas and experience. There are many similarities between Smylie's conditions and key principles for professional development presented by King and Newmann (2001), who argue that teacher learning is most likely to occur when:

- teachers can concentrate on instruction and student outcomes in the specific contexts in which they teach;
- teachers have sustained opportunities to study, to experiment with and to receive helpful feedback on specific innovations;
- teachers have opportunities to collaborate with professional peers, both within and outside of their schools, along with access to the expertise of researchers and programme developers.

Moore's (1998) suggestions for teacher learning opportunities, based on principles of adult learning, also include the importance of fostering participation, and working collaboratively in a climate of mutual respect. Dialogue also appears to be a key link, being seen as the process through which the gap between individual and organisational learning is bridged (Senge, 1990), although it is suggested that genuine dialogue is very difficult to achieve because it does not favour domination of certain voices (Oswick et al, 2000).

A systematic review of literature on CPD to discover evidence about sustained, collaborative CPD and its effect on teaching and learning (Cordingley et al, 2003) concluded that collaborative CPD could have a positive impact on teachers and pupils. The reported changes in teacher behaviour included: greater confidence; enhanced beliefs among teachers of their power to make a difference to pupils' learning; the development of enthusiasm for collaborative working, despite initial anxiety about classroom observation; and, a greater commitment to changing practice and willingness to try new things. The positive impact on pupils included enhanced motivation and improvements in performance. Features of CPD which were linked, in combination, to positive outcomes included: the use of external expertise linked to school-based activity; observation; feedback (usually based on observation); an emphasis on peer support rather than leadership by supervisors; scope for teacher participants to identify their own CPD focus; processes to encourage, extend and structure professional dialogue; and processes for sustaining the CPD over time to enable teachers to embed the practices in their own classroom settings.

b. Leading professional learning communities

It is difficult to see how a professional learning community could develop in a school without the active support of leadership at all levels. Leadership is therefore an important resource for professional learning communities, both in terms of headteacher/principal commitment and shared leadership (Mulford and Silins, 2003).

Headteacher/principal leadership - Leadership of professional learning communities seems to include creating a culture that is conducive to learning; ensuring learning at all levels; promoting and modelling enquiry; and, throughout, paying attention to the human side of change. On the basis of their high school study, McLaughlin and Talbert (2001, p.98) concluded:

> *For better or worse, principals set conditions for teacher community by the ways in which they manage school resources, relate to teachers and students, support or inhibit social interaction and leadership in the faculty, respond to the broader policy context, and bring resources into the school.*

Creating a learning culture - It has been argued that any attempt to improve a school that neglects school culture is 'doomed to tinkering' (Fullan, 1992) because school culture influences readiness for change. School culture's essence has been described as the deeper level of basic assumptions and beliefs shared by an organisation's members that operate unconsciously, and define the organisation's view of itself and its environment (Schein, 1985). Each school's members have a different reality of school life and the way things should be done. The nature and quality of the leadership provided by the headteacher and senior staff has a significant influence on the nature on the school culture. Schein (1985) argues that:

> *. . . there is a possibility . . . that the only thing of real importance that leaders do is to create and manage culture and that the unique talent of leaders is their ability to work with culture.*

He suggests that a culture which enhances learning: balances the interests of all stakeholders; focuses on people rather than systems; makes people believe they can change their environment; makes time for learning; takes a holistic approach to problems; encourages open communication; believes in teamwork; and has approachable leaders. Similarly, Shulman (1997, p.101) argues that the potential of teacher learning depends on:

> *. . .the processes of activity, reflection, emotion and collaboration . . . supported, legitimated, and nurtured in a community or culture that values such experiences and creates many opportunities for them to occur.*

Headteachers can only create conditions fostering commitment to the collective good; they cannot ensure it will happen. Attempts to stimulate cultural development may precipitate cultural change in unforeseen and undesired directions (Hargreaves, 1994; Wallace, 1996). A similar conclusion that organisational culture is not directly manipulable has been reached in studies of British industry (Anthony, 1994; Williams et al, 1993).

Ensuring learning at all levels means, particularly, understanding and focusing on pupil learning, promoting the continuing professional learning of individual teachers and leaders, as well as collective and organisational learning, and community learning. Indeed, there are those who argue that the central task of educational leadership is fostering, and then sustaining, effective learning in both students and adults (Law and Glover, 2000). The work of Southworth (1999) suggests that some leaders, at least, focus on learning as a pupil achievement outcome while addressing less attention to the pedagogical processes. Leaders model particular behaviours and as Louis and colleagues (1995, p.39) note: "*What leaders say and do expresses what they value . . . Principals who focus on classroom practice demonstrate through their actions that pedagogy is important. . .*". If school leaders are to facilitate the growth of a community it will be essential that they focus on promoting professional learning as fundamental to the change process. Leithwood and colleagues (1999) see this as "*creating the conditions for growth in teachers' professional knowledge*".

They argue that this is best accomplished by embedding professional development in practical activities, what they call "*situated cognition*".

Enquiry-minded leadership may be significant as a means to promote reflective enquiry. Three inter-connected modes of enquiry-minded leadership for school improvement have been distinguished (Stoll et al, 2002):
- promoting research and evaluation across the school, in departments and by individual classroom teachers;
- adopting a more systematic approach to the collection, analysis and use of data and evidence in the course of ongoing work; for example, in relation to students' examination results, value-added data and external school inspection reports;
- seeking out and using relevant and practical research, generated and produced by external researchers.

All three may be done either independently or in collaboration with external researchers or consultants. None is straightforward or simple. Chapman (1995), offering a head teacher's perspective, reported on two pieces of high quality action research conducted at a secondary school. The first, by a head of department, was well received and acted upon; the second, by a trainer, was not. He concluded that a collaborative approach is likely to be most effective and that it is the head teacher's job to create the conditions for this to take place. As yet there is still limited evidence of the direct use of research by practitioners; more often consultants and trainers act as intermediaries.

The human side of leadership – Because bringing about educational change is extremely complex and involves dealing with people who are often afraid of change, emotions are never far from the surface. The concept of emotional intelligence has been applied to leadership (Goleman et al, 2002). Empirical evidence endorses emotional intelligence as "*a legitimate part of effective leadership*" (Day et al, 2000). Morale is higher in some schools than in others. For example, in two Scottish primary schools in similarly deprived areas, teachers' reactions to a questionnaire item *Teachers like working in this school* was dramatically different (McCall et al, 2001). Given that school-specific factors have been found to be more influential on levels of primary teachers' job satisfaction, as well as their morale and motivation than are externally instigated and centrally imposed factors (Evans, 1999), it was important for this research to explore this dimension.

Distributed leadership – It has increasingly been recognised that leadership cannot be the domain of one individual or a small 'senior' group because of the increasingly complex nature of work and accomplishing workplace responsibility depending on the reciprocal actions of a number of people, not just one (Gronn, 2003). Indeed, joint action, characteristic of professional learning communities, has been described as distributed leadership (Gibb, 1958). In many professional learning communities, headteachers/principals work with teachers in joint enquiry and provide opportunities for teachers to take on a range of leadership roles related to bringing about changes in teaching and learning. Based on his findings of his Australian research into professional learning communities Crowther (2001) suggested that, within the community, pedagogic leadership works in parallel with strategic leadership as teacher leaders and administrative leaders developed new roles and relationships within the school. In her discussion of teacher leadership, Harris (2003, p.322) concluded:

> *If we are serious about building professional learning communities within and between schools then we need forms of leadership that support and nourish meaningful collaboration among teachers. This will not be achieved by clinging to*

models of leadership that, by default rather than design delimits the possibilities for teachers to lead development work in schools.

Managing and coordinating professional learning **-** Coordination of professional activities is a condition of school improvement (Hopkins et al, 1994) and requires sensitive handling in order that teachers feel that they have the discretionary autonomy they need to make instant decisions, taking account of their pupils' individuality and the unique nature of each encounter (Hopkins, 2001). Throughout the 1980s and early 1990s, the typical model of staff development was broadly consistent with the human resource management approach. In the UK, this found its most sophisticated and elaborate expression in the *Investors in People* programme for which about 20 per cent of schools have been recognised (www.iip.co.uk 2003). Latterly, there has been a significant shift in developed countries:

> *. . . from staff development for individual teachers to the creation of learning communities in which all - students, teachers, principals and support staff – are both learners and teachers* (Sparks and Hirsh, 1997, p.12).

This is so much so that, in a sample of OECD countries, professional development was accepted as being:

> *. . . central to the way principals manage schools, in at least two respects: first, as instructional leaders, principals may be expected to coordinate professional progression of their staff; second, they need to manage the learning community as a whole, using development as part of school change (*Centre for Educational Research and Innovation, 2001, p.27).

c. Developing other social resources

Creating, developing and sustaining professional learning communities is a human enterprise and the literature suggests that making effective use of human and social resources is a key dimension.

Trust and positive working relationships
Working together productively in schools depends on positive relationships and collegiality (Nias et al, 1989; Louis et al, 1995), although de Lima (2001) argues that the only imperative for the formation of a community of professionals is a deep commitment to pupils' learning, development and wellbeing. Nonetheless, a dynamic of dysfunctional relationships can have a negative effect on a school (Reynolds, 1996). Engaging in learning can be a risky business, especially so if working with one's colleagues. Teachers are unlikely to open themselves up to learning and participation in activities such as classroom observation and feedback, mentoring partnerships, discussion about pedagogical issues, curriculum innovation, unless they are confident that it will be safe to do this. Trust and respect from colleagues, therefore appears a key condition (Louis et al, 1995; Hipp and Huffman, 2003).

As Bryk et al (1999) note:

> *By far the strongest facilitator of professional community is social trust among faculty members. When teachers trust and respect each other, a powerful social resource is available for supporting collaboration, reflective dialogue, and deprivatization characteristics of professional community. On balance, we note that the dynamic relationship between professional community and social trust is likely to be mutually reinforcing.*

They continue:

As the practices of community are enacted, trust and respect should deepen. Thus, a base level of social trust may be necessary for the emergence of a professional community; as such a community of practice actually develops, the social resources of the community further expand.

Bryk and Schneider (2002) have subsequently identified four dimensions of relational trust: respect; competence; personal regard for others and integrity. They found that trust instrumentally affected students' engagement and learning because teachers' vulnerability was reduced and they were more willing to engage in public problem solving. They also found that the principal was the key person in developing relational trust, both in demonstrating it her or himself, and in the way they fostered a culture where relationships were trusted. Smylie and Hart (1999) caution, however, that when trust provides a context for predictability, stability, assurance and safety, the response may not necessarily be reflective conversation and professional learning. It might inhibit innovative activity by keeping individuals satisfied with their current situation.

Group dynamics
The assumption is made in much of the professional learning community-related literature that beliefs, values and norms may become universally shared, rendering the organisational culture unitary. Alternative conceptions give greater credence to inherent conflict between subcultures (the 'differentiationist' perspective) and to ambiguity: *"...relationships are complex, containing elements of contradiction and confusion...consensus is not organisation-wide nor is it specific to a given subculture. Instead consensus is transient and issue-specific"* (the 'fragmentation' perspective). Both the 'differentiationist' and fragmentation perspectives (Martin and Frost, 1996) make greater allowance for dissent and uncertainty that may be features of PLCs, and with which their members will have to cope. How they cope may be a significant factor in their effectiveness.

Internal politics affects change (Blase, 1998), control being a key issue. Sarason (1990) has argued that educational reforms continuously fail because attention is not paid to the alteration of power relationships.

d. Managing structural resources

Schools are bounded by structures shaping their capacity to create and develop a professional learning community (Louis et al, 1995; Louis and Leithwood, 1998).

Time
Evidence of teacher talk and exchange about professional issues is a key indicator of a learning community and to facilitate this, the research suggests that the school needs to be organised to allow time for teachers and other staff to meet and talk on a very regular basis (Louis et al, 1995). Time is also critical for any learning that is not superficial (Stoll and Earl, 2003; Hopkins, 2001). This does not only mean timetabling and being able to cover teachers who attend external training but how schools plan and organise their timetables such that learning can occur within the school, whether it is in classrooms, the staffroom, staff meetings or elsewhere. Time as an issue was insufficiently addressed in the DfEE's (2000) strategy for professional development (Thompson, 2001). Teachers in England work long hours and have considerable administrative/bureaucratic responsibilities. The Government subsequently recognised that teachers needed more time during the week to plan, train and prepare as well as more explicit time to spend on their own professional development and set up a process to investigate how this might be provided (DfEE, 2001). This led to a workforce

agreement between the English Government and all but one of the teaching unions (ATL et al, 2003), and a national emphasis on remodelling working patterns and deployment of staffing (NRT, 2003).

Space

If collaboration is a necessary component of professional learning community, a school structure where it is easier to have a coffee and professional discussions in a subject workroom rather than go to the staffroom because it is located in another building, is likely to inhibit school-wide collegiality. While contrived collegiality (Hargreaves, 1994) – forcing teachers to plan and work together – may be unproductive, opportunities for teachers to work and explore their teaching together appear to be key components of learning-centred schools (Dimmock, 2000). Opportunities for professional exchange appear to be further facilitated by physical proximity (eg. teachers in a department having neighbouring classrooms) and interdependent teaching roles (eg. team teaching; joint lesson planning). McGregor (2003, p54) found that, over the course of break times, the majority of the 25 staff of a secondary school science department visited "*the tiny office, providing the opportunity for casual, serendipitous contact as well as more focused social or work-related conversations*". Traditional egg carton compartmentalised school designs are likely to inhibit collaboration, whereas more flexible architectural designs are more likely to support collaborative cultures (Stoll and Fink, 1996).

e. Interacting and drawing on external agents

Schools exist within a wider system whose members, if they wish to see continuous learning and sustainable school improvement, must play their own role. There are strong arguments that schools cannot 'go it alone' and specifically need connections with outside agencies. Indeed, Fullan (1993) views the seeking of outside help as a sign of a school's vitality: "It is the organizations that act self-sufficient that are going nowhere". To promote, sustain and extend professional learning communities, schools appear to need external support, networking and other partnerships.

Support

The amount and quality of *external support* for any serious improvement effort is critical to support the change process (Huberman and Miles, 1984). In the professional community literature, external support tends to come mainly in the form of district support (Anderson and Togneri, 2003) although tensions occur where district evaluation policies foster competition and privacy (McLaughlin and Talbert, 2001). External agents may play a significant role in supporting schools' enquiry efforts and helping develop what MacGilchrist and colleagues (2004) describe as a school's 'reflective intelligence', helping schools interpret and use data (Dudley, 2000); while understanding the tensions inherent in self evaluation (Saunders, 1999), and playing the role of critical friends (Doherty et al, 2001), in particular by focusing on activities that, as MacBeath (1998) notes, help schools "develop independence, the capacity to learn and to apply learning more effectively over time". There have also been attempts to help schools 'become' professional learning communities (Huffman and Hipp, 2003; Andrews and Lewis, 2004). Support to help create a professional learning community may, however, be different from that to sustain it. Schools vary in their capacity for learning (Stoll, 1999). Building capacity for improvement necessitates paying attention to the fostering and development of collaborative processes (Harris, 2001). This will be different in a school that is cruising than one that is struggling or sinking (Stoll and Fink, 1996).

Partnerships
Over the years, many schools have built productive relationships with a variety of partners, including parents, governing bodies, their LEA, local community members, social services agencies, psychological services, businesses and industry. Schools have also engaged in a range of partnerships with higher education institutions related to initial and ongoing teacher development. From their study of a large number of partnerships, Watson and Fullan (1992) conclude that strong partnerships are not accidental; neither do they arise purely through good will or ad hoc projects. They require new structures, activities and the rethinking of the way each institution operates as well as how they might work as part of this partnership.

Networks
The moral imperative of the 21st Century is ensuring that *all* students experience and benefit from the highest quality learning opportunities. Developing whole systems in this way depends on more than individual schools focusing exclusively on enhancing their own students' and teachers' learning. Such an approach is insufficient. This adds a slant to the meaning of 'communities' within professional learning communities because the imperative is greater than ever before for everyone to learn together, not only in but beyond their schools. A further push comes from new technologies which are transforming learning and the way knowledge is shared. A networked society may offer possibilities for closer cooperation between schools, and between schools and their communities. NCSL's Networked Learning Communities initiative has evolved within this context as a lateral and local strategy to promote learning within and between schools through collaborative inquiry on, sharing and transfer of practice, development of deeper understanding, and co-creation of new knowledge about effective learning and teaching (Jackson, 2004).

David Hargreaves (2003, p.9) suggests that:
> *A network increases the pool of ideas on which any member can draw and as one idea or practice is transferred, the inevitable process of adaptation and adjustment to different conditions is rich in potential for the practice to be incrementally improved by the recipient and then fed back to the donor in a virtuous circle of innovation and improvement. In other words, the networks extend and enlarge the communities of practice with enormous potential benefits . . .*

Hargreaves and Giles (2003) make no distinction between networked learning communities and professional learning communities in describing how a strong professional learning community:
> *. . . brings together the knowledge, skills and dispositions of teachers in a school or across schools to promote shared learning and improvement. A strong professional learning community is a social process for turning information into knowledge.*

Networked learning communities and professional learning communities rest on similar assumptions about how teachers learn and change their practice (Toole and Louis, 2002). These include: that teaching is inherently a non-routine and complex activity (i.e., teachers will need to continue learning throughout their career); that there is a great deal of untapped knowledge already existing in schools; that the challenges teachers face are partly localized and will need to be addressed "on the ground", and that teachers improve by engaging with their peers in analysis, evaluation and experimentation.

Lieberman and Grolnick's (1996) study of 16 educational reform networks found that certain features created growth opportunities for participants: challenging rather than

prescriptive agendas; indirect rather than direct learning; collaborative formats; integrated work; facilitative leadership; thinking that encouraged multiple perspectives; values that were both context-specific and generalised; and flexible structures. Many LEAs have created their own networks for many years, and these have been found to be positive sources for improvement and organisational learning (Joy et al, 1998). University-based networks have also provided opportunities for schools to work together, including those based on a set of principles, for example Improving the Quality of Education for All in England (Hopkins 2001) or opportunities where practitioners can share and debate ideas, resolve issues and have access to current research, for example the Institute of Education's National School Improvement Network (Stoll, 1996). Other networks have developed, notably those linked to specific Government initiatives eg. Education Action Zones, NCSL's Networked Learning Communities and Diversity Pathfinders. This latter initiative has been described by its evaluators as:

> *about a qualitative change in relationships between schools so that collaboration is invested with a strategic vision and an enduring, enabling structure of co-operation. As well as this, a group identity amongst schools is envisaged as emerging from and infusing these new relationships, forging a commitment shared by all the schools to pupils' educational opportunities and progress throughout the area* (Woods et al, 2003, p.6).

One feature of the Diversity Pathfinder projects is reported to be "*the re-emergence of the LEA as a key player in brokering collaboration between schools*". (Evans et all, 2005)

5. WHAT OTHER FACTORS HELP OR HINDER THE CREATION AND DEVELOPMENT OF EFFECTIVE PROFESSIONAL LEARNING COMMUNITIES?

In exploring how effective professional learning communities are created, developed and sustained, it is important to consider factors that influence these processes by influencing schools' capacity for change and development (Hopkins et al, 1997) and, in particular, for ongoing and sustainable learning of the entire school community (Stoll, 1999). Staff in some schools appear better able to engage in and sustain learning than do their colleagues in other schools. Capacity has been described as:

> *. . . a quality of people or organizations that allows them routinely to learn from the world around them and apply their learning to new and sometimes novel situations so that they continue on a path toward their goals, even though the context is ever-changing. It also helps them continuously to improve learning and progress at all levels, but particularly and ultimately that of pupils* (Stoll and Earl, 2003, p.492).

Taking learning communities as their starting point, Mitchell and Sackney (2000) *describe three mutually influencing and interdependent categories of capacity*: personal capacity – the active and reflective construction of knowledge; interpersonal capacity – collegial relations and collective practice – building the learning community climate and team; and organisational capacity – building structures that create and maintain sustainable organisational processes, opening doors and breaking down walls, sharing leadership and sharing power, and making it happen.

The factors that influence capacity, and the development and ability to sustain a professional learning community operate at different levels – individual, group, school and external – and in complex ways.

a. Individuals' orientation to change

At the heart of the change is the individual. In essence:

> *Although everyone wants to talk about such broad concepts as policy, systems, and organizational factors, successful change starts and ends at the individual level. An entire organization does not change until each member has changed* (Hall and Hord, 2001, p.7)

Hargreaves points out that teachers do not only teach in the way they do because of skills or lack of skills. Their teaching is also rooted in their backgrounds, biographies, and in the kinds of teachers they have become:

> *Their careers - their hopes and dreams, their opportunities and aspirations, or the frustrations of these things - are also important for teachers' commitment, enthusiasm and morale. So too are relationships with their colleagues - either as supportive communities who work together in pursuit of common goals and continuous improvement, or as individuals working in isolation, with the insecurities that sometimes brings* (Hargreaves, 1999, p. vii).

Adults are, therefore, influenced by what goes on in their lives, and yet many approaches to staff development treat teachers as if they are all the same. In considering any form of teacher development, it is imperative to pay attention to their priorities and lives (Goodson, 1992). Age and gender influence teacher development (Oja, 1991), and teachers also go through different career stages. Huberman's (1989) examination of Swiss teachers' career cycles highlights connections between their careers and school improvement, as their interest in change and learning fluctuates during particular phases. Attention to people's sense of self therefore appears to be key to successful 'change agentry' (Fullan, 1993).

Claxton (1996) notes that: "*learning . . . takes place in people's heads*", and argues that attention needs to be paid to factors that inhibit learning, causing people to be defensive or withdraw, as well as to factors which facilitate learning. Learning is not just a cognitive process: it is emotional, as is teaching (Woods et al, 1997; Hargreaves, 1998).

The notion of a professional learning community implies a positive contribution from all its members. Individual motivation and commitment to the community is likely to be key for learning communities (Stoll et al, 2003). Research on effective teams outside the education sphere (Larson and LaFasto, 1989) has long indicated that effectiveness depends in part on unified commitment from their members: loyalty to and identification with the team, fostered through a balance between respecting individual differences and requiring unity.

b. Group dynamics

As already noted, professional learning communities can operate at a smaller group level, as well as at whole school level, and secondary schools have well-established group structures in the form of departments. Good teamwork is more evident in more effective secondary school departments (Sammons et al, 1997) and research focusing on senior management teams (SMTs) in secondary (Wallace and Hall, 1994) and large primary schools (Wallace and Huckman, 1999) revealed several group factors connected with the SMTs and their

relationship with other staff that may prove to have implications for professional learning communities. The team culture embodied two contradictory beliefs coexisting in some tension: in a management hierarchy topped by the headteacher who was uniquely accountable for the work of the SMT, and in the entitlement of all team members to make an equal contribution to the work of the team (Wallace, 2001). Headteachers were uniquely empowered to create a team in terms of a formally constituted group, and to create conditions fostering collaboration to achieve jointly held goals. However, it was not possible for them directly to create a strong and constructive team culture: their efforts to shape it were mediated by other team members. Professional learning community operation may entail finding constructive ways of coping with such contradictory beliefs within SMTs, within departmental teams in secondary schools, and across the whole staff.

c. School context influences

Learning is affected by the contexts in which it takes place (Watkins et al, 2000; Mitchell and Sackney, 2000; Stoll, 1999; Rosenholtz, 1989). The school's context, therefore, has an impact on teacher learning. Teachers as learners do not operate in isolation but within a social context influenced by:

School size - Small schools have been found to be more engaging work environments for both adults and students (Lee et al, 1993). It appears that size plays an important role in structuring a workplace's social dynamics, supporting better communication flow and greater face-to-face interaction (Bryk et al, 1999). The larger the school, the more numerous the staff, and the more difficult it may be to engender strong identification among all staff with being members of a single community (Huberman, 1993).

Phase – It is well known that improvement is generally more of a challenge in secondary schools. For example it has been found that change is more complex in secondary schools due to a greater diversity of purposes and objectives and department structures (Louis and Miles, 1990). In secondary schools, school culture has been viewed by some as more of an agglomeration of several sub-cultures (McLaughlin et al, 1990; Huberman, 1988). Several studies have shown that the structure of secondary schools sometimes results in members of departments having a stronger sense of belonging to a departmental community than a whole school community (Hargreaves, 1994; Siskin, 1994; McLaughlin and Talbert, 2001).

Location – The location of a school can be an important factor in relation to the links it is able to make with external partners. An evaluation of the first year of the 14-19 pathfinders (Highham et al, 2004) found that rural pathfinders had particular difficulties collaborating with others because of costs and time of travel, while urban pathfinder collaboration was made easier by relatively easy transport and accessibility of most of the schools, colleges, and training providers.

Particular mix of pupils – This includes size and age of the pupil body; their ethnic, social class or cultural background; whether they are all girls, boys or a mixed group, of a particular religious denomination; how many have special educational needs; and their own pupil culture and attitudes (McLaughlin and Talbert, 1993). The social mix of the school influences how a school functions, largely because of the cumulative effect of the peer group processes of how the students relate and act as a group (Thrupp, 1999). Furthermore, students' ability to respond to change affects teachers' ability to change (Butler et al, 2001; Rudduck, 1991).

History – Like other organisations, schools go through life cycles (Schein, 1985). During some periods they may be 'ripe for development'. At other times, often dependent on the people on staff at the time, the leadership, and whether previous efforts at innovation have been successful or otherwise, there may be institutional 'inertia'. Significant events – amalgamations, threatened closure, or a fire – can also affect schools (Stoll et al, 2001). Teacher mobility is higher in some schools and areas. Over the years, certain schools also build particular traditions and reputations.

d. External influences

A school's external context can also influence its capacity to create, develop and sustain an effective professional learning community. External contextual influences include:

A school's local community – Schools are located in and serve very different communities. Pupils' background characteristics have an impact on their schools' achievement (Teddlie and Reynolds, 2000). While disadvantage does not automatically inhibit a school's capacity, some schools face more of an uphill struggle in helping their pupils achieve national standards (Mortimore and Whitty, 1997). One study, however, found that race and ethnicity, socio-economic factors, and even academic background of the student body was not a strong predictor of a school's professional community (Bryk et al, 1999).

The broader community – Attitudes of the broader community to schooling can affect teachers' motivation and belief that what they are doing is worthwhile. In Australia, disaffected teachers and their partners remarked that the general public, in particular the media, did not appreciate the difficulties in teaching and the increase in preparation and marking time (Dinham, 1994). Unions' policy and practices can also influence how at least some of their members respond to changes in school (Whatford, 1999).

Policy decisions – The kinds of knowledge, skills and dispositions teachers have or need are shaped by standards of curriculum and assessment, and policies for hiring and promotion (Youngs and King, 2001). The amount of policy-oriented change is significant, and such change has been seen as "placing demands on the learning capacity of the organization" (Karsten et al, 2000). Overload is a dilemma for those trying to bring about change and responding to external change can produce stress and burn-out (Woods et al, 1997) or feelings of guilt (Hargreaves, 1994). High levels of stress are recognised as a major cause of teacher illness, leading to absence and increasing the likelihood of individuals leaving the profession. One way in which stress can affect teachers' behaviour is to make them less willing to engage in discussion with colleagues (McMahon, 2000) yet sharing and exchange is essential for the development of community. Teachers bombarded by an unrelenting plethora of changes over a short time period find it hard to maintain energy, enthusiasm and, ultimately, willingness for change (Helsby and McCulloch, 1998). Teachers are most satisfied when they can teach and having their attention diverted by paperwork or administration reduces their satisfaction (Stobart and Mutjtaba, 2003). For some schools, the language and labelling of being a 'failing school' contributes to low teacher morale and feelings of impotence (Stoll and Myers, 1998).

Given the focus on the development of community norms it is unsurprising that a degree of school autonomy, as evidenced in site based management, is seen as essential for the development of a learning community. This has been confirmed in an eight-country European study of effective school improvement (Reezigt, 2001). Schools in England and Wales have for many years had considerable autonomy over the school budget, albeit within

a strong regulatory framework. School based decision making, particularly as evidenced in the school development plan, can be said to have been institutionalised in these schools. However, research indicates that this is not enough; that school based decision making and teacher empowerment is an important but insufficient stimulus for developing teachers' performance as professionals (Louis et al, 1995).

Professional learning infrastructure – Some schools are located in areas or regions where the professional learning infrastructure is better developed than elsewhere. Fullan and Watson (1997, p.9) describe infrastructure as "*a network or structure with a clear purpose . . . The infrastructure is just there. People count on it as they go about their work . . . When infrastructure is weak, damaged, or missing, however, trying to get things done is frustrating*". The nature and quality of professional development opportunities and support that are available to the school and its staff can impact on the development of a professional community but in England and Wales this is influenced by a number of factors including geography, many schools in large rural areas have been disadvantaged because they did not have easy access to HE institutions and had comparatively little in-service support available from their LEA (McMahon, 1999); and the conditions attached to CPD funding (eg. TTA competitive bidding for INSET funding). Training models intended to develop particular skills may work well for technical innovations but not help teachers develop the range of skills needed for handling the reform agenda (Little, 1993). Hargreaves (1995) argued that, as well as addressing technical competence, professional development should include:

> ...*the place of moral purpose in teaching, political awareness, acuity, and adeptness among teachers and teachers' emotional attachment to and engagement with their work.*

Hargreaves (2003) raises the concern that an over-emphasis on "performance training sects" through National Strategy training is likely to lead to dependence, which would work against the "informed professionalism" (Barber, 2001) that characterises the work of professional learning communities. This concern about creating a culture of dependence is endorsed by findings of evaluations of both the National Literacy and Numeracy Strategies (Earl et al, 2002) and the Key Stage 3 Strategy Pilot (Stoll et al, 2003).

6.   ARE EFFECTIVE PROFESSIONAL LEARNING COMMUNITIES SUSTAINABLE?

At what point can it be said that a professional learning community has been established? Once established is it a static state or a series of ongoing interactions and processes for reference? How can a community be sustained over time (Fink, 2000)? The paucity of longitudinal research on professional learning communities means that little is yet known about the potential for establishing enduringly effective professional learning communities. Bryk and colleagues (1999) suggest that: "*when internal socialization routines are working properly, they should provide a self-renewal mechanism for professional communities*" but acknowledge the need for further research. The small amount of existing evidence in England, North America and Europe suggests that the subsequent evolution of schools that might have been interpreted as effective professional learning communities reflects subsequent decline (Imants, 2004). Given that changes in senior leadership of schools appear to be a factor in the decline, increasing attention is being paid to the potential of leadership succession planning as a means of promoting sustainability (Hargreaves and Fink, 2003) . A longitudinal study of change over time in Canada and the United States, from the perspective of staff who worked in eight secondary schools in the 1970s, 1980s and 1990s suggests that sustaining change requires: sustaining deep learning; involving a broad range of people in "chains of influence"; spreading improvements beyond individual schools; it being done on

existing resources, not through special projects where the funding then dries up; nourishing and taking care of people, rather than burning them out; sharing responsibility; activist engagement to secure outside support; and develop capacity that enables "*people to adapt to, prosper and learn from each other in their increasingly complex environment*" (Hargreaves, 2004) .

7.   CONCLUSION

The literature reviewed for this project largely concludes that professional learning communities are worth the considerable effort that goes in to creating and developing them, although it does not have much to say about sustainability. It makes clear that building professional learning communities is by no means easy, a number of subtle as well as more overt processes require work, and there are influences, both within and external to schools that can either facilitate or severely inhibit the process. Two major difficulties with the existing literature are that: it comes from outside England and therefore its applicability within this country's cultural context might be questioned; and that many of the studies have not got into fine enough detail about professional learning communities in practice. As Little (2002) in a detailed study of interaction between teachers in their daily course of work acknowledges:

> *. . .starts from the premise that if we are to theorize about the significance of professional community, we must be able to demonstrate how communities achieve their effects.*

Given the overall length of this project, it may be difficult to add a considerable amount to the knowledge base about sustainability, but we are hopeful that we will deepen understanding of professional learning communities within the UK context, and draw out credible, accessible and practically useful findings.

In the next chapter we turn to the design and results of our questionnaire survey.

Chapter 3.   Survey Findings

1.   INTRODUCTION

A major task of the project was to survey schools about the characteristics of effective professional learning communities. The purpose was to generate credible, accessible and practically useful findings for those within and outside schools interested in creating, developing, supporting and sustaining effective professional learning communities. Currently, there is no clear consensus on what precisely constitutes a professional learning community (PLC[2]). However, as reported in Chapter 2, international research suggests that they are characterised by: shared values and vision; collective responsibility for pupils' learning; reflective professional inquiry; collaboration; and the promotion of group, as well as individual learning. Therefore, the first aim of the survey was to test out the relevance of these characteristics by establishing basic descriptive data on the features of professional learning communities in different kinds of schools in England.

The second aim was to use statistical techniques to identify and examine a finite set of key factors related to the processes of continuing professional development (CPD) and more broadly to the development of professional learning communities. The purpose was to establish the existence of one or more factors that could be used to measure and evaluate schools' capacity for developing as professional learning communities. However, in addition to investigating the existence of PLC characteristics and factors, it was also important for us to examine the validity of the PLC concept by investigating the relationship between responses to different parts of the survey as well as in relation to different school contexts.

Crucially, the third aim was to compare 'PLC' factors with pupil outcome data. There is relatively limited evidence about the impact of CPD, and more generally of professional learning communities, on student outcomes. This study therefore provided a rare opportunity - presented by the collection of questionnaire survey data alongside access to the national pupil assessment databases - to produce some relatively 'hard' data. The nature of this data is of course correlational[3] not causal but nevertheless this evidence is arguably more robust than previous studies.

The chapter is structured as follows:
Part A: Questionnaire design and methods of analysis
Part B: The findings about professional learning in the EPLC sample schools
Part C: Internal validity and contextual issues
Part D: Relationship between PLC processes, factual information and pupil outcomes

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[2] Note that we have dropped reference to 'effective' in referring to the overall concept of a PLC due to subsequent team discussions concerning the nature of PLC 'effectiveness'. However when referring to original instruments or project labels the term 'EPLC' is retained.

[3] It is important to note that correlational results need to be carefully interpreted as weak (and unsubstantive) correlations can be statistically significant if the sample size is large. Therefore, in reporting the correlational findings of this study the strength of the relationship (eg $r >= 0.3$) will be considered more indicative than the associated statistical significance.

2. PART A: QUESTIONNAIRE DESIGN AND METHODS OF ANALYSIS

a. Development of EPLC questionnaire

The questionnaire (Appendix 3.1) was informed by a review of the literature on professional learning communities and was designed in consultation with the Steering Group and with international colleagues. A draft questionnaire was piloted with a sample of schools and the instrument was revised in the light of feedback obtained at different stages throughout this process. The final questionnaire was designed to be completed by the headteacher or CPD co-ordinator of each school participating in the study, in consultation with other staff. The questionnaire comprised three parts:

- Part 1 items designed to gather opinion about professional learning in the school; these questions are framed in terms of the proportion of staff in the school engaged in particular activities or having particular views.
- Part 2 items exploring perceptions of a definition of a PLC and the factors which the respondent felt facilitated or were barriers to the school becoming a professional learning community.
- Part 3 items related to factual information about the range and extent of professional development and school self evaluation activities in the school.

b. Sampling and administration of the questionnaire

The questionnaire survey was administered (one questionnaire per school) to two samples. Initially it was planned to administer the questionnaire to only one sample of schools. However, due to insufficient school responses to the first sample, a second sample was required to provide adequate and representative comparative data for the statistical analyses. The first sample comprised 800 nursery, primary, secondary and special schools approached in the summer term 2002 and the second was a different sample of 1500 primary and secondary schools approached in January 2003. The overall survey response rate was 17% (final sample size n=393 - see Appendix 3.2 for further details of the sampling frame). While this is a low response rate, detailed analyses indicate that this was a nationally representative sample of all primary and secondary schools in terms of various contextual factors. The analyses show no substantial differences between the sample and a national sample from 54 LEAs in either the primary or secondary school phases (Atkins and Thomas, 2003).

c. Analysis of survey responses

Data analysis focuses upon three key areas as outlined in the original project bid. First, we sought to establish basic descriptive data on the characteristics of professional learning communities. This was carried out as part of the customised survey feedback reports prepared for the EPLC sample schools and included the frequencies for each item response category for different phases of schooling - primary/nursery and secondary/ special. The anonymised general feedback reports are presented in full as separate documents to this report (see www.eplc.info). We have also sought to identify key PLC characteristics by analysing the mean and standard deviation of responses to each questionnaire item. In addition, correlational analyses have been carried out between school responses to different parts of the survey as well as in relation to different school contexts in order to examine the validity of the PLC concept.

Second, factor analysis techniques[4] have been employed with items from part 1 of the survey to identify and examine a finite set of key factors related to the processes of CPD and more broadly to the development of professional learning communities. The resulting factor scores have been calculated for each school in the sample and analysed in terms of phase and PLC developmental stage.

Third, the 'PLC' factor scores have been compared and contrasted with key school performance measures obtained from the national pupil assessment and background databases at Key Stages 1-4. Sophisticated statistical techniques (multilevel modelling) were employed to examine pupils' relative progress within a school (in comparison to pupils in other schools) and to calculate both 'value added' and 'raw' school performance measures[5]. The 'value added' analysis focused on primary pupils' progress between 1998 Key Stage 1 baseline assessments and the 2002 Key Stage 2 outcome 'mean KS2 score'. At the secondary level the analysis focused on pupils' progress between 1997 Key Stage 2 baseline assessments and the Key Stage 4 outcome 'total GCSE/GNVQ score'. A variety of pupil background factors such as gender and entitlement to free school meals (FSM) were also controlled for in the value added analyses. The school performance measures were then correlated with the 'aspects of PLC' factors in order to establish whether or not there was a statistically significant link between these particular measures of a school's 'effectiveness' and professional learning in communities.

The results for primary and secondary schools were analysed separately. However, due to small sample sizes the results for nursery and special schools have not been reported separately and have been analysed, as appropriate, as part of either the primary/nursery or secondary data sets.

d. Interpreting the findings - a note of caution

Schools in the sample were found to be adequately representative of the national picture in terms of context factors such as the percentage of pupils in the school entitled to free school meals. However, it is important to note that schools were asked specifically in the survey to assess their current stage of development as a PLC. The provisional working definition of a professional learning community quoted in the survey was as follows:

> '*An effective professional learning community has the capacity to promote and sustain the learning of all professionals and other staff in the school community with the collective purpose of enhancing pupil learning.*'

A majority of respondents, 57% from nursery and primary schools and 67% from secondary schools, reported that their school was a "developing" professional learning community (see Table 3.1). Therefore, the survey findings will of course reflect the features of this self-reported group of schools more than any other and this issue should be taken into account when interpreting the findings.

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[4] For an example of similar work see Thomas et al (2000) Valuing Pupils Views in Scottish Schools, *Educational Research & Evaluation*. 6 (4): 281-316.

[5] The multilevel analyses were carried out with both a national sample of 54 LEAs and with the EPLC sample (see Appendix 3.3). No major differences were found between the results of the two samples and therefore only the EPLC sample results are presented.

Table 3.1 Percentage of schools reporting different stages of PLC development

Stage	Primary %	Secondary %
Mature /established	25	15
Developer	57	67
Starter	14	15
Working to re-establish PLC	2	1
No response	2	1

It is also important to note that the survey findings are a summary of data collected at one point in time from one respondent - either the head or CPD coordinator - in each school responding to the survey. Of course, the situation may have changed since the data were collected and also other members of the school may have different opinions about the questions. Nevertheless, our aim is to provide some useful indicators of the features of schools as PLCs, of how they are created and sustained, of the levels of resources and self-evaluation activities, and the extent of staff participation in local and national initiatives that support PLCs.

3. PART B: THE FINDINGS ABOUT PROFESSIONAL LEARNING IN THE EPLC SAMPLE SCHOOLS.

The frequency of the responses for each questionnaire item are reported in the EPLC school feedback reports (see www.ePLC.info). The findings from EPLC Survey Part 1 provide an initial descriptive overview of the nature and extent of teachers' involvement in their school's professional learning community (drawn from the EPLC sample schools). These findings could be tentatively used to provide a nationally representative picture of the dimensions of schools as PLCs but further analysis is needed to identify key patterns in the data. In this case it is relevant to consider for which of all the PLC 'process' characteristics are schools most and least likely to report high teacher involvement, as well as which are most and least variable across schools (thereby indicating the level of consensus amongst schools). This can be done by treating the four item response categories as a numerical scale from one to four[6] and calculating the mean and standard deviation for each item (see Table 3.2 and also Appendix 3.4 for the complete table of results).

a. How common are PLC characteristics across all schools?

The findings show that two question items in particular are key in terms of primary and secondary schools reporting the highest mean level of teacher involvement and these are: *collective responsibility for pupil learning* and *create conditions for pupils to feel the confidence to learn.* Responses to these two items also demonstrate a high level of consensus amongst schools given the low item score variability in comparison to other items. These findings suggest that - not surprisingly - pupil learning is the foremost concern of PLCs and that this is a characteristic that is very common in all schools.

In contrast, the results for two different items (*experience job rotation* and *have opportunities for work shadowing)* indicate that both primary and secondary schools typically report a low level of teacher involvement in these activities. The finding suggests that these particular

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[6] nearly all staff=4, most staff=3, some staff=2, a few staff=1

aspects of CPD related to learning and developing staff roles are not a common characteristic in most schools.

Finally, the results for two further items (*have dedicated time for classroom observation* and *have some protected time for joint planning and development*) suggest that although a medium level of staff involvement is reported by primary and secondary schools, there is a notable lack of consensus (ie. high item score variability) concerning these two activities across schools.   This finding suggests that aspects of CPD concerned with improving classroom practice are very variable across schools, with some schools reporting a high level of staff involvement and others reporting a low level of staff involvement. The issues of teachers' time management and professional culture may have an impact here.

Table 3.2 Primary and Secondary Process Items (from Survey Part 1)
Three items with the highest/lowest mean and standard deviations[7]

	mean	standard deviation	n
Highest mean - primary			
Q1a: collective responsibility for pupil learning	**3.77**	0.56	224
Q3a: create conditions for pupils to feel the confidence to learn	**3.74**	0.52	225
Q4a: learn together with colleagues	**3.73**	0.51	223
Highest mean - secondary			
Q1a: collective responsibility for pupil learning	**3.64**	0.54	164
Q3a: create conditions for pupils to feel the confidence to learn	**3.40**	0.61	164
Q24a are members of at least one professional team	**3.80**	0.55	160
Lowest mean - primary			
Q9a carry out classroom based research	**1.81**	1.00	209
Q36a: experience job rotation	**1.83**	1.07	214
Q38a: have opportunities for work shadowing	**1.75**	1.03	215
Lowest mean - secondary			
Q36a: experience job rotation	**1.13**	0.34	160
Q38a: have opportunities for work shadowing	**1.36**	0.71	157
Q44a: receive financial support from the school for award-bearing courses	**1.42**	0.85	153

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[7] items concerning non-teaching staff have been excluded as generally these items have very high mean scores as well as 3 items that would normally be expected to have very low mean scores (ie want to leave profession, have low expectations of children, use university staff for professional learning)

	mean	standard deviation	n
Highest standard deviation - primary			
Q13a have dedicated time for classroom observation	2.48	**1.25**	222
Q44a: receive financial support from the school for award-bearing courses	1.95	**1.26**	207
Q45a: have some protected time for joint planning and development	2.57	**1.37**	218
Highest standard deviation - secondary			
Q13a have dedicated time for classroom observation	2.28	**1.13**	162
Q43a: use professional development profiles/portfolios	2.41	**1.14**	158
Q45a: have some protected time for joint planning and development	2.36	**1.18**	163
Lowest standard deviation - primary			
Q1a: collective responsibility for pupil learning	3.77	**0.56**	224
Q4a: learn together with colleagues	3.73	**0.51**	223
Q18a: share a common core of educational values	3.71	**0.55**	225
Lowest standard deviation - secondary			
Q1a: collective responsibility for pupil learning	3.64	**0.54**	164
Q24a are members of at least one professional team	3.80	**0.55**	160
Q36a: experience job rotation	1.13	**0.34**	160

Note: highest/lowest mean in bold font; highest/lowest standard deviation in bold font

b. Are schools' self-reported PLC characteristics – in terms of teacher involvement – related to their PLC developmental stage or phase of education or both?

In the survey, respondents were asked to assess their current stage of development as a PLC in three developmental stages; mature/established PLC, developing PLC and starting the journey to become a PLC. Therefore it is important to examine the validity of conceptualising PLCs in three stages by looking at the relationship between schools' responses to individual questionnaire items in the survey and their self-reported stage as a *mature*, *developer* or *starter*. The validity of the PLC concept at the primary and secondary phases of education is also an issue that needs to be examined in terms of whether schools from different educational phases report similar levels of staff involvement.

c. PLC stage: mature, developing, starter

Statistically significant differences (at 0.05 level) were found between schools' self reported PLC categories (ie. mature, developing, or starter) in terms of their responses to the majority of part (1) items in the survey. Table 3.3 shows the nine items (out of 57) in part 1 which did *not* show a statistically significant difference between stages. However, one possible explanation for the apparent lack of PLC developmental progress for these particular items is that they relate to issues that – *within any school* - are more likely to involve nearly all or alternatively relatively few teachers. Generally 'mature' PLCs' reported a higher percentage of staff involvement and 'starter' PLCs reported a lower percentage of staff involvement (see Appendix 3.4 for detailed results for each survey item). These findings indicate that schools'

reports of themselves as a PLC in one of three developmental stages were generally consistent with their reports of a higher or lower extent of staff involvement thereby providing some positive evidence of the validity of the PLC concept.

Table 3.3 Questionnaire items (part 1) that do NOT indicate a statistically significant difference between mature, developing and starter PLCs

Q22a say their workload is too heavy
Q23a are involved in seeking solutions to problems facing the school +
Q24a are members of at least one professional team +
Q36a experience job rotation +
Q39a want to leave the profession
Q40a engage in team teaching
Q46a say they experience undue stress in their work
Q48a systematically feed back the outcomes of external courses to colleagues +
Q54a NTSS are valued by teachers +

+ indicates a statistically significant difference (at 0.05 level) between phase of schooling
(see Appendix 3.4 for further details of analysis)

d. Phase of education: nursery/primary (and special deemed primary), secondary (and special deemed secondary)

School responses to just over half of part (1) items (35 out of 57) in the EPLC survey indicate statistically significant differences (at 0.05 level) between phase of schooling (ie. nursery/primary/special or secondary/special). Generally, the 'primary phase' PLCs report a higher percentage of staff involvement and the 'secondary phase' PLCs report a lower percentage of staff involvement. However, a closer look at the mean score response across the three stages for each phase (shown in Appendix 3.4) reveals the following item exceptions: use of ICT data bases to monitor pupil progress (Q8a), use of private consultants for professional learning (Q47a) and teachers being members of more than one professional team (Q24a). The findings from these three items suggest areas of particular strength in secondary PLC's in comparison to primary phase PLC's.

Given these findings, it is not clear whether it should necessarily be expected that primary and secondary phases would report a similar level of staff involvement in the PLC given the larger nature of secondary schools and the likely existence of smaller sub-PLCs within the school. However, we may hypothesise from our questionnaire results that the professional learning communities within secondary schools are less developed than those within primary and nursery schools because the results indicate that a smaller percentage of staff are perceived to be engaging in the behaviours cited in the literature (eg. sharing a common core of educational values). Such a response pattern is not uncommon in questionnaires of this type (eg McCall et al, 2001), and achieving secondary school improvement is notoriously more difficult than achieving improvement in primary schools (Louis and Miles, 1990). However, the range of questionnaire responses highlights that some secondary schools do appear to demonstrate characteristics of effective professional learning communities. We will return to this issue again in the conclusion section.

For a small minority of items a statistically significant *interaction* (at 0.05 level) was found between PLC stage and phase of schooling (see Appendix 3.4 items: 3a, 5a, 33a, 36a, 51a).

These findings tentatively suggest that in relation to some PLC characteristics, primary and secondary schools at different developmental stages may operate differently. The size of schools may again be a relevant issue here.

For example, it can be seen that reported percentages of staff actively *creating conditions for pupils to feel the confidence to learn* (Q3a) in 'mature' secondary and primary schools are roughly equal (mean scores of 3.93 for primary and 3.92 for secondary) but for 'developing' schools reported percentages of staff are different in magnitude for each phase (mean scores of 3.79 for primary and 3.40 for secondary) and this is true also for the 'starter' schools (mean scores of 3.29 for primary and 2.96 for secondary). School responses to the item *staff take responsibility for their own professional learning* (Q33a) in the secondary phase for the 'mature' and 'developer' schools indicate generally that slightly lower percentages of secondary staff are involved in this activity (scores of 3.36 and 3.00) than in the primary schools at these respective PLC stages (scores of 3.70 and 3.26). However, this changes for 'starter' secondary schools that report more staff involved in this activity (score of 2.79) than the primary school staff at that stage (score of 2.42).

Secondary 'mature' and 'developer' schools report almost identical percentages of staff involvement (scores of 3.15 and 3.16) in *ensuring pupils receive constructive feedback about their work* (Q5a). Thus only the Starter PLC scores on this item appear distinguishable at the secondary phase. By way of a contrast, however, PLC developmental stages are more clearly seen in the percentage of staff involvement reported by primary schools (mature score was 3.75, developer 3.51 and starter 2.91).

e. Are schools self-reported PLC characteristics – in terms of factual information – related to their PLC developmental stage or phase of education or both?

PLC stage: mature, developing, starter
In contrast to the findings about PLC 'process' characteristics (from Survey Part 1), school responses to the majority of the factual items (from Survey Part 3) items indicate no statistically significant differences (at 0.05 level) between schools' self reported PLC categories (ie mature, developing, or starter) – except for the items highlighted below (see Table 3.4 and also Appendix 3.5). It appears – not surprisingly - that schools reporting a greater extent of improvement and self-evaluation practices in part (3) items, such as use of pupil outcome and progress data, having achieved IIP as well as the active involvement of school governors in the PLC, are more likely to report being a mature rather than starter PLC. This finding makes some sense given these particular part (3) items are fairly similar in nature to the part (1) 'process' items and again provides some positive evidence of the validity of the PLC concept.

Table 3.4 Questionnaire items (part 3) with a statistically significant difference between the 3 PLC stages and phase of schooling

Q69   Sum of different types of management information used for school improvement *+
Q70   Sum of different groups of professionals regularly reviewing pupil outcome and progress data *+
Q72iii Investors in People accreditation has been achieved *+
Q72v   Temporary and supply staff are included in the CPD policy *#
Q72vi Governors actively contribute to the school as a PLC *

+ indicates a statistically significant difference (at 0.05 level) between phase of schooling
*indicates a statistically significant difference (at 0.05 level) between EPLC stage
# indicates a statistically significant interaction between EPLC stage and phase (at 0.05 level)
(see Appendix 3.5 for further details of analysis)

f. Phase of education: nursery/primary (and special deemed primary), secondary (and special deemed secondary)

The majority (22 of the 35) of part 3 items analysed are significantly different across phases of education. These findings suggest that in relation to the majority of part (3) item responses, primary and secondary schools seem to operate differently. Interestingly, secondary school percentages or total number responses for the factual items in the survey were generally higher than for primary schools. Although clearly in many cases, such as items relating to staff numbers, space and funding, this finding is related to school size. However, there are incidences where this pattern is not observed. For example, percentages of primary mature and starter schools who responded that *temporary and supply staff are included in the CPD policy* (Q72v) were higher (93% and 73%) than their secondary counterparts (77% and 67%). Developer secondaries, on the other hand, were more likely to include these staff in their CPD policy than developer primary schools (89% of developer secondaries compared to 79% of developer primary schools).

Percentages of schools indicating that *Governors contribute to the school as a PLC* (Q72vi) were lower for secondary developer and starter schools (75% and 54%) than their primary counterparts (86% and 63%). Also percentages of primary schools across all PLC stages were higher (83% for mature, 72% for developer, 68% for starter) for the item *membership of a within phase network* (Q78ii) than for the equivalent secondary stages (55% for mature, 64% for developer, 53% for starter). However, in relation to the part (3) item concerned with *total teaching days covered by supply staff for CPD purposes* (Q77ii) the results were inconsistent. Developer primary schools' mean 'number of days' was significantly higher (52.81 days) than for the starter and mature primary responses (40.13 days for starter and 41.41 days for mature primary). Whereas, developer secondaries indicated that they were less likely (*ie* lower mean number of total teaching days covered by supply staff for CPD purposes -116.85 days) to use supply cover for CPD purposes than either their mature or starter counterparts (152.44 days for a mature and 155.25 days for a starter secondary).

Only for three items was a statistically significant *interaction* (at 0.05 level) found between PLC stage and phase of schooling (see Appendix 3.5 items: Q72(iv); Q72(v); Q75). In other words, for example in relation to particular items, the PLC stages (mature, developing, starter) may be identified for one phase but not for another, or phase differences may be identified for particular PLC stages but not others. The size of schools is likely again to be a relevant issue here.

Looking in greater detail at the significant interactions, phase and stage differences are apparent in the school responses to these three items. Percentage responses to the *school is working towards IIP status* (Q72iv) item increase consistently across stages for the secondary phase with the lowest proportion of schools affirming this item being 'mature' PLCs and the highest proportion being 'starter' PLCs (25% mature, 32% developer and 53% starter schools indicated that they are working towards IIP). However, these results must be taken in context of the percentages of secondary respondents at each stage reporting that IIP status had already been achieved (Q72iii) – in this case responses were highest for mature schools (79%) with 65% and 63% of developer and starter schools indicating IIP accreditation had been achieved. For the primary phase this trend is not seen, instead only 13% of all mature, 34% of all developer and 13% of all starter schools are involved in this activity. In particular, these figures demonstrate large differences in phase response for the 'mature' and 'starter' PLCs, whilst very similar percentages of developer PLCs are involved in achieving IIP accreditation. Also, as indicated above, phase responses to the item 'temporary and supply staff are included in the CPD policy' (Q72v) differ considerably. In the secondary phase there are lower percentages of schools, reporting inclusion of supply and temporary staff in CPD policy.

Overall these findings indicate that schools reporting themselves as mature PLC's generally report a higher level of staff involvement in PLC processes and activities (part 1 items) than starter PLCs. However, in contrast, schools' self-reported PLC stage does not generally seem to differentiate between most of the PLC factual items (part 3). This indicates that 'factual' aspects of CPD such as staff facilities and funding are not reflected in a school's view of themselves as a mature, developing or starter PLC. As mentioned previously, there are some notable exceptions to this pattern in terms of use of management information, IIP status, governor involvement and inclusion of temporary and supply staff in CPD policy. Nevertheless, schools' conceptualisation of the development of a PLC is generally reflected by the part 1 items responses – in terms of the extent of staff involvement - and much less so by the part 3 'factual' item responses. Therefore the overall meaning and validity of the PLC concept in three developmental stages seems to relate more to the extent of staff involvement in particular PLC processes rather than the 'factual' aspects of PLCs.

g. Factor analysis of PLC 'process' items (from Survey Part 1)

In addition to the descriptive results outlined above we have also used factor analysis to investigate the relationship between the PLC process items in Part 1 of the EPLC questionnaire[8]. The purpose is to establish the existence of one or more factors that could be used to measure and evaluate schools as PLCs. The technical details of the analysis are not presented here (Atkinson and Thomas, 2004) but standard criteria have been employed to deal with missing values, and to identify which items should be included and excluded from the analysis.

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[8] This approach only employs those questionnaire items where an order of magnitude can be justified in relation to the categories of response.

What is factor analysis?

This is a technique for data reduction. Given the large number of survey items in part 1 of the questionnaire it is desirable to reduce this complexity. Factor analysis attempts to produce a few factors (linear combinations of the original item variables) that can represent a majority of the variability that was present in the original item variables. The factors themselves are manipulated such that they have a low correlation with each other – the aim is to identify factors that are relatively 'independent' from one another. It is also necessary that any factors identified will be adequately reliable and have some face validity in terms of recognisable characteristics of EPLCs. However, the existence and/or number of such factors will be determined by the properties of the original data set.

The results are from the combined factor analysis of nursery, primary, secondary and special school responses[9]. Four 'independent' factors have been identified from the Survey Part 1 items with a reasonably robust reliability score (alpha>0.7). The clusters of items included on these four factors (1,2,3 and 4) map fairly well onto the original groupings of questions (ie. as shown in the feedback reports to schools). Where there are grouping/factor differences for a particular item this may be because the item relates to more than one aspect of a PLC. Essentially, the labels given to factors are subjective headings intended to reflect the content/wording/weight of the items included on the factor while at the same time having some meaning in terms of the PLC characteristics. However, items generally cluster together on individual factors when school responses to particular items are similar in some way.

The four factors [10] relate to:

1. Professional and pupil learning ethos
2. Within school policy, management and support for professional learning
3. Enquiry orientation (external and internal)
4. Participation of non-teaching staff in PLC

For each factor the questionnaire items and their relative weight in contributing to the overall factor score are shown in Table 3.5 below. So, for example, the first factor 'professional and pupil learning ethos' provides a way to 'estimate' or 'measure' for a school the combination of several items that cluster together, the extent of teachers' involvement in activities that enhance pupil learning as well as activities that support their own learning. Factor 1 also includes aspects of a PLC that are often regarded as features of effective schools (e.g. share a common core of educational values). Note that because the reliability of factors 4 and 5 in the initial analysis was not sufficiently robust - these factors were considered inadequate for describing the underlying data and therefore were dropped from further reporting and analysis.

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[9] Separate factor analyses of the primary and secondary schools datasets have also been carried out and these results are in the most part similar to the combined primary and secondary analysis results. However, because of the relatively small sample of primary and secondary schools for this kind of analysis it is not considered appropriate to present these results in detail.

[10] It should be noted that Factor 4 was originally called Factor 6.

Table 3. 5   Factors (derived from the Survey Part 1)

Factor 1 Professional and pupil learning ethos	*Weighting*
Q3: create conditions for pupils to feel the confidence to learn	0.08
Q5: ensure pupils receive constructive feedback about their work	0.08
Q7: set learning targets for individual pupils	0.06
Q11: have low expectations of children	-0.05
Q15: actively seek and use feedback from pupils	0.07
Q16: regularly monitor the learning and progress of individual pupils	0.07
Q4: learn together with colleagues	0.08
Q27: experiment and innovate in their work	0.08
Q32: learn from each other	0.08
Q33: take responsibility for their own professional learning	0.08
Q34: give priority to learning more about pupils learning	0.08
Q1: collective responsibility for pupil learning	0.08
Q18: share a common core of educational values	0.08
Q19: use the staff room at break times for professional links	0.06
Q23: are involved in seeking solutions to problems facing the school	0.06
Q25: regularly discuss teaching methods	0.08
Q26: share their professional experiences and successes	0.09
Q30: see the school as stimulating and professionally challenging	0.08
Q31: routinely share information with parents and the community	0.06
Q2: base their approach to change on the use of good evidence	0.08
Q10: routinely collect, analyse and use data and evidence to inform their practice	0.06

Note: Mean Substitution N=393; KMO=0.952; Bartlett Sig. =0.000

Factor 2 Within school policy, management and support for professional learning	*Weighting*
Q40: engage in team teaching	0.19
Q43: use professional development profiles/portfolios	0.17
Q13: have dedicated time for classroom observation	0.19
Q28: receive training in how to work and learn in teams	0.19
Q29: have opportunities to take on leadership roles '	0.18
Q35: have dedicated time to be mentored in a new role	0.20
Q36: experience job rotation	0.19
Q38: have opportunities for work shadowing	0.21
Q45: have some protected time for joint planning and development	0.18

Note Mean Substitution N=393; KMO=0.853 Bartlett Sig.=0.000

Factor 3 Enquiry orientation (external and internal)	Weighting
Q9: carry out classroom-based research	0.28
Q12: seek out and use external research that is relevant and practical to inform their work	0.33
Q6: actively seek ideas from colleagues in other schools	0.28
Q14: use university staff for professional learning	0.29
Q17: use professional/subject associations for professional learning	0.25

Note: Mean Substitution N=393; KMO=0.788 Bartlett Sig. =0.000

Factor 4 Participation of non-teaching staff in PLC	Weighting
Q50: TAs are valued by teachers	0.18
Q51: TAs share responsibility for pupil learning	0.21
Q52: TAs have opportunities for professional development	0.16
Q53: TAs actively contribute to the school as a professional learning community	0.22
Q54: NTSS are valued by teachers	0.15
Q55: NTSS share responsibility for pupil learning	0.20
Q56: NTSS have opportunities for professional development	0.17
Q57: NTSS actively contribute to the school as a professional learning community	0.22

Note: Mean Substitution N=393 KMO=0.743 Bartlett Sig. = 0.000

Subsequently we calculated the factor scores for each school in the sample. Figure a) shows the results for four schools and illustrates that individual schools can have a very different profile of results across the four factors. For example primary schools A and B seem to have reported a similar profile of staff involvement in professional enquiry (external and internal) and participation of non teaching staff. In contrast school A reports a considerably higher level of staff involvement than school B in professional and pupil learning ethos. This finding suggests that at least four dimensions in different aspects of PLC's exist (learning ethos, organisational support for PLC, enquiry orientation and support staff involvement). Of course it is possible that other PLC factors may also exist but have not been identified here due to limitations of the survey design. We will return to this issue in the conclusion section.

Table 3.6 shows the mean and standard deviation of the factor scores from primary and secondary schools. Overall the findings indicate that - as similarly reflected in the descriptive statistics for individual questionnaire items - primary schools generally report higher levels of staff involvement in PLC processes than secondary schools. Interestingly, the highest level of primary phase staff involvement suggested by the factor scores is in terms of pupil and professional learning ethos (factor 1). In contrast, for the secondary phase the highest level of staff involvement is in terms of enquiry orientation (external and internal) (factor 3)

Table 3. 6   Mean and standard deviation of factor scores[11]

	Phase in 2 categories: Primary, Nursery and Special, and Secondary and Special					
	Nursery, primary, special			Secondary, special		
	Mean	Std Deviation	Count	Mean	Std Deviation	Count
All schools single factor score 1	.29345	.93702	227	-.40540	.94620	165
All schools single factor score 2	.27592	1.03225	227	-.38101	.81861	165
All schools single factor score 3	.22053	1.05764	227	-.31605	.80894	165
All schools single factor score 6	.26267	.81573	227	-.36176	1.11628	165

Note: *each factor is standardised across the whole sample with mean =0 and standard deviation = 1.*

We can also examine the factor scores for each self-reported developmental stage (mature, developer, starter). The results are shown in figures b) and c) in the form of stem and plots indicating the relative level of staff involvement/activity in the areas addressed by the four 'aspects of PLC' factors from the survey (central bar/box indicates median and inter-quartile range). In some cases, the findings suggest an overlap between mature and developer PLC's with starter PLC's falling behind on some factors; we have tested this using ANOVA and post hoc tests, as reported below. Also not surprisingly, in all cases the primary mean factor score for a particular PLC stage is higher than the equivalent secondary mean factor score, again reflecting the overall tendency for primary schools to report higher teacher involvement in the PLC than secondary schools.

In terms of Professional and Pupil Learning Ethos (factor 1), a statistically significant difference (at 0.05 level) was found between all PLC stages for both primaries and secondaries.   However, starter PLC scores appear much lower than both mature and developer PLC's and, therefore, for PLC starters, pupil and professional learning could be problematic and may reflect a wider issue relating to school quality and/or improvement. With reference to Internal support for professional learning (factor 2), statistically significant differences (at 0.05 level) were found between all PLC stages for secondaries but, for primaries only, a statistically significant difference was found between starter and developer PLC scores compared to mature PLC's. This finding indicates that only primary schools reporting themselves as a mature PLC also report significantly more staff involvement in professional learning roles and tasks.

In terms of enquiry orientation (factor 3), statistically significant differences (at 0.05 level) were found between all PLC stages for primaries but, surprisingly, for secondaries no significant score difference was found between any PLC stage. Finally in terms of participation of non-teaching staff (factor 4), statistically significant differences (at 0.05 level) were found between all PLC stages for secondaries but for primaries a statistically significant difference was found only between mature and developer PLC scores compared to starter PLCs. The findings suggest particular difficulties for starter PLC's in terms of the participation in the PLC of support staff.
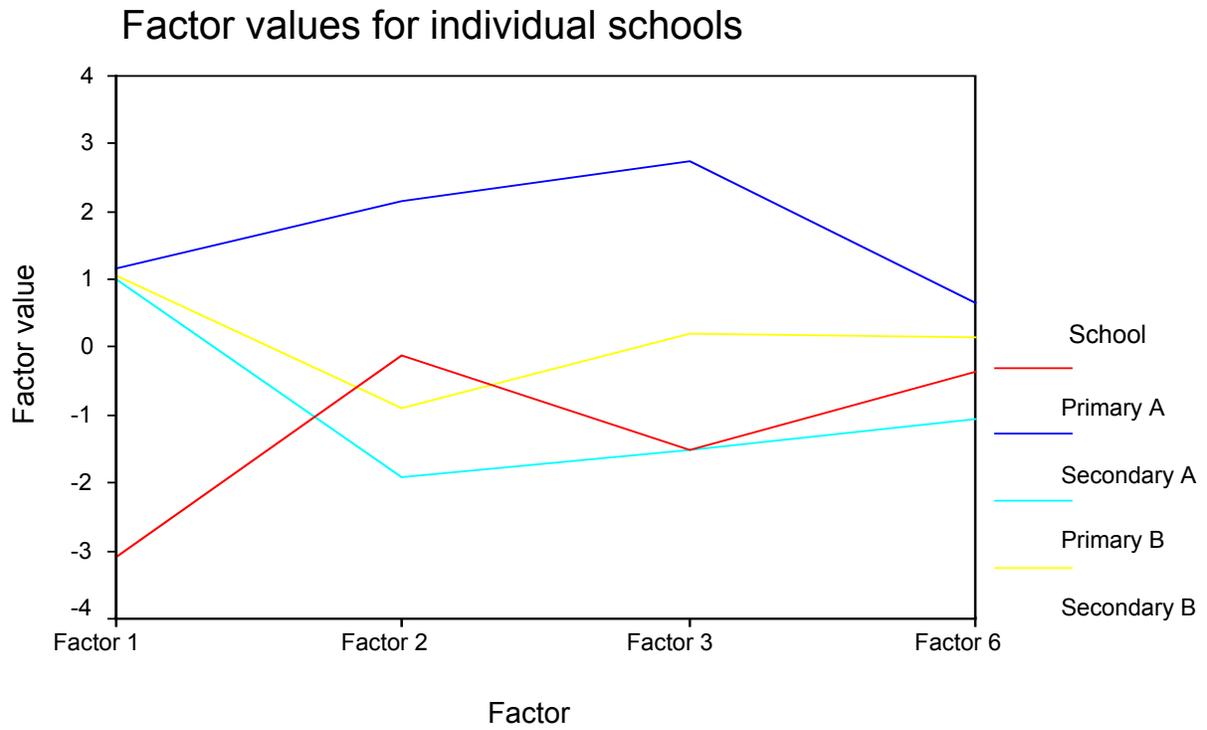
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[11] Factor 6 now re-named factor 4

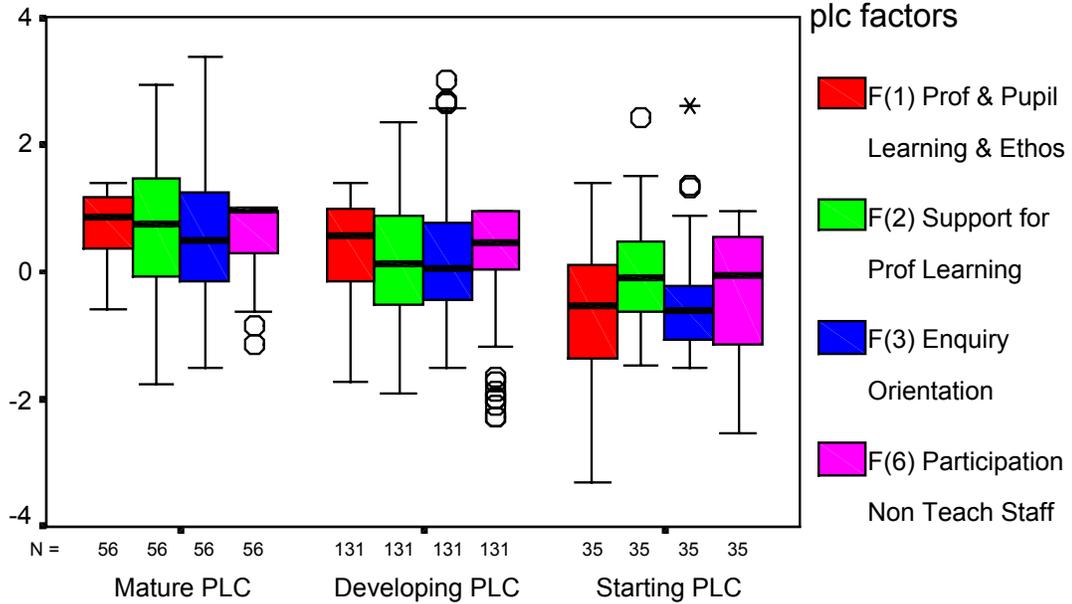Factor values for individual schools

Figure a   **Factor values for four schools[12]**

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[12] Factor 6 now re-named factor 4

Primary & Nursey School sample

Mature, Developing and Starter plc's

Figure b   **Factor Scores for each PLC stage (primary & nursery school sample)[13]**

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[13] Factor 6 now re-named factor 4

Secondary School Sample
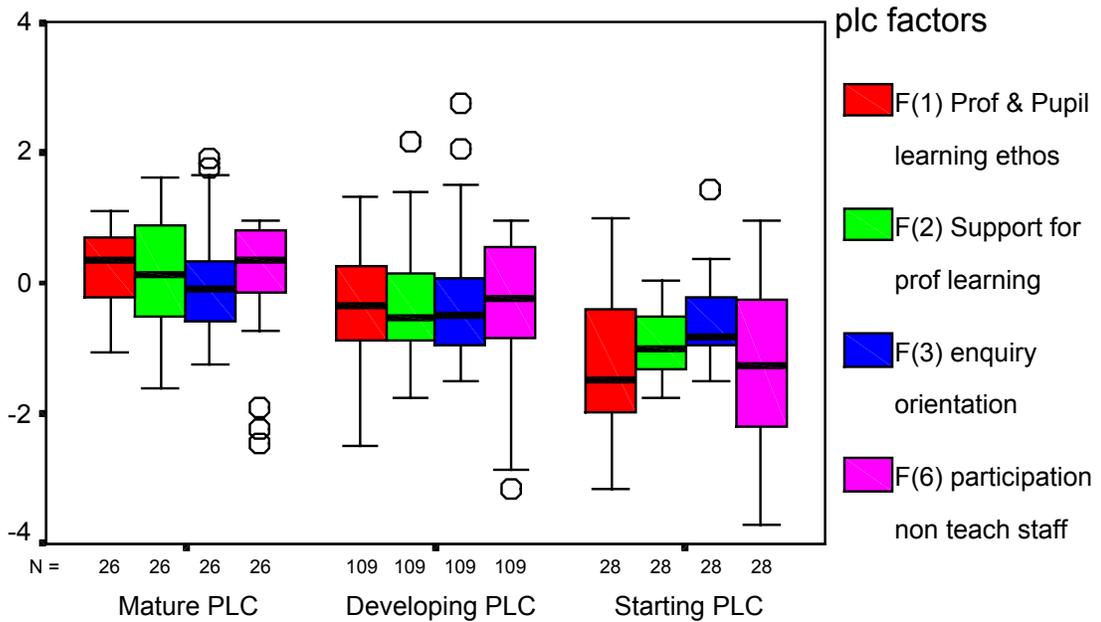
Mature, developing and starter plc's

Figure c   Factor scores for each PLC stage (secondary school sample)[14]

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[14] Factor 6 now re-named factor 4

In summary, for primary schools factors 1 and 3 appear to show developmental progression with starters, developers and mature PLC's reporting a (statistically significant) increasing percentage of staff involved in professional and pupil learning ethos (factor 1) and enquiry orientation (factor 3). However, for factors 2 and 4 all primaries report similar levels of staff involvement except that mature primaries report significantly higher staff involvement in specific CPD activities (factor 2), and starter primaries report significantly lower participation of non teaching staff (factor 4). In contrast, for secondaries three of the four factors (1-3) appear to show developmental progression with starters, developers and mature PLC's reporting a (statistically significant) increasing percentage of staff involvement. However, for factor 3 (which reflects staff involvement in seeking out new ideas) all secondaries report a similar level of staff involvement.

On balance, the results from the factors do appear to be broadly in line with schools self-reported PLC stage of development - in all cases mature PLC's have higher average factor scores than starter PLC's. Nevertheless, it is also important to point out that by combining the results from different questionnaire items into factor scores a greater degree of differentiation can be employed in measuring each factor than the three crude PLC developmental stages of mature, developers and starter. This evidence does seem to suggest that the conceptualisation of a PLC needs to shift from the idea of a single dimension in three developmental stages to multiple dimensions each being on a continuum.

4.   PART C: INTERNAL VALIDITY AND CONTEXTUAL ISSUES

a. Internal validity of the survey: relationship between PLC factors (derived from part 1) and part 3 items

The internal validity of the survey items has been examined in terms of the relationship between the factors (derived from part 1 items) and the 'factual' part (3) items of the questionnaire. Crucially, the findings indicate that generally school responses to part 1 do not conflict with their responses to part 3 and where a relationship would be expected this was found. For example, the key findings from the correlations between the factors and part 3 'factual' items include the following. For primary schools, summed responses to the item 'Pupil outcome and progress data are regularly reviewed by:' (Q70) was fairly strongly correlated (at 0.05 level) with three factors (derived from part 1 items); factor 1 professional and pupil learning ethos (r=0.296), factor 2 within school policy, management and support for professional learning (r=0.264), and factor 4 participation of non-teaching staff in PLC (r=0.226). In addition, all four factors were statistically significantly positively associated with the same item (Q70) for the secondary phase (with Pearson correlation coefficient (r) values of 0.407 for factor 1, 0.255 for factor 2, 0.255 for factor 3 and 0.243 for factor 4 at 0.05 level). Importantly this finding indicates that a school's commitment to self-evaluation activities is linked to teachers' involvement in professional learning.

Interestingly, statistically significant correlations (at 0.05 level) were also found for the primary phase between factors 1, 3 and 4 and responses to the item *governors actively contribute to the school as a PLC* (Q72vi) (r = 0.326, 0.204 and 0.203 respectively). For the secondary phase, statistically significant links between the same item (Q72vi) and 'aspects of PLC' factor scores were also found for factors 1, 2 and 4 (r = 0.263, 0.194 and 0.259 respectively) underlining the importance of governor involvement in professional learning activities. A statistically significant correlation was found (at the 0.05 level) between factor 2

support for professional learning and 'temporary and supply staff are included in the CPD policy' (Q72v) at the secondary level (r=0.218). Moreover, not surprisingly, for both phases a statistically significant, though weak, positive correlation between *the temporary and supply staff are included in the CPD policy* and factor 4 'participation of non-teaching staff' in the PLC was indicated at the 0.01 level (r=0.158 for primary and r=0.204 for secondary phase).

Clearly those part 3 items being specifically concerned with staff and governor involvement fit well with the way aspects of PLC are measured in part 1 of the survey (and this finding supports the results of the PLC stages analysis described in the previous section). In addition a majority of part 3 items (16) correlated statistically significantly with factor 2 concerned with 'support for professional learning', which may be expected given the 'factual' nature of CPD provision included in the part 3 items. In summary, overall these findings indicate that schools' responses to the survey are generally consistent and suggest an acceptable level of internal validity as well as highlighting important links between particular characteristics and 'factual' items.

b. Relationship between factors (derived from part 1), part 3 items and school context

The validity of the PLC concept can also be examined by looking at the relationship between a school's context and their responses to part (1) and (3) items on the questionnaire. Clearly, if particular types of school or schools in particular types of context (such as serving particularly disadvantaged pupils with a high level of free school meal [fsm] entitlement) gave similar responses to the survey it could be argued that the PLC concept reflects to a large extent school context – which is normally outside the control of the school.

c. Examining context variables versus 'aspects of PLC' factors

After examining 11 school context measures against the four factors for primary schools and 8 school context measures against the four factors for secondary schools - a total of 76 comparisons - only 14 were found to be statistically significantly correlated (at 0.05 level) and none were strongly correlated (ie r>=0.3). Therefore, the evidence of a link between school context and PLC processes is clearly fairly weak but nevertheless we highlight below those relationships that were statistically significant (at the 0.05 and 0.01 levels).

Primary phase

School size and pupil teacher ratio featured in a number of significant correlational results with 'aspects of PLC' factor scores. School size was statistically significantly positively correlated with factor 2 'internal support for professional learning' (r=0.215, at the 0.05 level). Weaker negative correlational links (at the 0.01 level) were found between school size and both factor 1 'professional learning and ethos' (r=-0.168), and factor 4 'the participation of non-teaching staff in the PLC' (r=-0.161). Also negative statistically significant relationships (at 0.05 level) between pupil-teacher ratio and both factor 4 'the participation of non-teaching staff in a PLC' (r=-0.213), and factor 3 'enquiry orientation' (r=-0.141). In addition, it was found that the urban/rural geographical setting of the school was negatively correlated (r=-0.224 at the 0.05 level) with factor 2 'within school policy, management and support for professional learning' suggesting that urban primary schools tend to have lower factor 2 scores than their rural counterparts. The percentage of pupils with English as a second language in the KS2 cohort, the variability in average KS1 scores for the cohort and the percentage of pupils known to be eligible for fsm were all weakly negatively correlated (at the 0.01 level) with factor 1 professional learning and ethos (r=-0.179, r=-0.179 and r=-

0.158 respectively). Also pupil stability for the KS2 cohort was weakly negatively correlated with factor 3 (r=-0.178, at 0.01 level).

To summarise, in primary schools there is indication that the factor 1 score tends to be inhibited by a high percentage of pupil fsm entitlement in the school, large school size, a high percentage of pupils with English as a second language in the school and high variability in KS1 scores amongst pupils. Factor 2 is enhanced in a primary if it is geographically placed in a rural setting and school size is large. Low factor 3 scores are more likely if there is a high pupil-teacher ratio, large KS2 class sizes and high pupil stability. Factor 4 is enhanced in smaller schools with low pupil-teacher ratios and a higher percentage of girls in the school as a whole. In spite of the evidence being fairly weak these findings may tentatively point to the kind of contextual features that enhance or hinder PLC's in the primary phase.

Secondary phase

Interestingly much less evidence of links between context and PLC processes was found at the secondary phase than at the primary phase. However, a weak positive association (at the 0.01 level) between the percentage of 'filled full-time places' in a school and factor 2 'within school policy, management and support for professional learning' was found (r=0.192), which may possibly suggest that oversubscribed schools are more likely to have more staff involved in CPD activities. Also, evidence of a weak negative correlation was found between factor 4 'participation of non-teaching staff in the PLC' and pupil stability (ie the percentage of the KS4 pupil cohort who had remained in the school from KS2; r=-0.173 at 0.01 level).

d. Examining context versus part 3 'factual' items

Similar to the correlational findings reported above only a minority of school context factors were found to be statistically significantly correlated (>=0.05 level) to the part 3 items. For the part (3) items the most significant context factors were % fsm and number of pupils (*ie* fte pupils), which were both fairly strongly correlated (r>=0.3) to five or more part 3 items. Further details are provided below.

Primary phase

Not surprisingly, fairly strong statistically significant positive associations were found between primary school size and both the total number of teaching days covered by supply staff and the number of teaching days covered specifically for CPD purposes (with r>=0.3 at the 0.05 level). Primary school size was also significantly positively correlated (at 0.05 level) with the number of teaching staff involved in professional bursaries (r=0.281) and NPQH (r=0.207). Weaker, but still statistically significant, correlations (at the 0.01 level) were found to exist between school size and whether the school is in a cross phase cluster/pyramid group (r=0.160) or part of a NCSL networked learning community (r=0.161).

Secondary phase

Schools reporting that their Governors contributed to the school as a PLC were also more likely to have a lower percentage of E2L and non-white pupils in the school (ie statistically significant negative correlations were found r=-0.225 and –0.226 respectively, at 0.05 level). A weaker negative association between schools' reports of the governors' contribution to the school as a PLC and the percentage of pupils with free school meal entitlement was also found (r=-0.208 at the 0.01 level). Clearly one possible explanation for this finding is the

difficulty faced by schools in disadvantaged areas (or areas where E2L may inhibit parental involvement) in recruiting school governors.

Again not surprisingly, fairly strong statistically significant positive correlations (r>=0.3) were found between secondary school size and the total number of teaching days covered by supply staff, whether the school had Specialist School status and whether other formal working links were established. Secondary school size was also significantly positively correlated (with r>=0.3 at 0.05 level) with the number of sites the school operates on and the number of general staff-rooms and departmental staff/workrooms. Weaker, but still statistically significant positive correlations (at the 0.01 level) were found to exist between the school size and the number of staff involved in NPQH (r=0.199), school budget for CPD (r=0.278) and whether the school had achieved IiP status (r=0.191).

Interestingly the achievement of Investors in People status was negatively correlated with the percentage of pupils entitled to free school meals (r=-0.228, at 0.05 level), the percentage of non-white pupils in the school (r=-0.168, at 0.01 level) and the percentage of pupils with English as their second language (r=-0.188 at 0.01 level).

Overall these findings point to the possibility that some aspects of characteristics may be related to the advantages or disadvantages of particular contexts [For full details of correlational results see Smith and Thomas, 2004a]. As mentioned previously, size is likely to be a relevant issue. For example, smaller schools may allow greater opportunities for collaboration but fewer organisational/formal structures to support professional development[15]. Also high percentage fsm in a school may indicate higher funding levels for CPD.

5. PART D: RELATIONSHIP BETWEEN PLC PROCESSES AND FACTUAL INFORMATION AND PUPIL OUTCOMES

A crucial project aim was to investigate the relationship between the characteristics of PLCs and pupil outcomes. Hence, we now examine the crucial question of whether there is a statistically significant relationship between the factor scores for each school and school performance measures – both raw and value added. This final analysis aims to establish whether or not there is a statistically significant link between schools' value added in terms of pupils' relative progress and their professional learning community. We have done this by examining the relationship between the factors identified in part B and pupil outcomes. The pupil outcomes we have employed in this study include raw assessment and examination results - as published in the annual performance tables. Crucially we have also employed sophisticated value added measures of relative pupil progress (Smith and Thomas, 2004b)[16] which provide a more valid measure of educational effectiveness than the raw results.

The findings shown in Table 3.7 indicate that at the primary level positive and statistically significant correlations were found between schools' factor 1 score (concerned with pupil and professional learning ethos) and their 2002 KS2 performance - both raw and value added. At the secondary level, positive and statistically significant correlations were also found for both factor 1 and factor 2 (concerned with within school support for professional learning) - but only in terms of schools value added GCSE performance (and not raw GCSE performance).

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[15] Note that for primaries pupil fte is positively correlated with aspects of PLC factor 2 but negatively correlated with aspects of PLC factors 1 and 4.
[16] The method employed to calculate value added involving multilevel analysis is described in a separate technical appendix to this report.

Of course, it should be noted that the relationships are fairly weak (no correlations reported are greater than 0.3). However, it could be argued that this would be expected given any statistical relationship is likely to be tenuous between process measures collected as a snapshot at one point in time and pupil performance and progress over a relatively long time period (4-5 years).

These findings are important as they demonstrate - possibly for the first time - a weak but positive link between PLC characteristics and pupil outcomes, particularly value added performance which measures the relative progress of pupils in a school in comparison to pupils in other schools (arguably one of the most valid measures of school 'effectiveness'). It appears that the greater the extent of staff involvement reported by primary and secondary schools in professional and pupil learning the higher will be the level of pupil performance and progress (see Figures d. and e. for an illustration of this link). Moreover the greater the extent of staff involvement reported by secondary schools in terms of within school support for professional learning the higher will be the estimated level of pupil progress.

Table 3.7   Primary (KS2 mean score) and secondary (KS4 total GCSE/GNVQ) raw and value-added residuals correlated with aspects of PLC factors (derived from EPLC survey part1)

	Primary residuals		Secondary residuals	
	KS2 mean score RAW	KS2 mean score Value Added (from KS1)	KS4 total GCSE/GNVQ RAW	KS4 total GCSE/GNVQ Value Added (from KS2)
All schools single factor score 1	.227**	.211**	ns	.165*
All schools single factor score 2	ns	Ns	ns	.178*

Note: Number of schools for secondary correlations is 153 and 187 for primary correlations
   *   indicates Pearson's correlation coefficient is significant at the 1% level (2 tailed test)
   **   indicates Pearson's correlation coefficient is significant at the 5% level (2 tailed test)
       ns   means not statistically significant

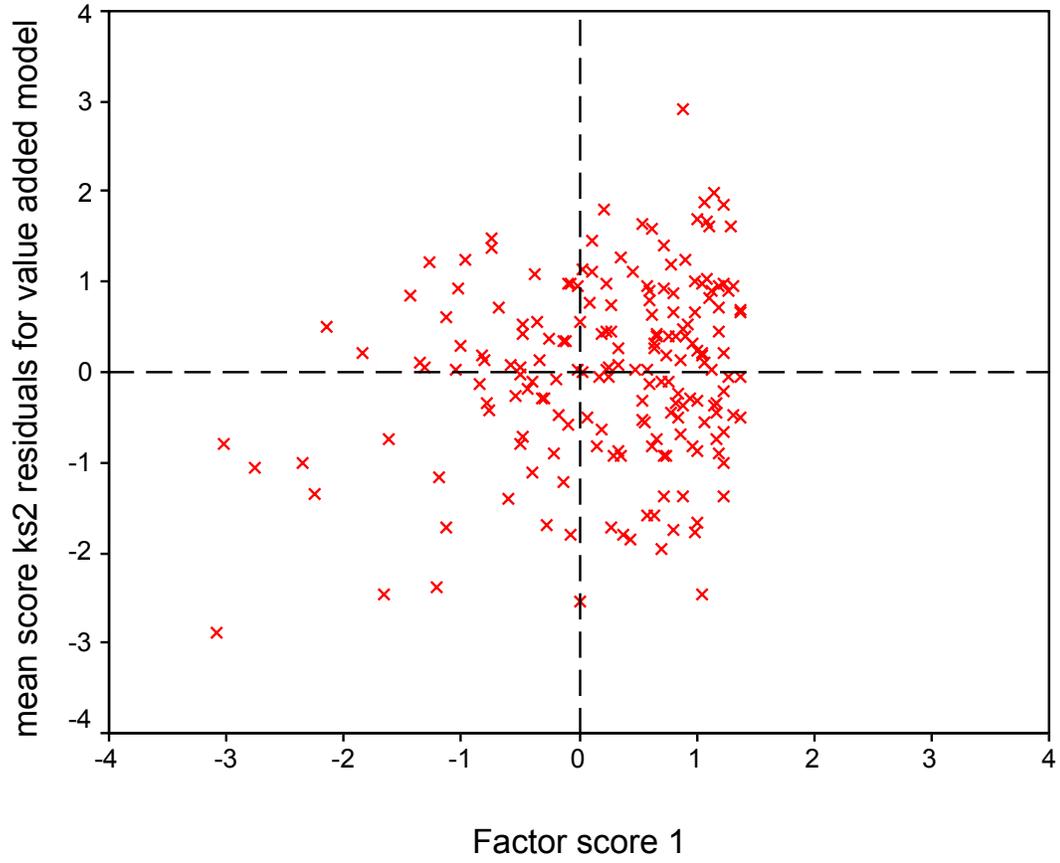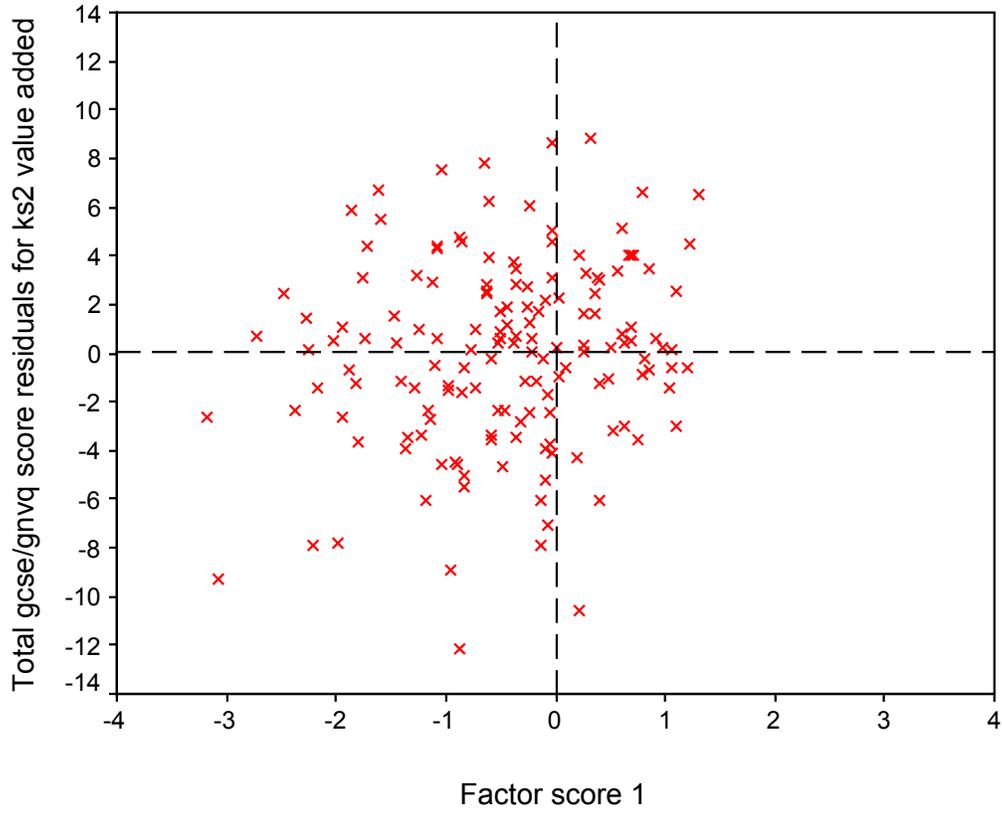**Figure d**   **Primary schools value-added residuals versus Factor 1 scattergraphs**

Figure e   Secondary schools value-added residuals versus Factor 1 scattergraphs

We also examined the relationship between pupil outcomes and the individual items from Part 1 of the Survey (see Table 3.8). As expected, the findings support those from the factor results reported above. Several positive and statistically significant correlations (at 0.05 level) were found - but only two were fairly strong (r>=0.3) - and most relate only to the primary phase and to pupil and professional learning (reflected by factor 1).

There are only three items that are statistically significant across both the primary and secondary phases and the evidence tentatively indicates that these aspects of a PLC are key in terms of enhancing pupil progress. Positive relationships were found between value-added (VA) residual outcomes and *teachers creating the conditions for pupils to feel the confidence to learn* (Q3; r=0.214 for primary and 0.202 for secondary schools), *teachers sharing a common core of educational values* (Q18; r=0.212 for primary and 0.188 for secondary schools), *teachers seeing the school as stimulating and professionally challenging* (Q30; r=0.187 for primary and 0.208 for secondary schools). In the main, these are significant at the 0.01 level, apart from Q3 and Q18 which are significant for the primary phase at the 0.05 level. A positive relationship (at the 0.05 level) was also found between primary VA residuals and *teachers experiment and innovate in their work* (Q27).

Finally, we also examined the relationship between pupil outcomes and the 'factual' items from part 3 of the survey (see Table 3.9). Both positive and negative statistically significant correlations (at 0.05 level) were found, six indicating a fairly strong relationship (r>=0.3). Not surprisingly, the most significant correlations were found between pupil outcomes and items related to the status of the school such as being in an Education Action Zone or part of an Excellence in Cities initiative (negative relationships) or being a Beacon, 'having other working links' or Specialist status (positive relationships). Clearly, a school's involvement in these kinds of initiatives is often related to school performance and effectiveness.

Also interestingly at the primary level, weak but statistically significant associations were found between school VA residual outcomes and the degree to which staff were monitoring pupil progress (r=0.153). This finding supports previous research that underlines the need for systematic monitoring of pupil progress in schools to improve school effectiveness. At the primary level the total number of supply teaching days for 2001/02 was significantly negatively correlated with raw pupil outcomes (r=-0.227) – suggesting that frequent teacher absences have a detrimental effect on pupil outcomes.

Table 3.8   Primary (KS2 mean score) and Secondary (KS4 total gcse/gnvq) Raw and Value-added residuals correlated with PLC process items (from EPLC Survey part1)

	KS2 residuals		KS4 residuals	
	KS2 mean score RAW	KS2 mean score Value Added (from KS1)	KS4 total GCSE/GNVQ RAW	KS4 total GCSE/GNVQ Value Added (from KS2)
Q1:collective responsibility for pupil learning	.186*	.176*	ns	ns
Q3: create conditions for pupils to feel the confidence to learn	.186*	.214**	ns	.202*
Q4: learn together with colleagues	Ns	.165*	ns	ns
Q5: ensure pupils receive constructive feedback about their work	.198**	.162*	ns	ns
Q7: set learning targets for individual pupils	.151*	ns	ns	ns
Q11: have low expectations of children	-.258**	-.178*	ns	ns
Q13:have dedicated time for classroom observation	.238**	ns	ns	ns
Q15: actively seek and use feedback from pupils	.200**	.168*	ns	ns
Q17: use professional/subject associations for professional learning	.164*	.155*	ns	ns
Q18: share a common core of educational values	.249**	.212**	ns	.188*
Q19: use the staff room at break times for professional links	.229**	.177*	ns	ns
Q20: are satisfied with their job	Ns	ns	ns	.211*
Q21: use e-learning opportunities	Ns	ns	ns	.213*
Q22: say their workload is too heavy	Ns	ns	.190*	ns
Q25: regularly discuss teaching methods	Ns	.163*	ns	ns
Q27: experiment and innovate in their work	Ns	.191**	ns	ns
Q28: receive training in how to work and learn in teams	Ns	ns	ns	ns
Q30: see the school as stimulating and professionally challenging	Ns	.187*	ns	.208*
Q37: use LEA advisers/support staff for professional learning	Ns	ns	-.171*	ns
Q38: have opportunities for work shadowing	.165*	ns	ns	.191*
Q43: use professional development profiles/portfolios	Ns	ns	.192*	.186*
Q44: receive financial support from the school for award-bearing courses	Ns	.173*	ns	ns
Q46: say they experience undue stress in their work	Ns	ns	.182*	ns
Q48: systematically feed back the outcomes of external courses to colleagues	.180*	ns	ns	ns
Q55: NTSS share responsibility for pupil learning	Ns	ns	-.164*	ns

Note: Number of schools range from 134 to 152 for secondary correlations and from 165 to 186 for primary correlations. Only items with at least one statistically significant correlation are included.

*   indicates Pearson's correlation coefficient is significant at the 1% level (2 tailed test)

**   indicates Pearson's correlation coefficient is significant at the 5% level (2 tailed test)

ns   means not statistically significant

Table 3.9   Primary (KS2 mean score) and Secondary (KS4 total gcse/gnvq) Raw and Value-added performance (residuals) correlated with factual items (from EPLC Survey part 3)

	KS2 residuals		KS4 residuals	
	KS2 mean score RAW	KS2 mean score Value Added (from KS1)	KS4 total GCSE/GNVQ RAW	KS4 total GCSE/GNVQ Value Added (from KS2)
Q70: sum of pupil outcome and progress data	Ns	.153*	ns	ns
Q73: Total number of hours per week allocated to the manager/coordinator of CPD	-.165*	ns	ns	ns
Q74i: Number of teaching staff involved in the last two years in sabbaticals	-.213**	ns	ns	ns
Q74v: Number of teaching staff involved in the last two years in NPQH	-.158*	ns	ns	ns
Q77i: Total number of teaching days since September 2001 covered by supply teachers	-.227**	ns	ns	ns
Q78iv: The school is in an Education Action Zone	-.280**	ns	-.270**	-.208*
Q78v: The school is in an Excellence in Cities initiative	-.225**	ns	-.200*	-.282**
Q78viii: The school is a Beacon school	.247**	.195*	ns	ns
Q78ix: The school is a Specialist school	Ns	ns	.191*	.249**
Q78x: The school has other formal working links	Ns	ns	.227*	.286**

Note: Number of schools range from 78 to 152 for secondary correlations and from 131 to 180 for primary correlations. .
Only items with at least one statistically significant correlation are included.

* indicates Pearson's correlation coefficient is significant at the 1% level (2 tailed test)
** indicates Pearson's correlation coefficient is significant at the 5% level (2 tailed test)
ns means not statistically significant

6.   SUMMARY OF MAIN FINDINGS FROM PARTS B-D

Part B: PLC characteristics - the findings about professional learning in the school.

- Some key PLC characteristics are more or less common in all schools than others (eg. *opportunities for work shadowing* and *experience job* rotation were generally less common).
- Some key PLC characteristics are more or less variable amongst schools than others (eg. *dedicated time for classroom observation* and *protected time for joint planning and development* were more variable).
- The validity of a PLC conceptualised in three developmental stages (mature, developer, starter) was largely confirmed in the analysis of individual questionnaire items. However, the concept seems to relate more to PLC characteristics (*ie* the extent of staff involvement in aspects of PLCs), rather than the 'factual' features of PLCs (eg *number of staff rooms*).
- Primaries generally reported higher levels of teacher involvement than secondaries for part 1 'process' items. In contrast, primaries generally reported lower frequencies than secondaries for part 3 'factual' items. However, there were some important exceptions to this general pattern particularly for part 3 'factual' items that related to school improvement.
- At least four factors (derived from part 1 'process' items) appear to exist:
    - 1   Professional and pupil learning ethos
    - 2   Within school policy, management and support for professional learning
    - 3   Enquiry orientation (external and internal)
    - 4   Participation of non-teaching staff in PLC

The findings indicate that a PLC is multi dimensional and also that three developmental stages (mature, developer, starter) may be too crude to measure the complexity of PLC's.

Part C: Validity issues concerning the measurement of characteristics

- There was some evidence of relationships between characteristics and factual information, where this would be expected, thus demonstrating the internal validity of the questionnaire.
- There was some limited evidence that aspects of context (*eg* size and %fsm) are related to particular PLC factors and part (3) items. These findings tentatively suggest that some PLC characteristics and processes may be enhanced or hindered by the advantages or disadvantages of particular contexts (eg smaller size may allow greater opportunities for collaboration, high %fsm may indicate higher funding levels for CPD).

Part D: Relationship between processes and facts and pupil outcomes

- There was weak but positive evidence of a relationship between two 'aspects of PLC' factors (factor 1 concerned with professional and pupil learning ethos and factor 2 concerned with support for professional learning) and, a minority of part 1 'process' items and part 3 'factual' items and pupil outcomes – both raw and value added. These findings were subsequently confirmed by further more sophisticated multilevel analyses (see Smith and Thomas, 2004b).

Chapter 4   The Case Study Findings

1.   INTRODUCTION

This chapter presents key findings from the case study sites in three parts. Part A summarises the methodology used - how the sites were selected, the rationale for the four rounds of data collection, together with the research methods, samples and extent of data collection. Part B presents a summary of the cross-site findings. Part C presents accounts of the findings on PLC characteristics and processes within each phase of schooling. These accounts include examples, quotations and vignettes to illustrate the practical realities of a PLCs in particular settings.

2.   PART A: METHODOLOGY

a. Selection of Case Study Sites

We aimed to identify sixteen case study sites using the survey returns as the starting point, prioritising those respondents who had indicated willingness for the school to be involved. We also checked that the responses to individual items in these survey returns were consistent with the respondent's identification of the school as being at a particular stage of PLC development. Beyond this, the main selection criteria were:
1.   phase of schooling - nursery, primary, secondary, special;
2.   self-reported stage of PLC development - *early starter*, *developer*, *mature*.

We then sought to ensure that the sixteen sites selected would display diversity according to the following criteria:
3.   school size (eg small primary/large secondary);
4.   demography (in different regions across England);
5.   governance (eg community school, county school, church school);
6.   location (eg urban/rural);
7.   socio-economic status of pupils (indicated by percentage receiving free school meals);
8.   ethnicity of pupils (indicated by percentage from ethnic minority backgrounds);
9.   status/involvement in relevant initiatives (eg Beacon school, Early Excellence Centre, Educational Action Zone).

The profile of the 16 case study sites selected according to criteria 1 and 2 was as summarised in Table 4.1

Table 4.1   Sample of case study sites

School phase	'early starter'	'developer'	'mature'	'additional'	Total
Nursery	1	1	1	0	3
Primary	1	1	1	1 'early starter' 1 'developer'	5
Secondary	1	1	1	2 'developers'	5
Special	1	1	1	0	3
TOTAL	4	4	4	4	16

The diversity of these 16 sites and their contexts, according to criteria 3-9, was as follows:
- *school size* - nursery schools ranged from one to two-class, primary schools had between four and eight classes including a nursery, secondary schools catered for between 550 and 1300 pupils and covered three age ranges - 11-16, 11-18 and 13-18, special schools ranged from a 130 place organisation for 11-19 year olds to 70 a place nursery for 2-5 year olds;
- *demography* - located in the southwest, midlands, northeast, east, south and southeast of England;
- *governance* - community nursery schools, county and voluntary controlled (church of England) primary schools, county secondary schools, and maintained and a non-maintained special school;
- *location* - encompassing rural villages, small towns, major conurbations, and inner city settings;
- *socio-economic status* of pupils - from mainly working class industrial districts or estates to middle class rural commuter villages;
- *ethnicity* of pupils - from almost entirely white heritage pupils to almost entirely pupils from ethnic minority backgrounds;
- *status/involvement in relevant initiatives* - ranging from central government initiatives (eg Beacon school, Early Excellence Centre, Educational Action Zone), through national agency initiatives (eg Networked Learning Community, Investors in People), to local cluster groups of schools.

b. Data Collection Methods

The three main data collection methods used were:
- semi-structured, confidential interviews with individuals (and occasionally small groups);
- document analysis (eg. school prospectuses, Ofsted inspection reports, handouts from in-service training days, school development plans);
- non-participant observation of collective activities connected with leading and managing the PLC (eg. senior leadership team meetings, secondary school departmental meetings) or designed as professional learning opportunities (eg. in-service training days, cluster group meetings, lesson planning meetings).

A series of 28 research questions, grouped according to topic, was derived from the project aims, the initial literature review and the emergent conceptual framework (Appendix 4.2). An indicative interview schedule is included in Appendix 4.3. These research questions were addressed through four major rounds of data collection at each case study site. From the 2002 autumn term to mid-summer 2004, 98 person days were spent in carrying out 301 interviews and 22 observations in these four rounds.

Round 1: Initial visit
The purpose here was to discuss project aims and data collection arrangements and to gather relevant contextual information through a preliminary interview, touring the school site, and collecting documents. Preliminary interviews were conducted with the headteacher, where possible, a deputy headteacher and the CPD coordinator or whoever else fulfilled this role.

Round 2: Baseline data
The purpose here was to obtain a detailed picture of each PLC at the outset of the project. Additional documents were also collected as appropriate. The sample for interviews included the following categories of staff, as appropriate to the size and phase of school: the

headteacher; the CPD coordinator or whoever else fulfilled this role; a deputy headteacher/head of a key stage group of classes; secondary school heads of subject department/school primary subject or department coordinators; class teachers (possibly in a subject department/key stage group of classes); support staff in different roles (eg. nursery nurse, science technician, secretary, bursar). The emphasis in this round was on five principal topics:

A. Membership and number of PLCs: research questions 1-4
B. Characteristics of a PLC: research questions 5-6
C. Stages of development and transition over time: research questions 7-9
D. and E: Effectiveness and impact on staff and pupils: research questions 10-12

Round 3: Process of PLC operation

The purpose was to obtain a detailed picture of the actual operation of each PLC over a period of approximately 12 months. As appropriate for each site, the sample of interviewees included the headteacher; the CPD coordinator or whoever else fulfilled this role; another senior member of the teaching staff who was also centrally involved in promoting an effective PLC (eg deputy headteacher); teaching and support staff engaged in an area of reported collective good practice or a collective initiative that involved both teaching and support staff and entailed CPD and/or work-based learning opportunities directly promoting effective pupil learning. Selected observations were carried out and additional documents were collected as appropriate. The research questions for this round covered the following principal topics:

A. Consciously promoting the development and sustaining of a PLC: research questions 13 and 15
B. C and D: Provision of professional learning opportunities: research questions 14 and 16-18
E. Effectiveness of PLC operational processes: research questions 19-21
F. Evaluating the process of PLC operation: research questions 22-25
G. Facilitatory and/or inhibitory factors: research questions 26-28

Round 4: The evolution of a PLC

In the final round of data collection, we revisited selected research questions that we had addressed in earlier rounds. The following categories of informant were interviewed, as appropriate to the site: the headteacher; the CPD coordinator or whoever else fulfilled this role; a head of department/key stage coordinator; an informant who had an overview of the development of the PLC over the previous academic year, who might have a critical perspective; a member of the support staff; a newly qualified teacher; the chair of the school governors. In addition, a group of students was interviewed in a minority of sites. Selected observations were carried out and any final documents were collected as appropriate. The research questions for this round covered two main topics:

A. Aspects of PLC evolution: research questions 5, 8, 14, 15 and 26-28
B. Evolving promotion of an effective PLC: research question 13

3.   PART B: SUMMARY OF THE CROSS-SITE FINDINGS

These findings are, in general, presented in the order in which they were collected during the four rounds. Where it made more sense to present them out of sequence in order to link them to related findings, this is indicated.

a. Membership and number of PLCs

In Round 2 (Topic A: research questions 1-4) we investigated the problematic issue of PLC membership. The PLC concept was likely to be unfamiliar amongst staff in UK schools, and it was important to be able to distinguish between degrees of involvement in professional learning across each school community. Staff turnover meant that membership would evolve as individuals entered and left the PLC. Following discussion with Steering Group members and the Initial Visits, we adopted a four-fold categorisation:

- *internal professionals* - qualified teachers and headteachers were clearly the core members of the PLC. Teaching assistants (also known as learning support assistants (LSAs) might also be close to that core;
- *internal non-professionals* - parents and governors (non-employee members of the school organisation), 'other' support staff, and possibly pupils;
- *external professionals* - LEA and university staff and consultants, staff from other schools involved in networking, officials from agencies supporting the school;
- *external non-professionals* - wider community or business representatives.

In summary, in all 16 cases, the PLC appeared to include teaching staff and those support staff who worked with them to promote pupil learning (eg. LSAs, nursery nurses, technicians). But the self-perceptions of the support staff interviewed varied across different schools, depending partly on the extent of their contribution to educational activity. There was also variation over the degree to which other support staff might be involved with pupils' education. Minimally, administrative, cleaning, caretaking and school meals supervisory staff tended to be regarded as part of an extended school community with at least some pastoral responsibility for pupil welfare and behaviour. But individuals could be more closely involved: for example, the projects' coordinator at one nursery school wrote proposals to secure funding for education projects as well as initiating the family programmes to be offered in the school.

Support staff tended to work most closely with teaching staff in the nursery, primary and special schools, at least partly connected with the predominantly generalist role of teachers. Teaching staff were always the clear leaders of teaching and learning, and most support staff took modest initiatives only in their sphere of activity, depending partly on their level of expertise and the wishes of the teacher. The demarcation between teaching and support staff tended to be stronger in secondary schools, but varied depending on the extent to which LSAs and technicians were integrated within departments and worked cross-departmentally. Those who were most highly trained, including nursery nurses or nursery officers in nursery and some primary schools, and care-workers in a residential special school, tended to share initiative-taking most fully in their area of responsibility and expertise. In most cases internal and external non-professionals were less central again, though often included in the wider school community rather than the PLC as such. External professionals, such as educational psychologists, tended to have strong professional input in their specialist sphere of activity, rather than across the PLC as a whole.

Experience and research indicated that there might be more than one PLC within a school. The existence of significant sub-PLC groups, or smaller PLCs, depended at least partly on the size and degree of educational specialisation linked with the four school phases. The nursery and special schools were all relatively small organisations, with a high ratio of staff to pupils and a major component of pupil welfare support integrated with educational provision. Staff

tended to work in sight of each other, and often staff with different roles would all contribute to supporting the learning and welfare of children in a particular teaching area. There was increasing scope for subgroups of staff to work closely together in separate locations within the building or buildings in larger primary schools and in secondary schools. Conversely there was less scope for all staff to work together with the same pupils.

As expected, departmental and senior leadership and management teams featured most strongly as a small or sub-PLC in larger organisations, especially the secondary schools. For example, the management structure at one comprised a senior management team, which included the assistant headteacher responsible for coordinating CPD, and eight subject departments. The SMT met regularly in the headteacher's office, and each department had a base room for departmental staff. The existence of these subgroups flowed from the need for close working in departments and within the senior leadership or management team, but less need for continual liaison across the school. In all cases where sub-PLCs were investigated the members were more or less integrated with the rest of the staff, for example through regular staff meetings, in-service training activities, or collaborative initiatives. In no case did a set of sub-PLCs appear to be the main professional learning community structure. In the secondary schools, departmental sub-PLCs overlapped with and cut across other groupings, most notably the pastoral support teams. Most teachers had both a subject teaching and a pastoral support role of some kind.

b. Characteristics of a professional learning community

In Round 2 (Topic B: research questions 5-6) we set out to assess the extent to which the characteristics of a PLC reported in the research literature could be identified in English schools. For the purposes of collecting baseline data and, later on, to assess how PLCs had evolved, we focused on five characteristics:

    a. shared (educational and leadership and management) values and vision;
    b. collective responsibility for pupils' learning;
    c. collaboration (focused on teaching and learning and its leadership and management);
    d. reflective professional enquiry (into teaching and leadership and management);
    e. promotion of collective (and organisation-wide) as well as individual learning.

We assumed that all five characteristics were likely to be interconnected but that not all would be displayed to the same extent (eg. a school where there was a strong sense of collective responsibility for student learning but little reflective professional enquiry).

As indicated in Appendix Table 4.4, all five characteristics were reported in some degree in each PLC or sub-PLC investigated. This finding suggested that although these characteristics had been largely derived from North American research, they were also reasonably applicable to schools in England. However, it should be noted that first, the data were collected in the second half of the 2002/3 academic year, and reflect informants' perceptions at that time and, second, data sources were limited to perceptions stated at interview. The latter could, therefore, be corroborated through other interviews and through statements in documents. However, the very limited observation possible precluded checking stated perceptions against observable practice.

We also assumed that there might be other characteristics relating to the English schools context that were not necessarily highlighted in the literature on the characteristics of PLCs;

as indicated below, two further important characteristics – related to trust and openness - did indeed emerge with greater clarity than anticipated.

c. Stages of development

We initially categorised professional learning communities in terms of their 'stage of development' - *early starter*, *developer* and *mature*. Implicit in this categorisation were the four assumptions that:
- each stage reflected increasing PLC effectiveness.
- a PLC might vary over time in the extent to which the characteristics of effectiveness were expressed;
- as a PLC made the transition between developmental stages, its effectiveness as a PLC varied accordingly;
- transition between stages might proceed in either direction, therefore including the possibility of a decline in PLC effectiveness (*eg mature* to *developer* as a result of high staff turnover).

We took each school's self-reported stage of development (in the survey) as the starting point for investigation in Round 2 (Topic C: research questions 7-9). The multi-dimensional nature of PLC development was underscored when comparing the degree to which characteristics were expressed with the putative stage of PLC development. The general picture revealed was of a loose positive association between them. However, there were significant variations between the case study schools according to their phase.

The association was strong across the nursery phase, with relatively low expression of characteristics of effective PLCs at the *early starter* stage, considerably higher at the *developer* and highest at the *mature* stage. In the primary phase, the association was less strong but still positive: expression of characteristics of effective PLCs was lowest at one *early starter* but higher at the other one; one of the two *developers* and the *mature* were categorised almost identically with relatively high expression of characteristics. The association between schools at different stages of development in the secondary phase was strong. There was a clear differentiation between the *early starter* and the three *developers*, but not much differentiation between the latter. However, there was a clear difference between these four and the *mature* school which featured higher expression of most characteristics of effective PLCs. Amongst the schools in the *special phase* there was no positive association, with the *mature* being judged as having slightly lower expression of the characteristics of effective PLCs than either the *early starter* or the *developer*. In this context, it is important to note that the three special schools were of very different types – secondary, residential and nursery.

These findings suggest that there is a qualitative difference in the extent of expression of these characteristics in different PLCs. But the notion of three distinct and sequential 'stages of development' seems to require an equal degree of expression of all characteristics at any time (all low, or all medium, or all high), and to evolve together at the same rate, which did not square well with the data. In only two schools - the *mature* nursery and a *developer* secondary – was it judged that all characteristics were expressed to the same extent.

d. Overall perceived effectiveness and impact on staff and pupils

Our starting point on the complex question of overall PLC effectiveness was to assume that each case study school site was likely to exhibit at least some, and possibly all, the

characteristics of a PLC, but that the extent to which they did so might vary and that this might change over time. Even in the school with the least collectively oriented staff, therefore, we would not wish to claim that there was *no* PLC. This approach enabled us to focus on what makes them more or less effective.

The effectiveness of PLCs was associated in the research literature with their *intermediate impact* on their members and their *impact on pupils*. With regard to intermediate impact we focused on:

- individual teaching-related and leadership and management practice;
- morale and commitment to working in the school;
- experience of others' leadership and management practice;
- experience of participation in collectivities - groups, school-wide and inter-organisational (eg networks between schools).

For pupil impact we focused on three indicators:

- attitude towards school and attendance;
- engagement with learning in the classroom;
- learning outcomes.

In summary, we found that the interviewees in Round 2 (Topics D and E: research questions 10-12) said that provision of learning opportunities and participation in collectivities did impact positively on their practice. Perceptions were, however, based largely on impression. There was little sign of consistent differences between reported impact in schools whose PLCs were at different self-designated 'stages of development'. High morale was reported in most cases. Commitment to the school was not necessarily higher in *mature* PLCs, as indicated in one nursery school where staff were interested in moving on for personal career reasons although strongly committed to their work in this school.

Similarly, the Round 2 impressionistic responses indicated a positive impact on pupil attendance and interest in learning. There was little evidence of different levels of impact according to self-designated stage of development. Socio-economic and demographic factors appeared to have a stronger impact on pupils' attitude and learning than efforts to promote an effective professional learning community. Staff across three case study schools located in the same part of the southwest region reported a high level of rural deprivation and poverty amongst pupils and parents, high unemployment and unpredictable seasonal self-employment dependent on tourism, and low educational aspirations amongst most pupils (especially boys). There were constraints on opportunities for staff professional development activities such as attending external courses or school visits and pupils' educational visits because of schools being situated in a rural area with a scattered population, few urban centres, and very limited public transport.

e. Consciously promoting the development and sustaining of a PLC

In Round 3 (Topic A: research questions 13 and 15) we set out to investigate to what extent and how headteachers, possibly with other senior staff and others such as chairs of governors, consciously or deliberately tried to develop and sustain an effective PLC. We recognised that the characteristics and processes associated with a PLC might occur without anyone necessarily being conscious of the notion of a PLC or deliberately setting out to achieve one.

In summary, we found that the headteachers in all 16 schools were key promoters of collective operations that were consistent with our notion of an effective PLC. However, they

varied over the degree to which they appeared to be doing so consciously or deliberately, and few tended to refer explicitly to the notion of a PLC at interview. That said, awareness of the nature of a PLC generally increased over the fieldwork period, especially amongst those who attended the research project workshops. In the nursery phase, the headteacher of the *mature* school demonstrated greatest awareness of what the idea of an effective PLC might entail and promoted it extensively. Similarly, in the primary phase, the outgoing headteacher at the *mature* school expressed her endeavours more in terms of an effective PLC than her counterparts in the other four *early starter* and *developer* schools. In the secondary phase, headteachers, their CPD coordinators and other SMT/SLT colleagues were central promoters of the learning community. But there appeared to be greater awareness of the idea of a PLC in four schools - *developers* and *mature* - than in the *early starter*. In the special phase, senior staff at the *developer* school appeared more consciously to promote an effective PLC than those in the other two - *early starter* and *mature* - schools.

f. Managing the provision of professional learning opportunities

Within this strategic approach to promoting a PLC, we also sought to identify innovative and effective practice in managing human and financial resources to create time and opportunities for professional learning and development and optimise its impact (Round 3, Topics B-D: research questions 14 and 16-18). This included the management of the provision of learning opportunities. We distinguished between two kinds of learning opportunities:
- the conscious provision of *intended opportunities* for professional learning;
- the less conscious and often unintended provision of *incidental opportunities* for professional learning;
- support for the transfer of learning.

We assumed that any actual professional learning from intended or incidental opportunities was ultimately an *individual* experience but in a PLC it might also be *collective* where the learning experience itself was shared, or where what was learned through an individual learning experience was subsequently disseminated to colleagues, so that colleagues also learned. A collective professional learning opportunity might thus result in combined individual learning that could not be achieved through individual learning opportunities on their own. Such professional learning might be focused either directly on promoting effective pupil learning (eg. through the curriculum and pedagogy) or more indirectly on creating conditions enabling effective pupil learning to be promoted (eg. through pastoral support, or through leadership and management tasks such as procuring curriculum resources). Intended professional learning opportunities were divided into two categories – formal CPD courses and conferences etc and work-based learning opportunities.

In summary, we found that while staff were encouraged to attend traditional external courses in all 16 schools, the diversity of informal CPD and work-based learning opportunities was variable. The range of opportunities and the feasibility of taking them up appeared to depend in part on factors that were largely beyond the control of senior staff:
- headteachers and, where employed, CPD coordinators differed in their awareness of the potential range of informal CPD and work-based learning opportunities;
- the adequacy of funding was highly variable. Staff working in LEAs where a stringent budget was set, in schools where the roll was falling, or in smaller organisations reported more difficulty over financing professional learning opportunities than staff in schools with adequate budgets that could support such activity;
- staff in all schools (but most strikingly in the nursery phase) were significantly reliant on making successful bids for external funding to supplement the core budget

allocation. Writing proposals was itself a time consuming activity which had to be weighed against other priorities, especially if failure meant that the time would be wasted;

- demographic circumstances differed widely. Staff in the most rural areas had to travel considerable distances to attend external courses or cluster meetings - expensive in terms of travel and time - whereas those in the urban areas had more plentiful and feasible local choice;

- staff employment circumstances could affect their willingness to engage in learning opportunities. At one nursery school, LSAs tended to avoid activities beyond the school day. They were on part-time, fixed-term contracts, paid a low hourly rate, and most were mothers with childcare responsibilities.

The range of *planned* professional learning opportunities on offer was loosely correlated with the self-designated stage of PLC development. However, in secondary schools, the range of provision on offer also depended significantly on the extent to which heads of department actively promoted professional learning amongst their departmental colleagues, and so shared part of the responsibility for CPD coordination in their school.

The take-up of planned professional learning opportunities relied on the willingness of eligible staff to do so. In a sizeable minority of schools, informants implied that one or more of their colleagues did not wish to engage in such professional learning opportunities and so declined where they could, or remained passive during participation compulsory opportunities, such as in-service training days.

It was apparent that all staff were presented with potential *incidental* opportunities to learn through their normal work, especially when undertaking new tasks. Awareness of this potential, and attempts to harness it were much less in evidence. Exceptions included the *mature* and special nursery schools. In both cases senior staff were conversant with current academic thinking on professional learning and they arranged opportunities, such as a regular staff discussion forum, to create conditions favouring incidental learning.

We assumed that support for *transfer of learning* was required for staff to integrate whatever might be learned from professional learning opportunities into their skilful performance in the normal job setting. We found that such support was comparatively rare. In only a minority of cases did support reach beyond talk to observation and feedback. In smaller primary schools there was little non-contact time available for teachers to work together during the school day. There was greater awareness overall of the needs of new staff for induction support, though capacity to provide this support varied.

g. Effectiveness of professional learning and its management

We investigated the impact of professional learning opportunities (Round 3, Topic E: research questions 19-21). Our criteria were that:
- PLC members actually learn professionally as a result of CPD, work-based and incidental professional learning opportunities;
- they learn both individually and collectively;
- what they learn is directly related to promoting effective pupil learning or more indirectly to creating conditions enabling effective pupil learning to be promoted;
- what they learn is *valued* by promoters of effective PLCs;
- the process of PLC operation is *monitored* and action taken to maximise its effectiveness.

In summary, we found that *individual* professional learning - connected with particular CPD, work-based or incidental learning opportunities - was widely reported in all 16 schools. Examples of *collective* learning were reported in the majority of cases, commonly amongst a group of staff engaged in a shared activity. In small organisations, such collective professional learning might involve all staff, as where a whole in-service training day at a nursery school focused on promoting pupils' confidence in speaking. In larger organisations they tended to involve a sub-group, as in several secondary school subject departments where staff worked together on pupil learning outcome data. But it was less clear to what extent staff actually learned professionally from all they experienced of the *range* of intended and incidental professional learning opportunities provided in any school, as opposed to specific instances.

Reporting of indirect impact of staff professional learning on pupils' learning was similar. Individual instances could be attributed to a specific professional learning opportunity, as in one nursery school where pupils were judged to be more confident speakers following a whole staff in-service training event devoted to this topic. But informants were less certain how far the range of professional learning that was taking place impacted indirectly or directly on pupil learning.

We also investigated the effectiveness of the management of professional learning opportunities. (Round 3, Topic F: research questions 22-25). In summary, we found that, in the smaller schools, including all three nursery schools, the headteacher was the key manager of provision. In larger organisations, CPD management responsibility was shared with or allocated to a senior teacher. Where the headteacher was the sole manager, this responsibility was particularly vulnerable to issues arising that temporarily diverted the headteacher's attention. In one primary school, the declining roll and consequent budget reduction precipitated higher priority tasks for the headteacher of managing redundancy, cutting the Teaching Assistant's hours, and shouldering a class teaching load. Where the CPD coordination role was allocated to a senior teacher, problems could still occur. In one nursery and one primary school, a problem occurred for the newly appointed headteachers when existing senior staff with CPD coordination responsibility did not fulfil their role. Only when these teachers eventually left the schools did the headteachers judge it appropriate to take over or reallocate their responsibility. Performance management was viewed by a majority of headteachers as integral to the management of CPD as one means of identifying individual staff development needs.

The process of managing provision was evaluated in only a minority of the 16 schools, whether in terms of individual and collective professional learning or in terms of its potential impact on pupil learning. At the *mature* secondary school, pupil feedback was sought from a questionnaire which indicated that pupils perceived themselves to have particular learning styles and appreciated staff efforts to accommodate them. A staff development survey had been carried out in one *developer* secondary school to evaluate staff perceptions of the quality and range of professional learning opportunities on offer.

h. Facilitatory and inhibitory factors and their impact on PLC operation

We sought to identify factors which appeared to facilitate or inhibit the process of PLC operation, and so its perceived effectiveness (Round 3, Topic G: research questions 26-28). We assumed that the effect of any particular factor might be contingent on the context of a

PLC, even inhibitory in one case and facilitatory in another, and its impact might change over time. We considered potential factors at four levels of analysis:

- external (eg. national policy framework - partnerships and support networks could also be treated as external factors, especially if the impetus was coming from elsewhere rather than being initiated to bring ideas into the school);
- school (eg. school or team leadership, staff professional culture, extent of mutual caring as people rather than merely colleagues);
- group (eg. perceptions of being in an in-group or an out-group);
- individual (eg. personal career interest, experience of stress, antipathy to change, willingness to trust colleagues).

In summary, a different mix of factors was identified in each school (see Appendix Table 4.5), indicating that both external and site-level contextual factors are of paramount importance, as is exemplified in Part C, below. *External facilitating factors* included means of bringing support into the PLC, whether for the headteacher, as where there were strong networks with other headteachers and influential professionals in the LEA, or for staff more generally, as with long term cluster group arrangements. Major *internal, or site-level, facilitating factors* included:

- a strong lead from the headteacher coupled with support from senior colleagues where appropriate, on promoting professional learning in general, and provision of a wide range of professional learning opportunities for all staff in particular;
- readily available support for the headteacher, such as advice from LEA officials;
- the breadth of understanding and spread of activity on the part of whoever occupied the CPD coordination role to promote diverse forms of professional learning;
- collaborative professional relationships and mutual support amongst staff, helped where conscious effort was made to build trust and demonstrate caring;
- the drive and enthusiasm of individual staff, whether newly trained or in senior positions, fostering engagement with continual professional learning;
- an adequate or more generous operating budget, with earmarked money for specified CPD;
- site facilities that helped create space and time for collaborative working and professional dialogue.

External inhibitory factors confirmed the limited capacity of school staff to control parameters affecting PLC operation. Such factors included:

- the consequences of central government and LEA policies affecting resource parameters, as with budget constraints and even the closure of one school;
- the consequences of ambiguity or changes in such policies, generating anxiety which deflected attention from professional learning;
- dependence on external provision of CPD where quality and relevance was found lacking;
- demography of the school location, as with the isolation felt by staff in some of the rural schools and also at the *early starter* special school, for different reasons, and so constraints on the range of external sources of professional learning;
- responding to requests to support school or LEA staff in difficulties, as where the headteachers who were helping others to make a fresh start after a negative Ofsted inspection found that they were being distracted from work in their own organisation.

Site-level inhibitory factors were not necessarily controllable by senior staff either. Inevitably, a change of headteacher brought a period of mutual adjustment. The inherited

situation could be intractable, especially where individual staff were unwilling to accept the new headteacher and his or her values. Also, small size meant that staff could be very stretched fulfilling all the managerial and specialist teaching roles – as exemplified in schools of all phases.

The same factor could have different effects at different times in the same school, different effects in different schools, and even be facilitatory in one school, but inhibitory in another. In all schools, the requirement to write bids for external sources of funding took time and expertise which were not always readily available. For nursery schools, bidding was required for up to half of the budget and time spent on this initiative meant that less time could be spent on other, potentially more beneficial, activities. Extensive investment in external networking might mean that less time was available for collective learning opportunities within a PLC.

Temporary, externally imposed conditions could prove double-edged for the process of PLC operation. For example, Ofsted inspections, a move to temporary accommodation or impending closure all took energy away from what staff felt were more pressing educational concerns but they also stimulated staff to pull together to meet the challenge. In the case of an *early starter* primary, a very good Ofsted result was not enough to prevent a couple of months of 'post-Ofsted blues' among staff. But more lasting was the legacy for staff of having become used to working together more closely than before, on which the headteacher was able to build in promoting collective professional learning opportunities.

i. Evolution of PLCs over one year

We investigated aspects of PLC evolution in the 16 schools during the lifetime of the project (Round 4, Topic A**:** research questions 5, 8, 14, 15, 26, 27 and 28). In the light of the first three rounds of data collection and the ongoing literature review, we asked questions, for example, about key characteristics of PLC effectiveness and aspects of professional learning opportunities, as the basis for assessing the extent of PLC evolution over a year or more. Our data suggested that the following three characteristics were particularly salient in distinguishing differences between PLCs in our case study school sites:
- shared (educational and leadership and management) values and vision;
- reflective professional enquiry (into teaching and leadership and management);
- collaboration (focused on teaching and learning and its leadership and management).

In the baseline interviews we had distinguished between educational values and leadership and management values. For the evolution interviews we investigated both sets of values together because there had been no major discrepancy between educational values and leadership and management values in any PLC. As with the baseline data, the extent to which any characteristic was expressed was assigned impressionistically to one of three categories – low, medium and high.

In summary, in nearly three quarters of the PLCs the expression of two or all three of these characteristics appeared to remain at roughly the level of the previous year. But a significant shift in the direction of greater expression of these characteristics appeared to have occurred in four PLCs – three *early starters* nursery, primary and secondary) and one primary *developer*. All three were small to medium-sized organisations for their phase in which a recently appointed headteacher was actively promoting more collective and coherent PLC operation. Poor Ofsted inspection reports had led to a change of headteacher in two schools and a radical shake-up for other staff. Recently appointed headteachers were actively promoting more collective operation in two of the larger secondary schools but,

speculatively, their size and specialist department-based structure may have militated against such a rapid shift as could take place in smaller organisations. The overall shift was towards more collective PLC operation, possibly influenced by involvement in the research project. In no case was there any marked shift towards a more individualistic PLC.

We also investigated the evolution of three further dimensions of PLC operation, the importance of which had become clear during the course of fieldwork:

- the range of professional learning opportunities to which PLC members have access (though these opportunities may not necessarily be taken up);
- the amount of participation in external networks or more formal partnerships;
- mutual trust, respect and support.

Here, too, the extent to which any characteristic was expressed was assigned impressionistically to one of three categories – low, medium and high.

In summary, a similar general evolutionary picture was also evident across the16 PLCs: of either maintaining the earlier level or effecting gradual increase. Even in small schools, evolution is likely to be incremental, and will be only partially amenable to control by senior staff. In schools where long-term inhibitors cannot be removed, for example demographic isolation coupled with a tight budget, staff may at most be able to sustain a level of PLC operation with occasional movement towards more collective operation. Equally, where major and relatively uncontrollable inhibitors have not undermined the efforts of senior staff, as at the *mature* nursery and secondary schools, it seems evident that a high degree of collective PLC operation can be developed gradually and also sustained as long as such inhibitory factors do not subsequently arise. The instance of the closing primary school illustrates graphically how such a factor can surface and undermine what has taken staff years to nurture despite their stoic endeavour to sustain the high degree of collective PLC operation that they had achieved.

The dimension of mutual trust, respect and support is, perhaps, in a class by itself. The evidence indicates that, like other aspects of professional culture, leaders cannot simply make these happen. It also suggests that a high degree of PLC-wide mutual trust, respect and support is not necessarily essential for a considerable degree of collective PLC operation, as was apparently the case at one *developer* secondary school. But equally, its importance is demonstrated by the mutual adjustment that took place in every instance of a new headteacher being appointed. Mutual trust, respect and support cannot directly be made to happen but much interview evidence indicates the sorts of things that can be done, especially by senior staff, to ensure that PLC members have the sort of positive experiences that demonstrably facilitate the gradual establishment and strengthening of the PLC itself.

In sum, all three of these dimensions were confirmed as having a significant contribution to make to PLC operation and so the potential for maximising collective and individual professional learning. They further reinforce the idea that the development and sustaining of effective PLCs is best conceived as evolution along multiple, semi-independent dimensions rather than sequential stages.

In Round 4 (Topic B: research question 13) we also focused on the evolution of practice and awareness over:

- the management and coordination of school structures and organisational arrangements to promote an effective PLC;
- the extent to which the attempt is made consciously to develop and sustain an effective PLC.

It was noted above how the sustained effort of headteachers and, in large organisations, CPD coordinators and maybe a small number of other senior staff, were crucial in leading the promotion and sustaining of an effective PLC, whether or not they conceived what they were doing in these terms. In secondary schools especially, heads of department could play a key role in maximising the potential for collective professional learning in their department. It was notable how awareness of the idea of an effective PLC was becoming more apparent in the language of senior staff interviewed towards the end of the project.

In summary, a range of management strategies for promoting or sustaining an effective PLC was reported to be working including:

Roles of all Staff
- developing the role of LSAs to work more closely with teachers;
- including a focus on teaching and learning in the brief for all PLC members, whatever their specialism or leadership and management responsibility;
- directing the major focus of all secondary school specialist staff towards the curriculum and promoting literacy across this curriculum;
- concentrating on support for the professional development of secondary school heads of department as leaders of professional learning in their department.

Appointing, Inducting and Promoting Staff
- seeking every opportunity to appoint and support beginning teachers to bring new ideas and enthusiasm which may rekindle interest in professional learning amongst longer-serving colleagues;
- where feasible, giving internal promotion to committed and competent staff with potential for greater leadership and management responsibility.
- attempting to appoint new staff who will both fit in with present PLC members and take a lead on further development activity;
- discussing core educational beliefs and values with incoming staff;
- providing a comprehensive induction programme for new staff over an extensive period of time.

Management Structures and Procedures:
- creating more non-contact time and using it for working alongside each other or observing each other's practice;
- establishing a system of regular planning meetings for different groups;
- making full use of the performance management system to identify individual development needs;
- senior staff delegating managerial responsibilities that are not directly related to teaching and learning so that they can concentrate on this core professional focus;
- fostering professional dialogue by creating shared spaces and time for staff to interact.

Professional Development
- seeking IIP status as a means of raising staff awareness of the importance of professional learning and boosting their morale through external acknowledgement of their good practice;
- providing individual staff with a professional development folder and guidance on how to use it as a vehicle for reflecting on their professional learning needs and successes.

- actively seeking involvement in external initiatives while being selective, opting for those that best fit what staff are trying to achieve and what would be manageable, given their other commitments;

Retaining an Emphasis on Professional Learning
- headteachers continuing to set high expectations and acknowledging colleagues' efforts retaining a constant focus on pupil and adult learning, whatever external pressures and threats might arise;
- revisiting statements of core purpose occasionally with all staff so that they remain relevant as the PLC and educational provision evolve;
- distributing the promotion of professional learning as a shared responsibility of secondary school senior and middle managers in secondary schools.

Focusing on the community aspect of the PLC
- consciously seeking to promote mutual trust, respect and support

j. Conclusion on cross-site analysis

Overall, the findings from the three main rounds of data collection indicate clearly that the endeavour to promote and sustain an effective PLC may be carried out more or less consciously. But the more conscious a promotion and sustaining activity is, the more likely it will constitute a single and coherent *strategy* rather than piecemeal and possibly tangential efforts. In most PLCs, the leading effective PLC promoters (and, in some cases, also sustainers) were becoming increasingly aware of how the various aspects and dimensions of PLC operation could be planned, worked on and evaluated together. A strategic approach could maximise the potential for mutually enhancing linkage between different aspects and dimensions, in the interests of maximising the potential for the collective professional learning that promoters and sustainers valued.

Further, while promoting and sustaining activity had a very significant temporal dimension in that the degree of collective operation might ebb and flow, there was no obvious transition from promotional activity to sustaining activity in any PLC. The ways in which headteachers and senior colleagues promoted and attempted to sustain a high degree of collective PLC operation remained, by the end of the data collection period, very largely those that they had been using at the time of our initial round of interviews. Just as with the heuristic notion of 'stages of development', there was not a two-step sequence with clear-cut boundaries between the endeavour to promote and the endeavour to sustain an effective PLC. The difference was of emphasis: from attempting to foster a valued state of affairs which had yet fully to come about (promotion), to attempting to service and protect a valued state of affairs which had very largely happened, but might not last without continuing effort (sustaining). Many of the activities that senior staff worked to put into place when promoting the development of a more effective PLC were in place in those PLCs which operated most collectively. To sustain this valued way of working, senior staff were primarily concerned with consolidating and improving further what they regarded as good practice, warding off anything that threatened it, and inducting newcomers into the PLC and the existing way of operating.

Promotion activities remained ongoing, even in the professional learning communities in the two schools, one nursery and one secondary, where the characteristics of effective PLCs were most extensively expressed, and where the various aspects and dimensions of collective PLC

operation and interpersonal caring were most in evidence. We found nothing to suggest that these PLCs were *self*-sustaining. Indeed, any complacency and slackening of effort might jeopardise the collective operation of the PLC that had been achieved. The promotional and sustaining effort could never cease because both the contexts and the PLCs themselves never ceased evolving.

The significance of context, and changes in it, were critical. Staff turnover varied widely but was never non-existent, new central government initiatives for different phases of schooling offered new opportunities as older initiatives were wound up, and the prospect of being held accountable through different means was ever-present - whether in terms of targets and assessment of learning, or the prospect of another Ofsted inspection sooner or later. Therefore, each PLC would inevitably continue to evolve with the evolution of its context. Without a strategic effort to continue shaping that evolution, insofar as it was amenable to shaping, the collective operation of the PLC could disintegrate by neglect. In consequence of the centrality of context, what promoters and sustainers of an effective PLC did and what appeared to work or not depended on a blend of internal and external features and evolving facilitatory or inhibitory factors, which in its detail, was unique to each PLC. What might work now might not work in future as the PLC and its membership evolved. What did not work now might do so in future.

Finally, there was also a delicate balance to be struck in promoting or sustaining activity between doing what was perceived to be a good thing and avoiding too much of a good thing. Setting high expectations, and enthusing and engaging staff and other community members were widely perceived as necessary to promoting and sustaining an effective PLC. But there was some indication that overly high expectations could demoralise staff who could not meet them and tire out those who could. Enthusiasm to excess could be perceived as insincerity and so breed cynicism. All-absorbing engagement in education risked burnout because it could exclude PLC members' other life interests and commitments necessary for a sustainable work-life balance. Paradoxically perhaps, sustaining PLC members' effort, enthusiasm and engagement in the longer-term appeared to be facilitated by giving them regular enough opportunities to distance themselves from the PLC and the day-after-day intensity of involvement in collective professional learning that it could entail.

4.   PART C: SUMMARY OF PHASE FINDINGS

In this section we present details of the findings within each phase of schooling. Our purposes are threefold:
- to provide examples, quotations and vignettes as practical illustrations of PLC operation;
- to highlight key issues of a general kind;
- to highlight phase or context specific issues.

The findings are presented in the order in which they appeared in the research questions at each stage of data collection. First, there are eight PLC characteristics followed by four processes of PLC operation. The practical illustrations are placed under the most relevant heading but, as will be apparent, the characteristics and processes often interconnect.

a.   Membership

In all three nursery schools, the PLC was considered to include all staff working in the school and in some cases beyond the school boundaries. For example, one headteacher said that

everyone connected with the school was a member of the learning community, although she drew a distinction between the teaching team, *in which I include the nursery nurses,* and the extended staff team, *which includes cleaners, caretakers, dinner ladies and governors as well.* This distinction related to specific tasks and responsibilities, for example, only the teaching team were involved in the daily meetings before school but the extended team were often involved in school functions. Lunchtimes and break times were seen as part of the children's learning experience and support staff were making an active contribution to learning at these times.

Without exception, support staff were included as members of the PLC in the five primary schools but here, too, there was a distinction between those staff involved in the 'inner core" of the PLC and those in more peripheral positions. The question as to who was 'inside' and who was 'outside' the core also varied between schools. Common to all was the potential for supporting teachers in delivering a positive impact on pupil learning, whether directly by working in class or indirectly by, for example, ensuring lunchtimes ran smoothly or the school building was kept in good order. Non-teaching support staff, who included lunchtime supervisors, administrative staff and caretakers, tended to make up this peripheral group.

Classroom support staff played a significant role in the classroom and with the advent of workforce remodelling this will increase and evolve. Without exception Teaching Assistants (variously called LSAs, TAs, and GAs) were regarded as members of the PLC. However, the degree of inclusion varied, as did their qualifications and roles and, as mainly part-time employees, their working patterns differed from teachers: all three influenced the initiatives they took. There was a close working relationship between TAs and teachers in all the primary schools and they frequently shared responsibility for pupil learning. The teacher normally planned the work and the TA worked with individual pupils or a small group, alongside the teacher or in a group room.

There were some sub-groups in the schools and, especially in larger schools, key stage departments often operated as smaller PLCs but they were all closely integrated with the overall school PLC. The common factor was that both professionals and para- professionals, that is teaching and classroom support staff, were members.

In the primary school facing closure, despite the many staff changes and the unusual number of supply teachers, all interviewees said that they felt that they were members of the PLC. One teacher said:

> *...there's no real pecking order. The beauty of this place is that everybody works as a team. There is no one who would say 'this job is far superior to that one', whether it be the headteacher or the cleaner. They are all part of the same team and it is a quality team.*

This inclusive approach was echoed by another primary school headteacher:

> *Everyone, including the caretaker. It's the whole school staff, we all do our bit. The caretaker is brilliant, he goes on school visits with the children and gets involved. We have two cleaners, they are here one hour a day - it's difficult for them, the children are gone, but they are always invited to anything that we arrange, staff dos - they are seen as part of the community but it's difficult for them I appreciate that.*

In all five secondary schools the PLC was reported to involve all teaching and support staff although there was some variation about the extent to which others were included. Comments from staff in the different schools give a flavour of their approach.

it is a very strong team of staff and that's everyone, the support staff, caretaker, kitchen staff, everyone works together, it's a very good community and the students are fabulous and the relationship between the teacher, all the staff and the children is really good, very strong   (Secondary deputy)

In another school all staff were regarded as members of the PLC and parents and students were also included. The head said:

We've always worked with parents and children as an extended family, we talk about the family and the extended family and we talk about family values. . . Respect is given to all colleagues, right through to our six-hours a week cleaners. They feel very proud.

In a third school, although the head saw all staff who worked in the school as the core of the PLC, he recognised that, because of issues of teaching and learning, more support was given to teachers and LSAs and less to administrative staff.

The question of who is included in the PLC takes on a particular form in special schools, where support staff can outnumber teachers. At the special secondary school, everyone in the school community was seen as a member of the wider PLC – teachers, Special Needs Assistants (SNAs), caretaker, lunchtime support assistants, nurses as well as staff on the buses that brought the children to school. The core members were the teaching and classroom SNA staff and two of the senior SNAs were also members of the senior management team. Teachers and SNA's had developed a very close working partnership. Given the organisation of the timetable into subject lessons, the SNA who stayed with the class might have a deeper knowledge of the students than the teacher and several teaching staff commented that the SNA's made a key contribution to planning.

. . .it would include special needs assistants. I mean I think it's our experience ... all my teaching colleagues I suspect would agree with this ... they are a very valuable resource. Not in the old terms as they used to say, they're just there to wipe noses and comfort us - they make a very real contribution to students' learning. They have insights and experience and knowledge that can be of great benefit. And I certainly value them when I plan. (deputy head)

At the residential school, with its wide age range, there were several organisational structures and sub-groups - eg. domestic staff, induction staff, instructors, as well as the three departments - junior, main school and extended education - each with their own distinctive approaches. Historically the care and education sections had been separate largely because they operated on different timetables and in different physical locations within the school. The principal had made it a priority to integrate these two sections and interviewees were agreed that this had happened. In the broader sense of community, pupils and parents too were included.

At the special nursery, which saw itself as a 'mature' PLC, all staff were seen as core. There were four classes with three staff in each team (1 teacher with 2 LSAs). Teams met to debrief at the end of each day, each week for a planning lunch-time, and each month with the speech and language therapist. The outreach team met together about once a month. Ofsted had commented very favourably upon the good working relationships between staff. There appeared to be a single PLC despite the fact that the nursery was involved in a variety of activities - some nursery based, the other outreach. However, the head recognised that the Saturday staff felt less involved.

b.   Shared values and vision

Headteachers and staff in all three nursery schools felt that there were shared educational values and vision, although the newly appointed head in the *early starter* school suggested that this did not include everyone. When they described their shared values and vision, staff in all three schools usually responded by referring to the development of the whole child:

> *I think we all believe we want to get the children to be confident and have lots of self esteem, and be able to be independent. We all want that. To be able to leave home and be independent. To be active learners, to do everything themselves and not rely on us too much*. (Nursery nurse)

Educational values were demonstrated through practice. One head felt it was through her practice that she was able to share and develop her educational values.

> *I have been in the classroom a lot over the years and been part of the teaching team it's not me saying you're doing this wrong, it's me saying, how does everyone feel about this bit because I feel that we are really not doing it as well as we might. It's an ideal setting in terms of keeping quality high because being part of the team and such a small team we can all work together in that way.*

Conversely, a non-teaching head commented of the staff:

> *They have not seen me teach and so are not sure about me, and this has had a ripple effect through the school.*

In the five primary schools shared vision, purpose and values were demonstrated to a greater or lesser degree. One showed a remarkable degree of continuing commitment to core professional values in spite of impending closure, a perception endorsed by the Chair of Governors. Teachers, especially the younger ones, teaching assistants, administrative staff and the head all focused on children and their learning as the core professional act until the day of closure. In contrast, another school demonstrated only partial sharing of values and vision. The head said that people she worked with most closely shared her values and vision.

> *It's much easier to work with people who have like values to you, it's much harder to change and develop people who don't really have that faith in you. Not that you want people to be compliant, that's the last thing I want . . .*

However, when asked if these values were shared across the school the head replied, *not completely, no,* although she added that she thought most people think they are. When the school was revisited, the picture had changed. A positive Ofsted inspection, staff changes and discussions held on values, had produced a much more cohesive view.

Establishing a shared vision among staff presents particular problems in secondary schools, mainly because of their size and structure. When we explored this issue in the case study schools the complexity of the concept and task was revealed. A baseline description of a shared educational vision would be focused on academic achievement, namely that students should learn and that departments should achieve good examination results. A comment from a head of department exemplified this approach:

> *There's not a lot of mixing of departments except Heads of Department in meetings together. All the heads of department want the same thing: pupils to be on task, working towards the national curriculum, doing well at GCSE's, achieving their potential. Staff have different styles.*

Although there was evidence in all five schools that staff wanted pupils to achieve, it seemed to be clear that the shared educational vision was often stronger and more apparent in particular departments or sections of the school.

Comments from a number of staff indicated that their shared vision was developed through shared work. For example, the literacy coordinator in one school explained how she and the Head of English worked together:

> *. . . we often sit down together and ask ourselves what is missing, needs to be developed etc. She might have ideas about poetry and I about the classroom. We bounce ideas off really well. It has worked very well.*

A more complex and possibly more sophisticated interpretation of a shared educational vision is that it is about the nature of pupil learning and how better to understand, promote and encourage learning. This broader vision can be seen as a development of the concern to raise standards of achievement rather than being an alternative perspective. In one school, where a shared educational vision was perceived to be widely in place across the school, the head commented:

> *The culture of the school is not one of a hierarchy of subjects but one that says learning is a priority and will be celebrated whatever its form is and everybody has a part to play in that.*

The deputy (curriculum) in the same school described how the leadership team worked to build this shared vision across the school.

> *We try to make the emphasis at policy level if you like, virtually every policy that we write we put the emphasis on teaching and learning, if it's a behaviour policy, a rewards and sanctions policy, an equal opportunities policy we try to put the emphasis on teaching and learning. We try to make the focus, even though we have a network of different structures and meetings that are needed to run the school in a nitty-gritty sense, all of them again have some focus on teaching and learning.*

The headteacher in a different school saw raising standards as a key issue for the school and strongly believed that members of the senior leadership team should be actively involved in teaching and learning whereas, in practice, they were more heavily involved in internal review but he recognised that there were some differences in the team about what should have priority.

In all three special schools, there was general agreement that there was a high degree of shared commitment to core professional values. The head of the secondary school said that agreed aims had been revisited in the past twelve months. Teaching and learning, and efforts to better measure achievement, had been identified as priorities. Several people said the focus on learning had increased during the case study year. The SNAs said that commitment had always been high and was increasing, citing as an example that, after training, they were now doing pupil reading tests and providing better support for teaching and learning

In the residential school, there was widespread agreement that the children and their learning were at the heart of everyone's concern. All staff interviewed supported this view, which was expressed in the school's mission statement and taken very seriously. Prior to the case study there had been a shift from a caring orientation to one that also addressed academic success. Professional expertise, based on a safe and secure environment, was seen as fundamental. The headteacher expressed some concerns about ensuring continuing commitment, given staff changes, but was basically confident. The induction of new staff focused on these values. In addition, the values were kept under review and the mission statement modified to take account of changing circumstances.

This was also a strong feature in the special nursery throughout the project, despite the disruption of a move to a temporary site for a year. Interviewees said that this was partly because it was a school where pupils arrived with very particular individual needs and this set a clear focus on learning needs as a central priority. Against this background, consistency of approach between staff was also a priority in order not to confuse the children; hence all classroom tasks were shared between teachers and support staff. There was also a strong sense, particularly from the head, of the value of compensatory education and there was clear evidence of how this influenced practice.

c.   Collective responsibility for pupils' learning

Frequent references were made in the interviews in nursery schools to teachers and support staff having a shared ethos and to whole staff discussions about the progress and successes of individual children. Planning for the learning and teaching for the whole group of children was often done collectively by teachers and nursery nurses. In all three schools the teachers and nursery nurses shared a large open plan teaching space, they got to know all the children individually and, although they might have specific responsibility for a group of children, the groups often rotated between staff over the year. A teacher in one of the schools said:

> *We do have our own groups – I suppose in my own group I feel that that is my responsibility, but in work times it is shared. If I notice something, for example if a child in someone else's group is doing something we will mention it so we do share. We make observations that someone else may not have picked up on.*

In the second school, the view of a nursery officer was:

> *. . . we all look after the children. The only way we have our own children is if there are difficulties with particular children or a family, and the key worker may know you better. But I feel no less responsible for any child here and the same is true for the others.*

In primary schools, collective responsibility for pupils' learning is multi-layered. The class teacher has ultimate responsibility and accountability for day-to-day teaching and learning whilst other teachers may be responsible for certain specific subjects. However, the class teacher is the one to whom Ofsted look to judge the quality of learning and, indeed, the quality of teaching of the TAs in that class. The implicit dilemmas are well exemplified by one Key Stage 1 coordinator who tried to develop the role of her teaching assistants; in doing this she has encouraged them to take more shared responsibility.

> *Here for quite a while teaching assistants were just literally working with children who needed support rather than doing anything else whereas now they have a huge variety of jobs and activities that they get involved in. I hope that they are finding it is a bit of a challenge and that they have some responsibility over things themselves as much as anything. That would always be my aim with my teaching assistant - she has her own role and is quite independent in that, although she is directed by me she has her own things that she does every day that I don't have to keep putting into place.*

Although one head thought there was a strong sense of shared responsibility, the non-teaching staff did not agree. Some teachers reportedly worked closely together, sharing views and ideas, and it was observed that this was easier in a small school. Amongst the Teaching Assistants there seemed to be less sharing, as they worked hourly rates and so were off site for some of the time. This led to a disjointed responsibility. This was the same school that demonstrated only partial commitment to shared vision and values.

In one secondary school the senior leadership team had a strong sense of collective responsibility and desire to do the best for all students but not a shared belief about how to achieve this. A deputy headteacher commented that shared responsibility was developing across the school but that:

> *we still have elements within staff who are not prepared to do as much as I would like or are ready to blame others.*

Another teacher pointed out that it was difficult to develop a sense of collective responsibility where there were problems with recruitment and consequent dependence on part time and supply staff. There was a sense that staff were less willing to share responsibility for the less able students. In a second school the head felt that collective responsibility wasn't strong enough across the school and was, *compartmentalised in departments.* This view was confirmed by a head of department, who commented that:

> *The only whole school view is the senior leadership team. A lot of departments are driven by their own need to get good exam results and protect their own interests.*

But, within a department, the reality could be different as indicated in this comment from a teacher who said that in his department staff working with years 10 and 11,

> *talk about shared assessment and moderation. We help each other out, sharing lesson plans and tests.*

In a third school a sense of collective responsibility was more evident in particular departments and among the younger, less experienced teachers. Where arrangements for joint teaching were in place, as in science where two teachers were allocated to each class, the potential for sharing was greater. Without collaborative work and/or access to shared information it is hard to see how staff can develop a sense of collective responsibility for pupil learning. Evidence from two of the schools reinforced the point that forms of team work and team teaching fostered shared responsibility, as this comment from a teacher in one of the schools illustrates:

> *There are three teachers teaching the same group because we teach in units at the same time. It's definitely a shared responsibility to get them through and we all pull together.*

There was evidence that the pastoral system (eg. a year team) was often a means of staff developing a wider sense of responsibility for pupil learning since working as a form tutor provided a better opportunity to build up knowledge about the whole child. Similarly, a cross curricular initiative, for example work to develop a more coordinated approach to learning at Key Stage 3, could prompt staff to take a wider perspective on pupil learning.

In all three special schools, virtually all the interviewees said there was collective responsibility for pupil learning. This was demonstrated in various ways. For example, at the secondary school each student had a statement of special educational needs and individual targets, both of which were reviewed on a frequent and regular basis by a teacher and SNA. One teacher commented:

> *…….. it's whatever area from the statement, it depends on what the student's problem areas are, what their difficulties are. Some are to do with behaviour, some with literacy, numeracy, communication, or social skills - anything in their statement. Then at the end of that term you make the next step into the target again, working towards the areas that they've identified.*

At the nursery, each class team (1 teacher with 2 LSAs) met to debrief at the end of each day, each week for a planning lunch-time, and each month with the speech and language therapist.

All activities in the classroom were shared, for example, they each took turns doing circle time, allowing other staff to observe, and each individual would notice different things. Classes met for four half-day sessions the fifth day was used to work on individual targets with parents and children at their home. Ofsted commented:

> *This is a very good nursery with many outstanding features such as the assessment of the children's needs and the partnership with the parents and carers.*

d. Collaboration focused on pupil learning

Collaboration was reported to be increasing in the three nursery schools. The most obvious example of collaboration was that teachers and support staff sat down together to plan the learning activities for the children. In one school, an LSA commented: *We are a small team and we share together.* The acting head in the same school said:

> *Collaborating as a team is very widespread. At present it is working very well. I have noticed that even if people aren't feeling 100%, even if people are tired, and there are supply teachers, people are prepared to support them, communication is good, routines are in place and expectations are shared.*

In another nursery school one teacher described how all the staff would collaborate and share ideas about any problem. Each child in this school has an individual education plan which is completed after discussion with all the staff, and she said:

> *When some child comes through the door you immediately twig there's something . . . if a child's speech or comprehension is not there. We just start talking about it - the person who has the child in the group may say, I'm really worried about X, he doesn't seem able to concentrate. Let's all watch over the next couple of weeks.*

At the next formal discussion about this child's progress the staff would share ideas and suggestions about how to deal with the problem.

Vignette: Case conferencing as an example of collective responsibility and collaboration

On the Thursday evening of every third week of term the pupils of this residential school were sent home for an extended weekend, returning on Tuesday morning. The Friday was devoted to the school inset programme and the Monday to intensive reviews of individual pupil progress with staff working in trios. We observed this latter process in action. Two lead teachers joined with the three care staff responsible for one residential floor. 'Targets' were reviewed and adjusted for each of the fourteen or fifteen boys: each boy had three targets – 1 education, 1 care and 1 joint. Most targets were related to behaviour eg. 'hands and feet'; not bullying child x; taking responsibility in the residential area etc. But others were related to classroom performance eg. 'reads more alone; 'will read each morning to a tutor'. Some targets remained unchanged; others were increased upwards or changed altogether.

Staff members were keen to ensure realistic and valued rewards for successful achievement. Each day and each activity was divided into detailed practical phases of the routine life of the school (eg. getting up, breakfast, changeover to classrooms, entering classrooms, application to work). For each activity each day, each student was awarded points on a 1-5 scale (5 = excellent). Performance was taken seriously and rewarded (eg. one boy was provided with his own magazine on aircraft – because this was a main interest). One pupil's target was to score 20 '5s' each week during school time (because, although a good pupil, they thought he was capable of much better behaviour and would respond to the challenge). In these meetings the staff members demonstrated detailed knowledge of each boy and were committed to the system.

The factors that hindered collaboration tended to be administrative rather than arising from any wish on the part of staff to work independently. Staff absence due to illness was a barrier in one school; also contractual issues could be a constraint as nursery nurses and officers were normally employed on contracts that did not include payment for attendance at any after school meetings.

In the primary schools there was evidence for the key characteristic of collaboration, as might have been expected this was mainly between support staff and teachers and it varied between schools in its extent. Where there was close cooperation and sharing of responsibility for the pupils there was increased understanding of the needs of the child and pupil learning activities were constantly reviewed with these needs in mind. In the case study schools where teachers and teaching assistants planned together and where there was a clear understanding of the learning objectives through a shared vision, TAs tended to take the initiative and devise their own teaching strategies.

In the closing primary school there remained a remarkable degree of continuing collaboration although strains, as might be expected, began to show as closure neared and looking for new jobs became a top priority for individuals. But, in a school with a relatively new headteacher, collaboration was encouraged through a professional development day on the School Improvement Plan (SIP). This brought everyone together to work on the new 'SIP', staff and governors.

There was evidence in all five secondary schools of groups of staff working together on issues concerned with pupil learning although there were differences between schools both in the number of staff who were perceived to be engaged in collaborative work and the nature of the collaborative activities. Senior leadership teams were more likely to be engaged in strategic thinking about how to promote collaboration among staff than in direct work about pupil learning. The head of one school commented about the senior leadership team:

> It's about having conversations and dialogue and proper calendared meetings about what needs to happen now and in the future . . .sometime a quick conversation in the corridor sparks change, sometimes it takes ages.

There were several examples of senior leadership teams collaborating to gather information and monitor teaching and learning across the school. In one school a departmental review system was in place to review each department in depth every two years. In a second school, the senior leadership team had started a system of lesson observations which had subsequently been taken over by heads of department. One of the deputy headteachers said:

> the learning walk is where we find out and monitor and we are doing a number of things, it started out with the senior team focusing on what is happening about learning, they developed some guidelines for looking at lessons . . .

In a third school there were examples of collaboration between LSAs and teachers as they used planning sheets to record the outcomes of their discussions. A maths teacher, who was applying to become an Advanced Skills Teacher, had been given one day a week to work with subject teams on learning styles.

There were also several examples of collaboration within departments and teams. A head of department said about collaboration in his school that it was:

> Very important, and there are various schemes of work that are in the department. We have weekly meetings and at these they discuss a particular area such as coursework, cross moderation, keeping classes at the same stage.

In a different school there were numerous examples of collaboration within groups and teams. Two language teachers said they regularly shared ideas.

> *You're always looking for practical ideas. If one of us doesn't have anything new the other will. It happens at least once a day I would say.*
> *We do share stuff with the others. There's one member of our department who's a bit more old school and doesn't teach them the same way as we do, so although he is interested he doesn't feel quite comfortable. But I have lent him games and things and he's said things have worked quite nicely.*

Geography teachers in the same school were using ICT to support student learning and this also promoted staff collaboration. The head of department said:

> *All lesson plans and resources are on it [departmental website]. There's a lot open to students as well. If anyone misses a lesson they'll be able to catch up.*

Other staff could access the resources if they wished:

> *I've said, I've put these resources on the internet if you want to use them with your students and sometimes people will use them or adapt them to their own style of teaching perhaps.*

Putting resources on the website had been a collaborative effort which he felt had been useful for staff as well as students:

> *I think I was forged ahead by the NQT I had this year because she's very ICT literate and she's caught up with a lot of the things I've done. But even my other colleague in the department is heading towards retirement but he is starting to get much more on board with this as well. I think in some ways it's helped to revitalise his teaching. He has very good IT skills but we weren't perhaps getting the full benefit of them until now.*

In all three special schools it was generally agreed that there was a high degree of collaboration to promote learning and that, in some areas, this was increasing. At the secondary school, collaboration was reported to be high between teachers in core departments, less so in other subjects. There was a lot of collaboration between teachers and SNAs, especially in the PSHE curriculum, but some SNAs thought they could be more involved in subject planning. The deputy thought more could be done across subject boundaries: key stage coordinators had been appointed to tackle this. One example was given by the SNA responsible for 'moving and handling':

> *The ethos… is one where we help each other. We have a policy within the school - we're always working in teams of two. Because a lot of the students because of their disability they have poor head control. So their head could all of a sudden go forward. And because of the systems with using the hoist they have bars in front of them, they could bang their head on the bar. So you do need two people to do it. But we have a policy of always two staff on hoisting.*

At the residential school, collaboration was evident in the work done to ensure coordination between the care and education sides of the school; in the Family Induction Team and between that team and the rest of the staff; between the examinations coordinator and the rest of the staff; and in the efforts made amongst the care staff, under their new head, to ensure consistency.

At the nursery school the core tasks required close collaboration with parents, other schools and other agencies. Team-work was exceptionally strong. Each team - one teacher with two LSAs - met daily, weekly for planning, and monthly with the speech and language therapists. The head commented,

> *As practice becomes embedded you wouldn't get away with doing it any other way. They'd be appalled.*

Teams also worked closely with parents who were encouraged to get involved in the school. Staff also carried out regular home visits, where they could model good practice for parents. Parents were invited to some inset activities. Furthermore, while the new school was being built, the nursery moved to another school's site where there was available space. This was seized upon as an opportunity for collaboration with the temporary host school, for example to run joint CPD, amongst other things.

e. Reflective professional enquiry

The term 'reflective professional enquiry' was interpreted by respondents in a variety of ways. Typically, they reported ways in which they were collecting and analysing achievement data to monitor pupil learning and set targets. This reflects current policy emphases in all schools. However, there were several examples of ways in which staff were actively investigating learning and teaching and using the findings to inform and develop their own practice.

In nursery schools, although the Foundation Curriculum provides guidance, there are no SATs tests in early years and practices for monitoring and assessing pupil work vary. However, all five schools had some procedures for assessment in place and means of recording pupil progress. In one, new procedures for assessment were being developed and work on a curriculum development initiative had prompted staff to collect more data about pupil learning. The two other schools had similar procedures in place for monitoring pupil progress. Each child had an education plan, targets and an individual file. Notes about their achievements, and examples of their work, were put into the file by any member of staff who observed significant learning taking place. A nursery officer in one of the schools said that, if she was involved in a focused activity, she would write an observation on every child, or she might just see something eg. *someone completes a puzzle or a child who does not seem to be getting involved or they might disclose something.* Every observation went into the key worker's box and they decided if the information was significant or should be discarded.

> *Concerns you talk about, signal achievements you put down. You watch them and track them. Some children take longer to settle in, you have to help them with their self-confidence.*

A teacher in a different school gave this example of how the staff would investigate a problem:

> *One little boy who we felt had been very unfocused at story time – you know, turning round the wrong way or inappropriate laughing in the middle of the story – we talked to his mum first to see if she had found the same thing, and then asked if he had a hearing and eyesight test. We then talked to our educational psychologist who came and did an observation, as the tests didn't show up anything, and we also arranged speech therapy. One of the action plan things – common sense really – sit him at the front, on a special mat, give him lots of praise – and he's much better. It really worked. We discussed him as a whole staff because it wasn't just at my story time; he was the same with everybody…*

Several primary school staff reported that, in general, *there is a lot of assessment going on*, but that *there is no time for written evidence of effects*, and that *reflection happens informally all the time*. Others described more strategic approaches to reflective enquiry and its purpose. For example, in one primary school, teachers wrote a weekly evaluation to which the head responded. Most respondents described planning sessions, either at whole school, department or team level. For instance, one early years coordinator said:

> *Well we plan, we do, we look, and we review. And that's just routine. The planning objectives for the week are the checking tool. We know what our termly objectives are and weekly objectives*

There was a particular emphasis in some schools on seeking pupils' views on their learning experience. One primary school was involved in an LEA project in which children had been asked what makes a good lesson. As a result, staff were starting to change focus from teaching to learning. Another involved parents:

> *As far as impact on achievement is concerned, we try to work closely with parents. We keep a daily diary in which we put comments and the parents put comments. We've also done target setting for numeracy and literacy. We are always telling the children what the next target is and parents respond because we put it in the book*

There was evidence in all five secondary schools that pupil progress and outcome data was being reviewed and used by teachers but there appeared to be a lot of variability within and between schools about the extent to which this data was used to inform practice. Some were using data, for example from performance management or the school's Ofsted inspection, for accountability purposes. One assistant head reported how his thinking had moved on:

> *Obviously now we are aiming to improve achievement and feel that schools can do better. In my early years I felt children couldn't do better, in the last five to six years I have changed. The Key Stage 3 strategy made a huge difference to my department. We saw Key Stage 2 had made a difference. There's a lot more monitoring. We get the results, share information, change children around classes. Pupils are now set.*

Classroom observation was frequently cited as being a valuable aid to learning. Indeed one deputy headteacher said:

> *The big leap that's been able to help us in the last two or three years is people are no longer defensive about being observed or intermingling with each other - there's a whole new culture . . .*

In another school the PE department video their own lessons and colleagues video each other so they have a lot of evidence that can be drawn upon in discussion. The geography department in the same school had had an internal review and all teachers were observed which had been valuable: *it helped us to assess where we are.*

Another example of reflective professional enquiry was where staff began some type of project or initiative which was designed to produce information about how to improve teaching and learning. Examples of this were found in two of the schools. In the first, all students had the opportunity to complete a questionnaire about their preferred learning style and the findings were embedded into the tutorial programme, plans were underway to make this information available to class teachers. In the second, teachers who were engaged in learning leader projects were conducting research with the aim of improving teacher and learning. For example, one teacher had focused on e-learning with a year 10 business studies class, developing a virtual learning environment for them. She commented:

One thing I have noticed, it works well with the gifted and talented, it works well with those who are interested in IT but with the lower ability they do mess around, there are limitations there - things like homework tasks, you can rely on the gifted and talented to log on and get the task but the lower ability will come up with a number of excuses.

In his research the head of geography had surveyed students to seek their views on what conditions would enable them to work more effectively and what kind of lesson activities they liked. This had been very productive and had prompted him to trial a lot of classroom activities. For example, he said:

One of the concerns that came up in the questionnaire was homework and coursework and I want to try and set up a website for GCSE geography students and parents so the information will be available for them. So for example, there will be the whole two years' information for the course, but we're aiming to give them much more choice within the homework. So I got an idea from one of my colleagues who sets her homework in a grid form and the students have to achieve say ten points over four weeks. Now that could be one really difficult task worth ten points, five point tasks or five two point tasks. So give them much more say in their homework.

All three special schools found assessment somewhat problematic but some did have particularly sophisticated mechanisms for gathering and using data. Early assessment of all children within two weeks of their arrival at the nursery set a baseline from which to build. Records (including anecdotal records) were then kept on each child's progress file and targets set. One teacher had made videos of children both as a record of their progress over a year, as well as being a source for teachers to review in identifying pupil needs and progress. The head was keen to develop the use of video further as a source for teachers to review their own practice.

In the residential school, data on each child were collected, stored, analysed and used to inform classroom teaching and learning. This was the responsibility of one member of the support staff in the office. In addition, every three weeks targets for each student were reviewed and revised by trios of staff:

It's done through the targets. On each target sheet there is a list of three targets and these are reviewed every three weeks. If the targets stay the same they're not learning. On the other hand if they are learning them there will be new targets set. Every three weeks the education tutor and the care team worker get together and review the targets and set new ones. (Care team leader)

In the residential care section, regular meetings were held with the students to discuss possible improvements in their living conditions; these meetings were minuted, posted on a notice board and acted upon. This approach was seen as having a direct impact in terms of benefits for pupils and the relationship between staff and parents.

At the special secondary school, because standard tests of pupil achievement like SATs were inappropriate, one initiative was to develop a common assessment system for the school

. . at the minute it's very difficult to find out what somebody's doing ... you know what one student's achieving in one subject, how that compares with another. We haven't got any centrally held records really.

Staff had been surveyed about the kind of assessment scheme they used and would prefer and *from that information everybody agrees that it would be useful to know what they were getting across all subjects, and we've got ideas for what everybody would need from a common assessment scheme.* (Teacher)

The headteacher and deputy both said that, although progress had been made in the past year, there was still much to be done. The headteacher wanted to work on peer mentoring with team leaders, to strengthen the role of the subject coordinators and encourage them to do some classroom observation, even though some teachers found classroom observation stressful. However, in the project year there had been an increase in the use of performance data, developments in the way staff worked with individual pupil educational plans, more evaluation at the end of every lesson and meetings about target setting in year groups and with pastoral staff.

f. Individual, group and collective professional learning

Examples of individual professional learning included:
- A nursery headteacher whose school had practically doubled in size with the addition of an extra unit said that managing this change had been a big learning curve for her.
- Another nursery headteacher whose work for an MA had impacted on her practice in school.
- A young chemistry teacher in a secondary school was working on a project to develop ways in which students could use ICT to help them conduct their experiments. She had become interested in the project just by using data logging equipment that she found in the school when she arrived:

  . . .that's basically how I learnt. Just playing around with it and seeing what can be done. There are a few resource packs that go with it and experiments you could do. More complicated ones for later on. . . . It's making me think about how I'm doing things and where the ICT will be useful, where I could bring it in. And the students are really enjoying it.

- A biology teacher, in her second year of teaching, was learning A level chemistry from a colleague.

  I come in early, usually on a Wednesday morning, and he (Head of Chemistry) will teach me what he's been teaching the students that week and usually we get through all the week's work in half an hour or 45 minutes if he wants me to do a task. This is A level. It's on a 1:1 and I thought it would take a lot longer but I'm getting the grasp of it really well. I thought it was going to be hard and I wouldn't be able to do it.

- An English teacher's secondment produced new ideas about how to teach Shakespeare to children with profound learning needs at the secondary special school.
- A teacher whose MA in media studies had helped her to introduce a new course at the residential special school.
- One headteacher's research for her masters demonstrated the value of compensatory education in re-integrating into the mainstream at the special nursery school.
- At the special secondary school an SNA had trained to teach trampolining and now worked with two other SNAs to teach this as an option in the Personal and Social Education curriculum:

  We use the trampoline but you see that's just - it's more to do with communication. And we're particularly trying to get some of the more able students helping the less able students on the trampoline so that we can actually step back and watch them communicate to each other and develop skills.

Examples of collective professional learning included:

- From a nursery head:

  We've just recently had a music course because there was a special grant for musical instruments in deprived areas, we all went on a course which we got free. I've already said to the staff that about a month into next term we will have a staff meeting when we all talk about something that has gone well that we wouldn't have done before that course. They all know it's a kick up the backside in terms of making sure that you do use some of the ideas from that but also, if you do share ideas, someone will say, this worked really well and someone else will say, oh yes, I remember that, I must try that with my group

- From an early years coordinator in a primary school:

  She (the teaching assistant) *and I learn from each other when we are reviewing our planning notes and the record keeping. For example, we looked at literacy and said, let's try this - that would work and we tried it out. Together we worked out the strategies that will really work. I've learned from her to* stand back a bit. *I'm all action – 'Let's do this.' and she says 'Let's look at it'. We complement each other - we work well together''.*

- From a young secondary teacher:

  *We're quite lucky in the (*science) *department in that we talk to each other quite a lot about the things we're doing. I do things that he's (another teacher) being doing for years and he's started doing things that I've done last week. And that really excites him and it excites me and then she (another teacher in the department) does something and I do things and we tell each other and buy the resources and we're quite good like that really. If something really works and it's good we do speak to each other quite a lot about it and try things out.*

- From a history teacher in another school:

  (Staff)… *pop in and out of each other's classrooms because we observe each other quite a lot . . . in our department I've asked if I can see our HoD teach, just because it's interesting to see different teaching styles. . . we nip in and out to nick ideas really! But also to see how different classes react to different teaching styles.*

- From a secondary school deputy head:

  The school is developing emotional intelligence, interpersonal skills and strategies to raise achievement. We've been doing it for a long time and the last two and a half years we have been looking at learning, we have been looking at people skills for seven years . . . it's the fact that we have been looking at how children learn

  One indication that this work had influenced staff learning was that through the language that they used in discussion. For example, a head of year said:

  There is no way that I would say we had a 100% emotionally intelligent school because I think that would be a joke. But I do think we are working very hard towards aiming for that and I think we are a lot more caring with each other than I have experienced in other schools.

- From a special school care-team leader:

    Anybody new is given basic, hands-on restraint training - I will take a staff group during the in-service day – including the legal side. Sometimes I'm there when an incident occurs and then I might say 'Why not use this hold?' Because when you are actually involved in an incident and kids are swearing at you and kicking you then it's not always easy to remember what you have learned in your training. So I will sometimes coach them as they are doing it. We also tell the kids about the holds. It may seem quite funny but sometimes when a new teacher tries the restraint techniques one of the children might say 'Sir you are doing that wrong - you should do it like this.' Whenever we have to use restraint I debrief the staff.

Vignette: Working Group Planning Induction as an example of collective professional enquiry and learning

INSET days take place on a Friday in a regular three-weekly cycle. This was the first time that the new CPD co-ordinator had organised one. A key component was an afternoon induction session for four new members of staff, including the new deputy head. This was preceded by a morning planning session by a working group of five long-serving members staff (the junior school teacher, the science teacher, the craft teacher and two senior care staff) who were joined by a school governor. The group's task was to help the coordinator prepare a presentation on 'the [name of school] method' for the afternoon induction session.

The planning meeting was held around a large table in the art room (the CPD coordinator was the Art teacher) because he intended to create spider-grams from the proceedings on very large sheets of paper. He had prepared a single sheet handout setting out the school's mission statement and listing six elements of "The Method": the key factors influencing professional practice aimed at achieving the school's mission statement. There was only time to deal with the first three of these elements. These, however, dealt with key issues in: classroom and residential care practice; the meaning *in action* of the 24 hour curriculum; staff/pupil relationships; and staff/staff relationships.

The group responded with enthusiasm and great professional insight to the coordinator's requests for an exploration of the meaning of some of the key ideas in the school's mission statement and for details of the 'nuts and bolts' of good practice. His skilful use of the spider-gram and astute questions enabled this two-hour discussion to retain its focus and structure. The discussion explored negative as well as positive aspects of professional practice and noted areas of weakness and suggestions for improvements. The intellectual level of the discussion was very high and group members displayed great empathy and responsiveness to each other's ideas.

It is important to note that this working session was convened in order to *prepare* materials for an induction session. It is, therefore, more an example of work-based professional interaction than a formal professional development experience in its own right. It had a far more the feel of a 'here and now' experience than is found in the typical INSET day exercise. It fell very much into the category of *collective professional enquiry.* Moreover, as the session developed the participants became more concerned to pursue this task *because as professionals they needed to exchange ideas and knowledge on practice* not simply to pass it on to new members of staff, but to improve their own understanding and to improve collective performance.

This was a meeting of long serving and senior staff members and cannot be taken as representative of the actions of the whole staff. However, there was a strong sense of cohesion amongst the people present and consensus on the need for all staff members to be included in collective reflection and exchanges on professional practice. Having said that, the group recognised that there was quite a steep gradient in the degree of involvement of the various categories of staff from teachers, through LSAs and care workers to non-professional staff.

There were genuine expressions of mutual respect between teachers, care workers and classroom assistants. At the same time, there was general agreement amongst the members of the working group that there was insufficient exchange of working experience between the classroom teachers and the care workers responsible for pupils' residential life.

The working group gave strong and detailed evidence of a high level of shared values and vision, collective responsibility for pupil learning and reflective professional enquiry. The depth of common understanding, albeit at a senior level, of what they did and why was very impressive.

g. Mutual trust, respect and support

As the project progressed it became apparent that an important characteristic of a PLC was that the staff should have mutual trust and respect and be ready to support each other. Indeed, participants at the first project Workshop Conference argued that a culture of mutual trust and respect was a necessary starting point for a learning community, Hence it was decided to explore trust as one dimension of the evolution of PLCs   In the *mature* nursery school there was a particularly strong sense of mutual trust and caring amongst all informants that appeared to underpin staff readiness to engage in depth with each other in promoting improvement in pupil learning.

Having trust and respect for colleagues didn't mean that staff in the various schools necessarily had close friendships or even particularly liked each other but, if they were going to share their classroom experiences and observe each other teaching then they needed to be confident that their colleagues would act professionally. Trust has to be earned and may take time to develop as one, relatively new, nursery headteacher commented:
> *The staff are slowly beginning to trust me and to give me their opinions.*

Comments from staff in this school confirmed that they were generally supportive of individuals professionally, were honest with each other and were concerned to help each other out but there were also reports of individuals experiencing stress partly due to the challenge to habitual ways posed by the curriculum development work and also because of staffing issues (eg. individual on sick leave).

In the other two nursery schools mutual trust, respect and care were widely perceived to have been high for some time. One nursery nurse said:
> *I think we are quite positive with each other. You do get your bad days where you think "everybody's getting on my nerves" but I think you get that anywhere. I think we do trust each other and we have a positive working relationship.*

The head in this school said that the most important features were that staff had mutual trust, respect and openness. If people liked each other that was a bonus. Luckily in this school staff did like each other, laughed a lot, liked having a break together. Another head spoke of how she needed to care for staff if they were to do their best.

> *Primarily we are here for the children. Staff are our greatest resource. If you don't collaborate, cooperate, challenge and have rigorous expectations, they won't do their best.... I'm paid more, I have an official duty to care for them.*

Her assistant said:

> *I feel hugely valued. It's a fantastic environment to work in. Investors in People came in the other day and talked to me. I told them, I don't need to work, I come here because I like it.*

One of the most frequently mentioned factors in the five primary schools was a supportive culture with an ethos of valuing all individuals and learning. As one respondent said:

> *Giving everyone status – making them feel valued by giving them confidence to take responsibility and act independently – but knowing that they will always be supported when necessary.*

In the closing primary school there appeared to be a pervasive positive ethos throughout the school with all staff providing support for each other despite the impending closure. One teacher said:

> *Everybody is very positive. There's nobody in the school I don't feel able to approach in a professional or personal capacity to pass the time of day or raise an issue which is causing concern. . . .We've got strong personalities and no real shy retiring types who won't make themselves heard. There's a lot of respect really, that's the best word for it. . . I know if I have an issue I can go and talk to the person it concerns, be it about a particular child or area of concern in one of my subject responsibilities and I know they'll take it on board and then feel comfortable enough to try it or say 'I could really do with something else there.*

Another primary school was going through a transition stage with a relatively new headteacher in her first headship. Although some groups demonstrated mutual respect and trust this did not appear to be true of the whole school.

The extent of mutual trust, respect and support was judged to be medium or high in all five secondary schools. However mutual trust and respect can be damaged or lost and then may be hard to regain. When an organisation or an individual has had a bruising experience (eg. a critical Ofsted report) one response may be for individuals to retreat into themselves and for a blame culture to develop. One head said that when she took up headship the school had experienced some difficulties and there had been expressions of antagonism and sarcasm which had now gone. She said:

> *Working with governors on aims we've emphasised valuing and respecting people as individuals, and pupils achieving the highest standards possible, raising expectations among all*

As she worked with people this in turn helped staff to increase their trust in her.

There are always likely to be degrees of trust, some people may be trusted more than others and individuals may feel greater confidence in their colleagues in certain situations rather than others. One head recognised that he wasn't receiving the same level of automatic trust that he had received at his previous school and was puzzled by this. However, he said:

In the end you have to stick to the key principles and get on with it. I refer back to the school mission statement and check back. If the principles are right the people will come with you. You have to focus on issues rather than personalities.

The level of trust was perceived to be high in another school although some staff felt that more could still be done. Over the years there had been a lot of training in interpersonal skills and emotional intelligence and this had influenced the criteria staff drew upon in making their assessments. A head of year commented that they were working hard towards emotional intelligence and commented:

I think we are a lot more caring with each other than I have experienced in other schools.

A science teacher who was coordinating learning walks (peer observation) argued that levels of trust were high:

I personally feel it is very high because with the learning journeys - the fact that people are very open about you going into lessons and sharing stuff with other people shows that it's not a scary place or a scary atmosphere.

Another teacher said:

You're encouraged to take risks and be a bit more creative and to work together and develop and share good practice.

But this is in a context where the head had said:

If it all goes pear shaped we're there to look after it.

In one of the special schools, several respondents referred to high levels of mutual trust and respect between staff and to a sense of belonging to a community. Caring was at the heart of one school's philosophy for the children and this was manifestly extended towards staff in all areas of the school. At the same time there was also a tough attitude towards the maintenance of professional standards in all aspects of the school. In another, there was a general feeling that levels of trust, mutual respect and standards of professional behaviour were high but could be improved. A number of staff felt somewhat isolated, in part because there were few other subject staff with whom to discuss. Furthermore, the geography of the school did not facilitate team- work. Recognising that staff didn't necessarily meet together very much during the week, the head and deputy were encouraging more staff to use the staff room rather than eat lunch in small groups elsewhere. Against this backdrop, some concern was expressed about stress and pressure on staff and there were several references to teachers feeling threatened by classroom observation. One teacher said that, overall, staff were confident and willing but also pretty tired.

In a third school, although there was also some evidence of internal tensions, the way in which teams worked collaboratively and the emotional investment that staff made in their work all pointed to a strong ethos of interpersonal caring within the school. Ofsted had commented on the school's strengths in this area. Staff brought lunches in one day a week which were shared, birthday cards were sent to all staff, and there was a lot of socialising outside of school.

It's a lovely atmosphere here. It's a lovely school and in the main I think we do a very good job. Everyone is going to have blips and there are going to be certain things where you think 'I wish I'd done that'. But you learn from it and at the end of the day, if you have the respect of the other staff, which we have, we all learn from each other. (Outreach worker)

h. Openness, networks and partnerships

As the case studies progressed, it became clearer, as tentatively indicated in certain literature, that a school operating as a PLC would be open to learning from individuals and organisations outside its boundaries. We assumed that every school would have some functional links and partnerships, for example with the LEA and neighbouring schools, but that in a PLC staff would be working proactively to use these links to seek ideas about how to improve learning and teaching. Rather than being protective and closed about what was happening in their school, staff would be open about what they were trying to achieve and keen to make contact with others who could provide ideas and suggestions about how to make progress. Hence, we investigated these inter-connected features in the case study schools.

The three nursery schools all had some external links although these were more developed in the two schools based in cities. Staff in these two schools considered that there were many opportunities to network and that these were beneficial. These two schools had both gained Investors in People (IIP) accreditation, in itself an indicator that they were seeking ideas outside the school. One headteacher said:

> *I think they (external links) have been the most crucial thing in this school's development. It allows you to widen your understanding.*

She argued that the small number of staff made it even more necessary that they looked outside the school for ideas.

> *Because we are small, we look for things outside to evaluate us and make us think. We have a lot of visitors. We open our doors to training. If you are good you can still get better.*

The deputy head of another school, who was also the SENCo, said:

> *I'm lucky that as deputy I get the chance to go to deputy meetings each half term. They're in a different setting. I get to talk to other colleagues from other schools and see their settings and talk about change and developments. I get a chance to meet SENCos from other settings as well.*

One primary school headteacher commented that she had very productive links with the local infant and primary schools and the secondary school in a neighbourhood cluster:

> *we work together, we have a cluster improvement plan and a shared budget which we put into a pot which we can use for training and venues.*

For some, networks were seen as a means to generate and share ideas, to promote staff development within the school, and to be less insular. One head said:

> *Our local special school has satellite funding. Three classroom assistants have been able to go and visit the school, shadow practitioners there and consider their work with children with autism.*

Several schools referred to networks being set up to enhance staff CPD. In one small primary school, links with neighbouring schools enabled staff to observe other teachers working with the same age children; this same network also ran shared INSET and enrichment activities. However, one headteacher worried that the school never felt calm since they had become involved in nine whole-school initiatives a number of them involving external agencies:

When I came here it felt comatose and I need to find a balance. . . It's the thought of not missing anything. . . That has an impact on what was happening to my staff. It isn't always right and fair- the good thing about what I'm doing is giving them a taster of all these exciting things that we should be offering, boosting the feeling about the school

Outside networks and partnerships were sometimes a critical source of sustenance for the headteacher. Several of the heads had taken or were taking higher degrees, and several had attended NCSL courses. For the head of the closing primary school:

The Director of EAZ has been my biggest support. They've (the EAZ) involved us in everything.

Secondary schools had also developed various types of connections. First, the links that are forged between subject specialists in different schools, links which were often facilitated by an LEA. For example, a head of history was the only specialist historian in one school so within school collaboration was difficult but, twice a year, he attended a meeting of the regional history forum where he said there were always new ideas and workshops. In a different school, the Head of Music had a termly meeting with heads of music from other schools.

A second illustration is the partnerships that were built up between a secondary school and neighbouring schools. These partnerships took different forms: one school had developed links with local primary schools and they now shared assemblies, displays and magazines and staff from the secondary school visited to work with primary pupils; in a different school an Advanced Skills Teacher in Design and Technology had a responsibility for supporting technology teaching in the three local middle schools, he drove a technology trailer which was a mobile DT computer lab around the schools to support the teaching. He commented:

The point is not to impose our project on the middle school. It's to look at the projects they're doing and integrate what we're doing with that, which is a much better way I think of working with the kids.

A third school was a member of a Collegiate with five other schools which involved the schools sharing expertise and resources. Examples of the activities that had been generated included organising regular meetings for heads of core subjects; some joint inservice training for staff; opportunities for students to study a subject at a different school in the collegiate if it was not offered in their own school. A common set of aims and a joint mission statement had been agreed for the Collegiate and the partner schools were working to establish a Graduate Teacher training programme. This school also had a separate link with a local independent school which was proving to be very productive, examples of joint activities were in sports, especially cricket, a joint sixth form conference, groups of staff visiting each other's school to exchange ideas and experience, some shared in-service training for staff.

There were a number of initiatives in one of the schools which could be put into this category. One school was leading on a bid to establish a Virtual College in collaboration with local high schools. Recognition of a shared problem had provided the initial stimulus; the curriculum deputy said:

There are shortages in certain areas in engineering and in agricultural areas in this region and unusually in hospitality and catering so between the four area high schools we are looking to see how we can provide a cost effective and electronically centred learning solution to some of these problems. We are in the process of planning the virtual college as we put it, which is cooperation between the schools, an

element of supported study with students from all four schools being in one centre providing one particular subject ... students from other schools being able to access resources we're developing on the net

The proposal for a Virtual College had been developed, some external funding had been secured and the initiative was underway. A different temporary partnership had been established to gain funding to improve the sports facilities when the school worked with the leisure department of the local council to bid for lottery funding. This had been successful as they secured a million pounds to develop a football facility with artificial pitches. The head commented:

It represents us, the school, putting together a team of people who by working together could achieve a million pounds worth of facility. So it was a new partnership to achieve a particular end and to a certain extent that partnership has now dissipated. But it's left with the school and the Leisure Department as now active leaders of this developing partnership for leisure based on these enhanced facilities. It's floodlit. It's 365 days and we manage it during school time and they manage it out of school time. And that means that the community gets a really good deal. We get a level of facility that we wouldn't have otherwise been able to do.

This school was also a lead member in an NCSL Network Learning Community. Another had been involved in an unsuccessful bid to be a networked community. A third was working up a bid to become a Specialist School and some staff commented that the experience of working on a bid could promote sharing and learning. The deputy who had helped to initiate the successful bid for a networked community said that she had chosen to work with four other secondary schools:

... Because we had all worked together before and I knew they would be very open and make things happen...... we all knew we were trying to transform education, we had to find a way to make it practical.

Although all three special schools were keen to link with other schools and agencies, they had not found this to be straightforward. Their reasons for involvement in external activities were varied. Interviewees referred to networks being set up to enhance pupil learning, and included examples of expanding the curriculum as well as contributing to broader learning agendas. A link with a secondary school resulted in a shared French trip involving gifted and talented pupils and pupils with particular learning difficulties. The stimulus for networking was sometimes external, for example the setting up of an EiC or Early Excellence Cluster, but we also found a number of cases where school leaders had been motivated by an NCSL programme or activity (eg New Visions or Networked Learning Communities) or informal connections, as one head described:

A lot of deaf schools are having increasingly more difficult kids and they want to know what to do about it. But for us it's a massive opportunity. We can show you how to work with difficult kids – but difficult deaf kids! So what can you teach us to help us work with kids who have language issues? We're going to benefit from that. That will be a one – two year project to work together.

Isolation was often cited as a key reason for involvement in networks. Isolation can also be an issue for teachers in small subject departments,

One of the problems with a school like this is that we are all in one-person departments. So to develop your department you often have to go outside of the school. In my first year I learned a tremendous amount from being an examiner and working with teachers from other schools to moderate our pupils' work. It was a

tremendous learning experience. There was a mix of normal schools and SEN so we were able to learn from each other. (Art teacher)

The residential school found the link with the National Association of Special Schools to be useful and there were good links with secondary schools. The new CPD coordinator was starting IIP. The school was increasingly entrepreneurial and had set up an enterprise arm of the organisation to market its training services. This was involving increasing numbers of staff in a range of external activities which undoubtedly had a learning spin-off.

External links had always been a feature of the way in which the nursery, the self-reported *mature* PLC, worked. There had been continual change and expansion, from 1998, they had developed outreach activities, Saturday and summer play schemes, training for pre-school staff and primary school staff and closer working with parents. Children were referred through health visitors and there was necessary liaison with other nursery and primary schools. They lead on many initiatives through Beacon school status, had worked with failing groups and provided varied training for other schools. The head had always been involved in many activities and networks - local Heads' conference, EEC national conferences, IIP, EEC, Beacon School, Chartermark in order to know what's going on and to be well prepared. She has encouraged others to do the same, and some staff worked part-time for the nursery and part-time for the LEA. One teacher was involved in various networks:

> *We have proved ourselves successful and effective in what we've done, it's made people confident in their practice and more prepared to accept change*.

Another was doing an increasing amount of work with other institutions, carrying out an assessment of pupil needs. She gave an example of a song she had picked up from another nursery, which helped to develop gross motor skills; she now used the song in her nursery. The head talked about how the LEA was increasingly recognising the expertise that was present in the school; for example, educational psychologists, will ask for advice from the nursery staff or act on their recommendations regarding particular children.

Such links are not without their problems. Thus, Beacon School status can be divisive creating a huge stress to feel you always have to be performing well with trainees coming in.

> *If you spend too much time on it, you don't look after the base, and you need to look after the base.*

Drawing an analogy with a plant that grows too fast, never producing a flower, another teacher commented that with so many initiatives she would sometimes like more time to consolidate.

The special secondary school was in an Education Action Zone and had achieved IiP status. In 2003/04 several staff gained teacher sabbaticals. In 2003, on British Council funding, the head travelled with other heads from a cluster group in the city to Australia and developed a link with a special school there. Two staff - one teacher, one SNA planned to make a follow up visit to the Australian school. The head tried to ensure that special schools like this one, where the children have profound physical and learning needs, were not forgotten when national or local initiatives were planned and funding was made available. Because of the nature of its student group, staff had found it difficult to find other comparable schools with whom they could exchange and share. Some years ago they tried to set up a network with some local schools (ordinary secondary as well as special) but did not receive any positive responses. They did receive support from the LEA but few staff there had the specialist knowledge that the staff were seeking. For example, one staff member went to LEA meetings for Key Stage 3 coordinators but nobody else in the group was concerned with the

issues that she and her colleagues wanted to explore. The school belonged to a City Schools Forum, which was part of Excellence in Cities, and they had increasing links with other schools. Some teachers were involved in LEA networks (eg. the ICT teacher was an Advanced Skills Teacher). This school would be the only special school in the country piloting the new Ofsted arrangements.

In addition to the eight characteristics presented above, we also investigated the following four key processes of PLC operation.

h. Optimising resources and structures to promote the PLC

There were many examples of staff taking strategic decisions, and sometimes seizing unexpected opportunities, about how best to use physical and human resources to support teaching and learning and to develop the PLC. The approaches adopted are presented under four headings: money and time; space; organisational structures, meetings, procedures and communication, including the use of ICT; and staff deployment to promote inclusiveness. In practice, of course, these four were often interconnected. Where appropriate, links are made to particular characteristics.

Money and time
Time and money were the two most important facilitating factors cited by survey respondents when asked what helped develop and sustain a professional learning community. Similarly, a lack of time and money were cited as the two greatest inhibitors. They are presented together here because, particularly in secondary schools, funding was often used to buy time in one shape or form.

All three nursery schools were small and their funding was inevitably considerably less than for larger schools. Nonetheless, through pro-active involvement in a range of initiatives, at least two of the schools had quite generous funding for CPD and all teaching staff were able to go on several courses each year. In one school, the headteacher reported she had, *wrestled with the Standards Fund for training*. She was concerned because of the small amount they had, but gradually, the LEA, *has seeped money in*. All of the schools were attempting to seek funding to support their work. A projects coordinator had been employed part-time in one nursery, mainly to write bids to help with funding, but the budget would not allow for this post to continue. Funding issues became increasingly important during the course of the project, with the advent of local management of schools in April 2004, and the heads found that they had to become much more knowledgeable about funding.

In one primary school a new head inherited £60,000 unspent in the budget and used this money to enhance teaching and learning capacity by buying new teaching resources and furniture and re-decorating parts of the school. She was also successful in getting sponsorship and grants for capital expenditure projects and so the outside grounds were considerably improved - games lines painted on the playground tarmac, climbing frame equipment, a covered seating area, a garden area and improvements to the infant playground. She decided to employ a building project manager so that her time wouldn't be diverted from what she saw as her core task:

> *I couldn't concentrate on what I'm actually here to do which is to encourage the teaching and learning so we used money, and I've convinced the governors that if they really want the school to improve then we do have to buy in expertise.*

In secondary schools, securing funding was not formally tied to the development of the PLC but some senior leadership teams were particularly entrepreneurial, bidding for and engaging with projects that could push forward the vision for the school and provide extra development money. In addition, available finance was used in a variety of ways to support the development of PLCs. Examples of successful practice and issues included:

- One leadership group allocated a small part of the budget to encourage staff to undertake learning projects. Staff were invited to bid for projects and those who were successful were awarded one management point for a year. This initiative generated several innovative projects (eg. how to increase motivation and enjoyment of modern foreign languages; the use of ICT in science at KS3). The results were disseminated to other staff through a voluntary *Learning Forum*. The head commented:

  > *. . by developing these Learning Leaders we are finding a way of developing [learning skills] because theoretically you could have any number of learning leaders and you could have more than one in a department.*

- A secondary school put science lessons on at the same time so that the staff could team teach and work to their strengths; and in other schools the 8.30-9.00am slot every morning or a period of time at the end of each day was designated for joint planning or staff training.

- In one school, breaks were shortened, which had a benefit on students' behaviour. This was, however, at the cost of some teacher interaction because most teachers did not move away from their departmental base, resulting in the strengthening of teamwork there, with subject teachers talking to each other far more and exchanging ideas, but engaging less with colleagues across the school.

The special nursery school had reduced its classroom-based teaching week to four days, to enable staff to work with pupils with their parents in their homes on the fifth day. This school recognised the importance of their pre-statutory status in facilitating the flexibility of this approach. Close liaison with parents was seen as a move to extend the boundary of the learning community to include parents/carers.

Space
The contrast in space and its use between nursery and secondary schools could not be more dramatic and this has an inevitable impact on the PLC. While in secondary schools it was often very difficult to get everyone together, in the nursery schools the pupil learning spaces were often shared and everything was located in a small area. This meant that staff were often working in sight of each other such that subconscious observation was a matter of course and incidental learning was more likely than in a much larger school. The three case study nursery schools all had one or two large open-plan teaching areas, with smaller group or support rooms off the main area or close by. Because of this spatial arrangement, although individuals had specific responsibilities, learning and teaching was very much a shared activity, especially in two of the schools where teachers and nursery officers typically each had responsibility for a specific group of pupils but felt a shared responsibility for the whole group. As a nursery officer described:

> *I was on the art area this morning and there were two children in C's group who were chatting away so I did a quick observation. It works like that, it's not just your own group, you do it with other children as well.*

Having two buildings created some communication challenges for staff in one of the nurseries because Sure Start was located in a separate building, but the headteacher was attempting to bring the groups closer together, and was involving the director of the Sure Start as a member of a newly created SMT as well as holding joint staff meetings each week.

A primary head had re-organised the physical space as a way of encouraging collaboration:

We started on the reception class and year one base. We made the classrooms into subject specialist bases – science, English, maths. People moved classrooms and took off classroom doors so people talked to each other. They could link with each other and not feel totally isolated.

Another head made good use of corridor spaces to make shared work areas for some classes as well as for mini computer labs for all, including the youngest children. These areas were manifestly well used and because years 3/4 and 5/6 were mixed age, the staff worked together as a team.

The department structure within secondary schools has particular implications for space. In all of the schools, stories were shared of people working closely with colleagues in the same department who had adjacent classrooms and shared workroom space. In one school, the staff room was rarely used, but teachers appreciated the provision of subject bases, where much exchange of ideas took place. As this comment from an art teacher in another school illustrates, these spaces facilitated professional exchange and joint planning.

… we gather round the kettle! And we do it in my room. For example the Head of Department said 'Look can we look at our timetable? We're all free there, so if we're not on cover can we go over it?' and in fact she did that yesterday, so tomorrow at certain times we're going to get together and just look at our marking for the GCSE and tweak it and talk about it. . . She rang me up at the weekend and said 'I've got these cheap tickets. Do you fancy going to London to see the exhibition?' So we do that, which is fun for us. We like it, but equally it's vital.

Often these department rooms were well resourced, and used all the time by subject staff in larger departments. Here, there was lot of 'work' talk with departmental colleagues, but not normally about cross-curricular or whole school (including pastoral) topics. A difficulty of this arrangement was that it tended to isolate the teachers from other subject areas. In one school, the maths department had a coffee maker in its small room and they found that this sometimes brought in staff members from other departments.

Some schools had located their pastoral offices in the same area, facilitating exchange between heads of year. But this could reduce whole-school exchange, as one teacher explained the situation in his school:

Sharing is informal. It's all entirely just chatting and informal stuff really. There's no getting together to discuss how best to teach our kids in a formal way ... For us it works, but I think a lot of the reason it works is because all the science labs are together and we've got that base room where we sit. I can imagine in other schools it wouldn't work at all really because certainly I speak to some people in bigger schools let's say and it happens with some teachers in the school where they come in the morning, walk into their classroom and then leave at the end of the day and they don't leave their classroom. Their classroom is their castle'.

All of the case study schools had staffrooms, although only three quarters of the secondary respondents to the survey reported that their secondary school had a general staff room, while almost half (47%) reported having eight or more work rooms. Only 20 per cent of secondary respondents reported that nearly all staff used the staff room at break times for professional links, which supports the picture that was emerging in the case study schools. This raises an

issue about the structures in place in secondary schools to facilitate cross-curricular dialogue and development. The size of some staffrooms and workrooms in the case study schools also posed difficulties. There was not always room for all of the staff to sit down in staffrooms, which made this less conducive for longer professional development discussions. In one school with a large science department, while there was a shared workroom, it was not large enough for all of the staff: *If all of us are there we're just standing really because there's nowhere to sit down.*

However, if the whole school is developing as a learning community, staff need to come together as a collective rather than just meet in sub-groups. The case studies also provided examples of strategies that senior leaders were employing to build relationships across subject boundaries. In one secondary school, the general staff room was used for briefing sessions before school, free coffee was supplied at breaktime, and the head often dropped in for a chat:

> *I feel that the staff need access to me informally when they can. It's nice to have a cup of coffee with them and sit down and usually that's a time for laughter and teasing and talking about football or what was on TV last night. Things like that. I think it's important to do that, because we all spend so much time here that I don't believe it's healthy for conversation to be purely about professional matters. It helps to build those relationships.*

The secondary case study school with a split site faced an extra challenge, both in terms of time (staff getting from one site to the other) and space. The use of staff newsletters were seen to be particularly helpful here and the school was also looking to develop its intranet communication facilities.

Developing a learning focus also appeared to involve paying attention to visual messages and changing dialogue. Throughout some schools, corridors and offices were adorned with copious amounts of excellent, eye-catching and informative displays about learning. In the main entrance of one school, for example, every opportunity was made to 'sell' the aspirations of the school and its staff in continually changing displays, forming a focus for subliminal messaging and reinforcement. One school adorned corridor walls with lists of results and targets, as well as themes from the Key Stage 3 Strategy and different approaches to learning, for example using multiple intelligences. By contrast, on touring another school, there were very few learning displays. In relation to dialogue, a shared *"language of learning"* had become increasingly evident in the mature secondary school. It was felt that the Learning Forum and Learning Walks in this school had contributed to both opening up practice and the discussion about practice. A member of the research team who observed a professional development day found that staff appeared to use and understand the same learning terminology.

Organisational structures, communication, meetings and procedures
With the space restrictions already outlined, it was important to ensure that communication flowed well. Several schools had whole-staff briefings - daily or several times a week - for ensuring that staff knew what was going on. Briefings were frequently short (usually not lasting more than 10 minutes) and their content often focused on purely administrative details. In some secondary schools, staff meetings were held no more than once a month and sometimes less often, so full-staff gatherings were often left to professional development days, although one school had an annual retreat for team leaders.

ICT was used for communication and other purposes. Secondary school teachers, and sometimes students, often had individual e-mail addresses, at least one of the secondary schools had a school intranet and each department had a website where shared teaching resources could be stored. In one school, where the use of ICT was widespread, staff noted that this facilitated the sharing of ideas and planning. All of these resources were valuable but probably even better, for those people who had one, was their own laptop computer. A high priority for some schools was to provide a laptop for every teacher and, while some of these could be funded through various Government initiatives, others had to be paid for from school funds. Elsewhere, school bulletins were being used to remind staff about external CPD opportunities eg. the bursary scheme and for introducing professional development initiatives within the school eg. the pilot of CPD portfolios. In one school, the ASTs had started a newsletter for all staff, which included the outcomes of training, and the head also produced a newsletter to which others were invited to contribute. This school also had a system of *collaboration sheets*, to help ensure that staff talked to each other. These sheets were agreed between teachers and LSAs. They identified targets for particular students and the role that teachers and LSAs would take in lessons. They were designed to help communication between teachers and LSAs, although they were not without problems because there was no time set aside for jointly completing them.

In a primary school, an ICT project galvanised all the staff into collaborative working, crossing barriers that normally prevented them from communicating. All teaching staff (but not the TA's) became actively involved in the whiteboard SCIP project. Money was available so this bought them time and some software for the whiteboards. A charismatic leader helped to encourage everyone without appearing domineering. Dividing rooms in half enabled a lot of team teaching to take place with minimum disturbance to normal routines. Most of this was achieved without the help promised from AST's and the LEA. The writing of the project reports was a challenge, but the head joined in, reinforcing team solidarity.

One nursery had changed considerably with the addition of a family support unit, almost doubling in size. Several new staff joined the school to work in the family unit but their previous jobs had been in childcare, with social services rather than education. The head explained the importance of bringing the two groups, each with its different ethos, together. Several initiatives were set in place to build the new staff team into one group including having a shared staff room, joint in-service days and a weekly staff meeting for the whole team (nursery and family unit).

In all three special schools, most respondents thought the structures and organisational arrangements were managed and coordinated to promote a PLC and that this had increased over the course of the project. Various factors and indicators were cited. In one school, decision making was delegated down where possible; the SMT were trying to get the school involved in national or LEA based initiatives; the focus on learning had increased over the years; so too had the focus on CPD including the programme of Wednesday night staff meetings and the increased amount of training for staff; water and fruit were made available in the staff room to encourage staff to drop in. In a second school, there were deliberate, explicit efforts to ensure that structures and arrangements supported the PLC. The new CPD coordinator saw this as central to his role and both the new deputy heads – for education and for care – were working towards the same end. The ongoing arrangements for training and pupil progress review were seen as fundamental to achieving this. In the third school, provision was made to induct staff into core values, for example, the coordinator of outreach work spent 6 weeks working in classes at the school before starting on outreach work; the 4 day teaching week enabled a lot of training activities to be carried out, as well as working

with parents; as a small school, everyone had additional responsibilities, including support staff, one of whom, for example, had recently asked to be involved in interviewing for a new member of staff.

Staff deployment to promote inclusiveness
Examples included:
- In one primary school, each TA worked with a particular class/year group and was closely involved in supporting student learning. They did "jobs" for teachers (eg. photocopying, producing labels for reports etc) but also took groups of children, kept learning records, received copies of the teacher's planning notes and attended planning meetings. TAs might supervise group work once a teacher had given the input/presentation for a lesson and might sometimes cover if a teacher was absent. SMSAs had been the weak link: as they were in school for such a short period it was difficult to make them part of the team and community. The SMT decided that in future, when appointing TAs, they would look for people who were also prepared to take on the SMSA role.
- Support staff in secondary schools had the added dimension of working across subject departments. This was especially marked where they were supporting a child on a 1:1 basis. Where LSAs moved around from class to class each day, it was more difficult to develop a rapport between particular LSAs and teachers. Efforts were made in one school to place particular LSAs with particular teachers where learning styles were compatible and where one or other had requested it as a result of positive prior experiences.
- Respect for LSAs and what they had to offer was also important. As one LSA, who felt extremely valued by members of her subject department, explained:
   > *A lot of times we feel quite down. We do such a good job. It's stressful stuff hour in hour out. There's not very much knowledge of what's going on. But any lesson you go in to, people are really grateful you're there. They're positive about having us in classroom".*
- Special schools are well placed to make the most of their human resources. Typically, their smaller classes and high adult: pupil ratios (eg teacher + TA:8 pupils) give staff many opportunities to work alongside each other. In the secondary and residential schools, both operating a subject-based timetable, a SNA was allocated to each tutor group and moved with them from lesson to lesson. They played a key role in learning as they often built up a fuller knowledge of the child's development than the subject teacher, especially in PSHE issues. One SNA commented:
   > *You do feel quite equal to the teachers, and I know it's not like that in other schools. You do feel valued. It's because you spend so much time with the students – more than the teachers do.*
- Two full-time staff in the family and induction team at the residential school liaised with and worked with parents and carers to maintain a high-quality communication and support programme focused on learning. They maintained close supervision of new pupils in their first term, providing extra support to those experiencing severe difficulties. In addition, out of school hours, a head of childcare and a team of 13 care staff provided a full programme including recreational activities for pupils in the junior department and main school.

k. Promoting professional learning

Key aspects and issues in the promotion of professional learning are presented here under four headings: strategic coordination of CPD, including performance management; promoting workplace and incidental learning and knowledge transfer; promoting collective learning; promoting inclusive professional learning.

Strategic coordination of CPD, including performance management
The heads of all three nursery schools oversaw CPD and it was increasingly focused on whole-school issues,

> There has been a shift, in the past there has been a feeling that the training has been
> for you, now it has to support the school

although efforts were made to enable individuals to attend professional development meeting their own interests.

The extent to which CPD was deliberately designed to promote the PLC varied in primary schools. Normally, the head and deputy managed provision but not always. There were no formal evaluation mechanisms in any of the schools but most interviewees thought the overall process was generally effective. However, some had only a hazy idea about what CPD might involve in relation, for example, to work-based learning. Performance management often formed a part of the overall CPD strategy. Pupil targets had to be linked into the School Improvement Plan and professional development followed. In one school, for example, a teacher wished to improve her skills in teaching art, so she used some of her non-contact time to talk to the art coordinator and gain some expertise. More generally, the head had introduced a mixed approach that included feedback sessions in assembly time where teachers could share feedback from courses or from peer observations; a CPD portfolio for each teacher; visits to a Beacon school for teaching staff; informal discussions between staff taking place in their sub-groups; efforts made to use staff meetings and some key stage meetings to discuss learning issues, rather than administration; encouragement of SMSAs to take an NVQ2 course. Another head adopted a more low key approach, largely because that was all she judged to be feasible given the difficulties of travel to courses and a small CPD budget. In the current turbulent environment, everyone was very busy and there was a widespread assumption that CPD needs were best met mainly through courses. Most teachers said they were too busy to engage in classroom research and were not especially interested in work-based learning. The head was the main initiator of CPD, discussing needs informally with staff on an individual basis. Most such needs were met through courses, about which staff completed a course evaluation form. Performance management interviews were used to review individual targets.

Arrangements for managing CPD varied across the five secondary schools, with greater central coordination in two schools and increasing delegation in the other three. In four of the schools, a member of the senior leadership team was responsible for overseeing professional development, although this was sometimes one of a number of major responsibilities, including department headship in one school. The fifth school had a staff development committee, membership of which included representatives from each subject team. Their joint responsibility was to plan ahead for staff development days, identify the development needs of different teams and oversee their development, and gather feedback on training. Professional development funding was increasingly delegated to teams or departments in three of the schools. Two of the schools did not have a structured plan for professional development. The CPD coordinator sent information to particular teachers and departments and attempted to identify staff for training, based on experiences skills and interest, but the

onus was left mainly on individuals to be proactive in making decisions about pursuing professional learning although in virtually all cases, requests were granted. Both schools had intentions to formalise this part of the CPD process eventually. Staff development surveys had been used in a couple of the schools to elicit feedback on needs.

All five schools were developing their performance management processes during the course of the project. Use of performance management to enhance professional learning had reportedly increased in three quarters (76%) of the secondary schools responding to the survey. When the surveys were completed, virtually three quarters of the respondents reported that half or more of their staff were using performance management for this purpose. Two schools had a formal process related to performance management and linked in to the school's improvement plan. Each had three broadly similar objectives, one of which was concerned with whole school issues, one with department or student progress issues and the third with personal professional development needs. Even in schools with more mature professional development systems, some adjustment to the new approach was necessary where teachers were uncomfortable with having information they had written down passed on.

In all three special schools, the provision of and support for professional learning opportunities for all staff was managed strategically, in relation to the school development plan, either by the head or by the head and CPD coordinator. Moreover the way provision was managed was generally thought to impact positively on the process of PLC operation.

Promoting workplace and incidental learning and knowledge transfer
The nursery schools found many ways to promote workplace learning. Sometimes staff trained their colleagues, including a nursery officer in one school who also developed and led training for parents. Staff, including support staff, took turns to be on the interviewing panel for new staff and everyone had a responsibility to observe the potential staff member in their work area. The head described appointments as a professional development opportunity, by giving staff experience of being on the other end of an interviewing panel. The senior teacher agreed and also thought that having a new member on the team had benefits:
> *This person will have new things to bring and learn from: finding her place.*

Having teachers sit in with the peripatetic music teacher was also intentionally planned as professional development for staff. An AST from another school came into one nursery to work with a teacher and then this teacher would pass on the ideas to her colleagues.

In primary schools, the formal CPD programme often overlapped with work-based learning: for example, a course leader observed at one school linked the course content directly to classroom teaching and provided follow-up demonstration lessons and coaching in the teachers' classrooms. Other examples, from the five schools, of planned work-based learning, both individual and collective, included: a staff meeting lead by the head to trigger and guide shared learning on SATs targets; a new deputy coaching an NQT, using '*Messenger*' software, their laptops and whiteboards to collaborate on lesson planning; observation of teachers in neighbouring schools within a shared initiative on thinking skills across the cluster; a head training LSAs who were due to become break and lunchtime supervisors under workforce reforms, ; coordinators being given a day each term to observe lessons and give feedback to teams.

All three special schools attached great importance to the provision of work-based learning opportunities. At the secondary school the head saw a direct link between induction, planning and development, performance management and teaching and learning; teachers received

written feedback on their performance in key areas. He said he was aiming to provide a clear focus: staff were applauded for success and given a positive steer. All personnel were included - training (eg. in signing) for bus guides, escorts and for lunchtime supervisory assistants (behaviour management and feeding project) was provided. Examples of deliberately planned work-based learning opportunities at the residential school included: collaborative teaching between teachers and TAs; ongoing, twice daily professional dialogue between education and care staff during the morning and afternoon pupil handover times; every three weeks there was a one-day inset session for all staff; the three weekly one-day sessions in which trios reviewed targets for individual children; systematic analysis and use of examination, achievement and behaviour data; induction was being taken very seriously. Work based learning opportunities at the special nursery school included: staff meetings to discuss practice, articles, new directives etc; buying periodicals which were shared out between teaching assistants who then made notes on key areas which they circulated; a system of regularly monitoring each others teaching; sharing all activities in classrooms.

Incidental learning opportunities are, by definition, mostly unplanned. Schools exploited the potential, for example, of staff meetings and discussions and performance management, to varying degrees. There were also opportunities for staff to learn from each other informally, which may or may not have been realised. For example staff from the special nursery school travelled together to visit children and their parents at home and much discussion went on during the car journey.

**Vignette: Observed lunch-time conversations in a nursery school staff room
as example of incidental professional learning**

The space is small, long and thin so less conducive to conversation than the intimate space at the old site. One member of the support staff showed colleagues how to download images from the internet; staff discussed the *Child in Our Time* TV series and related this to last term's inset work on right/left brain activity; they also discussed two particular pupils – one had been sick and the reasons for this were discussed (travel sickness on the bus? neglect at home?); LSA from one team shared her observations about a pupil from a different team – she usually only sees his (bad) behaviour in the playground but on this occasion was involved in a home visit with him – she observed his confused behaviour in the car, blurting out a jumble of disconnected ideas. Possible explanations for this were considered.

Promoting knowledge transfer was less well developed than other aspects of professional learning. So, while there were many opportunities to learn, it was not always possible to embed new ideas into practice. In one secondary school, arrangements were set up for mutual classroom observation, often using a video camera. One school had calendared peer observations and feedback sessions twice a term but other pressures meant that these had only happened infrequently. In all of the schools there was informal sharing in the staff room, and staff were generally encouraged to share ideas if they had been on an in-service course, which was sometimes built into staff meeting agendas. Staff in one school found that becoming an expert in one curriculum area sometimes had its challenges because of a lack of time to share this knowledge with colleagues. As a result, when the nursery nurse with responsibility for ICT left the school, other staff found that a key resource had gone and that they did not have the skills and knowledge to follow up on some of the issues, as one noted:

There are so many things going on it's so hard to get someone to show you things,
while another observed:

The idea is that it's important to share things but it doesn't really happen. I don't think anyone really teaches science because I've been on the course. [Name] does ICT. We've become specialist teachers in our areas. It's not intentional.

Professional development portfolios were introduced in one school. While there was some debate about whether staff should be encouraged or expected to keep them (it was eventually decided to use the language 'strongly encouraged') and some staff were looking for greater clarity about what could be included in the portfolio, most of the staff generally accepted that it was desirable for them to take greater responsibility for their own learning and the CPD coordinator piloted the approach with 10 carefully targeted 'volunteers'. Staff were given a folder in which to put evidence and they were encouraged to reflect more on what they were learning.

Promoting collective learning
Schools varied in the extent to which they used whole school professional development days for sharing across the school. In some cases this was extensive, elsewhere less so. Senior and middle leaders in one secondary school attributed limited collaboration to the unwillingness of some staff to change, although a staff survey in one school had found that staff felt there were not enough opportunities to share across the school. The head mused:
> *A lot of good practice could be shared more widely . . .The school misses out opportunities to share within and across the curriculum.* PD (professional development) *days could do more.*

A teacher agreed:
> *There's a wealth of knowledge and experience. You'd never know it until there's time to speak. On PD days, we could share. We are missing opportunities.*

Several secondary schools had cross-curricular teaching and learning groups. While these groups differed in their exact remit, their aim was to stimulate and share good practice across the curriculum. The teaching and learning committee in one school was a forum where staff from all curricular areas could share ideas, suggestions, and feedback from training. In one observed meeting, agenda items included feedback by two prospective ASTs on an 'Accelerated learning' training course and on the work they had since done in their classrooms; discussing the work two teachers had done using a computer programme with themselves and pupils; identifying preferred learning styles; a summary from a staff questionnaire on teaching and learning; and plans to set up further paired observations.

In another school, the head carefully selected the teaching and learning group, all of whom were experienced members of staff, one of whom explained:
> *We are in very early stages. There's an awareness that some of the practice in the school needs to be sharpened up. It's difficult; there's a fair amount of unqualified teachers on staff. In a school this size it's hard to select people.*

The membership of one school's learning forum was voluntary, meetings were held after school once each half term, usually about one third of the staff attended.
As one teacher commented:
> *. . . I think now, because of the learning forums we have and other INSET, we share more across departments, where before we were very much in departments . . .now there's a lot of liaison between departments.*

Staff residentials were used in one school as a means of encouraging collaboration across the teams. A mix of social and professional activity appeared to be very well received by staff

(the most recent one focused on self and team evaluation) and the senior staff rated the residentials as extremely valuable.

Promoting inclusive professional learning
The head of one nursery decided to take a whole-school professional development focus on behaviour so that the whole staff could attend:

> *So we've done a process for behaviour policy . . . which is around effective restraint and other strategies, so you never put yourself in a position where a child's behaviour becomes out of control. So it's a very safe way of working with behavioural difficulties. From that, the whole staff will do the behaviour policy, and that actually includes our dinner ladies as well. So it was one of the few times when absolutely everybody has done a course like that. Some staff found it very difficult because it was obviously pitched at teaching staff and some of the other staff found that hard and felt threatened by it, but everybody came through it and it was really worthwhile. Some people have been critical of it but the whole thing about the staff doing it together has demystified the course and doesn't allow people to think that they don't have to do it because they've not been trained . . . So what that will help us to do is to actually look at behaviour.*

The shift towards local management of schools in April 2004 also changed the relationship with nursery school governors, who were taking on a more strategic leadership role. The *mature* nursery school saw this as an opportunity to provide professional development for the governing body, led by the staff. The head ideally wanted to have a governor in charge of professional development: she wanted a more creative governing body:

> *At present . . . They leap through things they are not sure of, and talk about what they are confident about. It should be other way around.*

Nursery school respondents to the survey were particularly vocal in highlighting that a professional learning community had to think beyond the learning of staff, as this survey response highlighted:

> *I would include the phrase 'sustain the learning of adult educators in the school community including parents and carers . . .'*

In the primary schools, funding for the CPD of support staff was often limited and it could be difficult to find appropriate provision. However, schools were able to develop the role of support staff as a result of training through the Early Learning Strategy (ELS), ALS and 'Springboard national strategies, which involved training specifically designed for TAs. In addition many support staff were invited to attend inset days. In most cases, the commitment to training for non-teaching support staff was patchy, relying on individual enthusiasm, as in the example of the school secretary in the closing school who had coached her younger colleague:

> *We lost my assistant at Christmas. I'm very proud of her because I trained her. I got her through her NVQ and I must say I'm preening my feathers here like a peacock. She's got a job at the main hospital - she's come on leaps and bounds and the report I got back from her supervisor was that the groundwork here was of great benefit and to thank the lady who taught her. So I'm very proud of that. She's about my fifth lady for promotion.*

Some did promote a sustained period of training as illustrated in the following vignette.

l. Sustaining the PLC over time

In this section we explore the issues associated with developing and sustaining the PLC over time. The treatment here is somewhat unusual. Analytic summaries are presented for the primary and special schools whereas for the nursery and secondary schools we present contrasting accounts of change over time in two *mature* schools.

Primary schools
In the primary schools, the extent to which a PLC was deliberately promoted and developed varied from school to school in several respects. In one, it was certainly developed but not always consciously or explicitly. The head simply set out to promote excellent teaching and learning and was not completely comfortable with expressing what she was doing in terms of a PLC. Thus, her professional knowledge and skills were implicit or tacit. Nevertheless, in her fifteen years at the school she had adopted an evolving approach which included: in the early period of her headship, a deliberate policy of encouraging and supporting staff who did not share her values to leave and of then recruiting like-minded staff; attaining the *Investors in People* award; integrating an Early Years Unit into the school; working with outside agencies and seeking funds whenever she could; giving staff professional 'space', support and trust; ensuring that all staff felt included and valued; intuitively enhancing professional learning in staff meetings and INSET; using management points judiciously; latterly, in the run up to closure, using all her contacts and networks to recruit good temporary and part-time staff to fill vacancies caused by promotions and down-sizing.

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In another school, the head's initial mission, following an earlier, poor OfSTED report, had been to raise standards in the school by improving learning and teaching as a first step in developing a learning community. A PLC was being consciously promoted although, according to the head, it only existed in pockets across the school; hence, she was working to spread this more widely. The strategy included: the allocation of changed responsibilities to a new deputy; an enhanced role for LSAs; improving the school environment; making strategic staff appointments; working with the governors to develop their role; coaching and mentoring of individual teachers; consciously using CPD to promote the PLC when she first started, then making it more implicit. Other senior staff, including the KS2 coordinator and the new Deputy, promoted the PLC, not necessarily consciously but more as good management.

In a third school, the need to manage falling rolls and redundancies radically constrained any continuing work on promoting the PLC. The reduced budget meant there was little finance available for doing more than the basic work of the school. The head's heavy teaching load was exacerbated by problems with a part-time teacher who took her class for two days per week. She was seeking to develop staff collaboration and had used IiP, recently renewed, to promote this. She consciously promoted a sense of community but regretted not remembering to praise staff. The SDP was mainly seen as an accountability exercise, one in which governors did not want to be involved. Although it did force everyone to review priorities annually, she argued that the SDP was only of marginal use because the environment was constantly changing, government funding was too short-term to plan 2-3 years ahead and in any case there was too little money in this small school to fund any substantial development initiatives.

External factors could have a mixed effect in terms of facilitating or inhibiting the development of a PLC. For example, the impending, and in July 2004 the actual, closure of one school due to falling rolls, was the major external factor affecting this PLC throughout the project. Somewhat paradoxically, this generated a powerful survival spirit and in certain important respects enhanced morale because all staff were committed to ensuring that the children did not suffer any more than was unavoidable during the transition to the new schooling arrangements. More generally, workforce re-modelling could potentially raise issues but heads seemed mainly to see it as a facilitating factor, especially enhancing the work of LSAs.

Inhibiting factors mentioned across the five schools included one whose rural location and long travel distances made CPD courses expensive and time consuming; weak support from one LEA that had had a very poor Ofsted report; lack of funding to pay for the supply cover needed to release teachers for CPD; difficulty of finding funds to support CPD for LSAs; the short-term nature and multiple sources of CPD funding, often requiring a heavy investment of time for bidding, with no guarantee of getting the money; lack of time preventing development; day to day issues – for example, one LEA announced the closure of the school meals service at very short notice, leaving a head little time to develop an alternative system; the speed of external change and not knowing what was coming in the way of national initiatives.

Among the external facilitators mentioned were strong links with the local cluster of schools which produced cooperation on a wide range of issues including the schools sharing the salary costs for ICT support and a building projects manager, joint inset and meetings for staff at various levels and collaborative work by literacy coordinators. Internal facilitators included the contribution of a newly appointed deputy head who shared the head's values and

worked with her to promote the PLC; a growing sense of trust which appeared to be contributing to the development of an open, collaborative atmosphere in one school:

> *There is far more chat about what is happening. Not just in the staff room – conversations with come round to 'how can we make this better? People are sharing ideas now.*

Since there were no formal evaluation mechanisms in place, PLC impact could only be judged impressionistically but heads and other senior staff were confident about saying when they thought the process was leading to improvements in learning and teaching. One school seemed to be developing fast from a *starter* to a *developer*, led by the head, who had a very clear improvement model in mind, supported by a new deputy. Staff appeared very open to the opportunities offered: modern foreign languages, including a French club, were now well established in several KS2 classes; peer observation and feed back seemed to be accepted; teachers talked about the impact on their classrooms of the Preferred Learning Styles inset. The impact of all this on the support staff who were most close to the classroom was marked: LSAs, including two SMSAs, were well represented in the PLC and in smaller or sub PLCs. A subsequent Ofsted confirmed that the weaknesses identified in the previous report had been successfully addressed.

In one school with a small staff everyone knew all the children: staff perceived pupils to be positive learners and were able to discuss pupil needs and progress with staff who had already taught them. The head had established a very open style and a strong school vision: staff agreed that the school had a distinctive way of doing things. In another school morale seemed good but there was little talk of professional learning or any apparent desire to expand and develop ideas by getting engaged in external support or even working with other colleagues internally. There was an impression of professionals working on their own or in small groups and just getting on with the job, with little evidence of reflection. One teacher said, *Educational values are never really tested*.

Sustainability of the PLC was recognised as a key issue in all five schools but, of course, it took on radically different forms, depending on the context. In the school facing closure all efforts were concentrated on maintaining a focus on the children's needs. Faced with the crisis of closure, the PLC foundations laid in previous years proved to be very robust. As a result, in spite of the many staff changes, morale remained generally high and everyone continued to pull together to a remarkable degree. The school ended its life with a series of events to celebrate its success over many years.

In another school, the head felt that the PLC was much more sustainable than it had been twelve months earlier although there were particular areas needing attention. Her belief was that if something is going to work well and bring about improvement then staff had to have ownership of learning - *deep learning* as she called it. Her emphasis seemed to be on encouraging staff to reflect on their own practice but not necessarily on directly promoting the PLC *per se*, though these activities would probably contribute to this. She saw her role in this as chief coach and mentor, talking to people the whole time. The deputy and KS2 coordinator were also working to the same end.

Special schools
Senior staff from all three special schools said they were consciously promoting a PLC to some extent, although not necessarily using this terminology. At the secondary school the deputy head and CPD coordinator said:

the effort to establish a learning community has always been there - it has become more important as we focus on how we can develop teaching

while the head said:

this is a developing area - there has been a step change in our understanding.

At the residential school, the head and, later, the former deputy head and the new CPD coordinator had adopted an explicit strategy for promoting a learning community which included: a clear mission statement focused on student learning, developed collaboratively; more emphasis on learning for academic achievement; integrating the residential and care functions and staff more closely into the school; a policy of recruiting like-minded staff; using management points judiciously; using data analysis and application; a coherent behaviour management policy; a comprehensive and well-funded CPD strategy and policy for all staff; deliberately working with outside agencies and seeking funds whenever possible; enhancing professional learning in staff meetings and inset; ensuring all staff felt included and valued; latterly by the intended introduction of IiP. At the nursery, the PLC was fairly extensively promoted. Examples cited were that the head, in consultation with all staff, routinely moved staff around every two or three years so that everyone gained experience of working with other staff; the staff worked closely with parents whenever possible, including regular home visits and inviting parents to inset days.

Factors at the secondary special school that inhibited the development of the PLC included the fact that the school was so distinctive, there were very few other schools like it in the area with whom staff could exchange similar experience. The principal at the residential school saw as unhelpful the fact that, because the school was non-maintained it drew on 17 LEAs, with varied policies, capacities and expertise. Because both the secondary and the residential school were relatively small, it was unusual to have more than one specialist teacher in any subject area and so it was difficult for staff in these subjects to share ideas and planning. Several inhibiting factors were mentioned at the nursery, these included: cramped and shared accommodation which put a strain on everyone; and, while Beacon status helped the school's reputation, the pressure to respond to external enquires and visits led two teachers to talk about the need for more time to consolidate and to, *look after the base*; different rates of pay for LSAs, due to school budget rather than qualifications, created some tensions; the school's multiple sources of funding and the bidding culture made for precarious, and continually changing, funding which took up much of the head's time;

External facilitating factors mentioned at the residential school were that the head drew on ideas from a extensive EBD networks; the parents were very supportive and engaged – some interviewees saw them as part of the PLC and as active learners in the task of collaborating to enhance their child's learning; the governors were very supportive in a general sense and had attended inset days with staff. The nursery had lots of contacts beyond the school, for instance working with parents and mainstream infant schools and its pre-statutory status permitted greater freedom of action, notably in the adoption of a four-day teaching week.

The low pupil numbers and high-adult child ratios acted as internal facilitating factors at all three schools: in a small school every individual was known and there was real engagement with the individual needs of all children. Other factors mentioned at the secondary school included: the very good atmosphere between staff and students; a committed and hardworking staff; high integration of teachers and support staff; the multi-disciplinary organisation; head and deputy working with colleagues to promote a PLC; support for learning and teaching through staffing (eg. curriculum coordinators; progress coordinator); developing links with other schools, including those networks/projects directed at mainstream schools. Although the residential element at the third school had previously acted as an

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inhibitory factor for the PLC it was now seen positively because the excellent buildings, the 24-hour curriculum and the relatively closed community all contributed to a strong sense of togetherness. Also mentioned were a strong sense of mutual trust and respect; a very happy staff room atmosphere; and the excellent use, on a three weekly basis, of inset and case conferencing days. At the nursery, key facilitators mentioned were: shared vision and values between the mainstream and outreach staff; clear and consistent ways of working which were felt to be especially important for the school's particular pupil intake; staff induction; mutual trust, and sound professional and personal relationships, with lots of socialising outside of school; strong teams and stability of staffing at all levels.

Vignette: Investors in People – an example of its contribution to PLC development

The special nursery school had considerable experience of IiP. The head had valued the process of working towards the Standard and initially saw the main advantages of involvement as *gaining public recognition and reputation* and *improving staff morale and motivation*. Once the school engaged with the process, other changes followed, including improving communication and support for non-teaching staff.

Thus, IiP had influenced the early development of the professional learning community as indicated by its reported overall impact on CPD, especially the increased commitment to opportunities for all; a strong focus on cost effectiveness and value consciousness; greater emphasis on teamwork, valuing people and improving motivation and morale; and an increase in shared understanding through improved communications and a clearer sense of purpose; finally, there was some evidence of better connection between staff development and pupil achievement.

A lesser impact was reported on planning and organisation: *I would assess it as a minor influence on our structures and processes*. Moreover, engagement with IiP was perceived to yield a diminishing return in the longer term and was not seen as a direct aid to the systematic development of a PLC.

These efforts and activities had, by the end of the data collection, all impacted on the case study schools as PLCs. The secondary school, reported in the survey to be an *early starter,* was perhaps now better described as a *developer*. Learning was much to the forefront and the big push on assessment had been successfully implemented. The impact of operating as a PLC at the residential school was probably to enhance its self-reported status as a '*developer*'. There was evidently a clear focus on children's learning and on staff learning; a clear sense of common purpose and shared values; and, reportedly, all round staff commitment to improvement. The principal was justifiably proud of the school's performance in the pilot scheme that measured value-added between KS2 and GCSE/GNVQ, based on individual pupils' performance for a sample of schools. The nursery, self-reported as a *mature* PLC, continued *to demonstrate many strengths*. In spite of the inevitable strains and tensions provoked by the move to temporary accommodation, the teachers' meetings were a powerful means of supporting each other through a difficult period without depending on initiatives by the head. Distributed leadership had been encouraged and facilitated by the head: one LSA said that the head, *encouraged me* (to work with a failing pre-school and) *her trust in me helped*; the head had actively supported one teacher, through professional development, in her acting senior management role.

Sustainability of the PLC was recognised as a key issue in all three schools. The deputy head at the secondary school said that sustainability was problematic but structures were being put in place to strengthen the PLC. At the residential school, the implications of the shift to

selling services to other schools and agencies were being worked out. Several staff changes, especially at senior level, had slowed down progress and so a major focus had been to ensure that the PLC was sustained. Thus, the induction day for new staff, including the new deputy head, concentrated exclusively on the schools mission and encouraged senior and experienced staff to clarify and develop this with new colleagues. Several issues affected sustainability of the PLC in the nursery, particularly shortage of time and financial resources. For example, there was an expectation that the school would continue to provide Beacon-style activities even when Beacon status and funding ended. Second, the head was planning to introduce new training for reception support staff in the next academic year, for which the school would have to cover the full cost. Third, the head was also discussing with the governors about finding time and training for three new staff governors over the next three years and it was not clear how this would be resourced.

Change over time in a nursery school and a secondary school
To illustrate the process of change over time in *mature* schools, accounts of experience in two different contexts - nursery and secondary are presented.

School A   Nursery: self-designated as a *mature* PLC

The school's self-designation as a *mature* PLC was generally verified by the case study. Indeed, the staff's continuous striving and openness to feedback, change and growth marked the school out as a particularly mature professional learning community.

Despite changes of staff before and during the project, and the head's external secondment for a term during the project, the feeling in this school was one of energy and drive to find new ways of enhancing children's learning. Posters, quotes and notices around the school gave powerful messages about learning, teamwork and leadership. The incidental learning from these was significant, as exemplified by the part-time school keeper who asked the head if she would mind if he showed the quotes to the headteacher at the other school where he worked.

At the start of the project, the head was in her 7th year at the school. When she arrived she felt it was:
> *a sad school, allowed to go to seed with health and safety problems and a staff who were antagonistic.*

In great contrast, seven years later, her view, borne out by other staff members, was that: *It's an exciting place to be,* where new staff settled quickly in and saw themselves as *being part of the furniture.*

Most significantly, everyone was driven by a desire to improve what they were offering to the children. The head recognised staff as: *our greatest resource.* She had very high expectations on the one hand while, at the same time, trying to nurture staff. She tailored her approach to each individual, recognising that in a very small school formal leadership opportunities were limited. Nonetheless, she appeared to devote tireless energy to ensuring a wide range of professional learning and leadership learning experiences to equip staff for their role as a member of the school's professional learning community, a contributor to the LEA's learning community and for potential future job applications which she recognised were inevitable. As one teacher commented:
> *When I went for another job, I thought she wouldn't take it well, but she was really supportive, and said 'I think you've done really well here. It's time for you to widen your sphere. Ask me if you need any help.*

Generally, people felt extremely valued:

> *People support the opportunities we all have. If I'm on a course, there's no resentment if a supply teacher is dreadful. We value each other's opportunities. In some schools, if people are out three days, others may not understand. Communication here is good . . . It feels like we are all singing from same sheet. (senior teacher)*

> *I hope people feel their efforts are valued. I do. It's the end of a hard year and they've been under pressure. We do a tremendous job here. (nursery officer)*

The nursery officers were extremely committed to the school and all were given responsibility for a group of children and an area of the curriculum. A teacher reflected:

> *(The head) expects nursery officers to do a lot. I'm surprised they will do it but (she) makes it appealing. She makes sure they get development, have time to lead in an area. She does make it happen. People are willing.*

Staff changes each brought a new dynamic to the team. The staff team by the end of the project was a particularly close knit. The emphasis on learning and questioning was very evident. A quote on the head's office door reads:

> *A place of questioning where you must ask the question and the answer questions you.*

All staff interviewed talked about the importance of asking questions. There was a strong sense of collective responsibility for pupils' learning together with evidence of reflective enquiry through informal and formal observation notes, occasional peer observation, collaboration on setting goals for individual children, leading of weekly staff meetings, a lot of sharing and joint problem-solving promoting group learning. There was also strong mutual support and caring. Near the end of the project, the school was awarded *Investors in People* (IiP) for a third time.

Professional development opportunities were plentiful with staff members feeding into LEA working parties, often as the only nursery member of staff. A relatively new teacher enthused:

> *This has been a brilliant place for my first post. It wasn't until I began to write my supporting statement that I realised how much I've done. I sent a copy to my mentor. She said, 'It's too long, but it's all relevant – don't take anything out – it's all important.' The teachers I trained with all started at the same time, but no-one's done what I've done.*

The school's administrator was equally enthusiastic about the learning opportunities and the support from her colleagues:

> *I've been here 2 years. I feel more part of the team. I understand the education system more; how all the elements fit in to make it a better school. As I've grown, I've been given more responsibilities by [name of head] and the team. You grow together, you give each other a lift, boost each other up. Through support, you give people a leg up.*

While there had been significantly positive change over the years since the head arrived, she did not view it as always moving in one direction and this final quote from her illustrates the fluidity of the process of development of a professional learning community:

> *You can't be growing all the time. There are ebbs and flows: when you get into new school year; after a few weeks; the beginning of a new term; the end of term tidying up and rewards and satisfaction. No document you can produce will ever show us all*

those layers. What fires us up may be life changing to one of us. There are phases when you have spurts, or when you chill out, or when the waters are distinctly choppy.

School B   Secondary: self-designated as a *mature* PLC

An important feature of this school was that, at the point when it became a case study, staff had already been working to improve learning and teaching for several years. One of the deputy headteachers who had a brief for learning development explained:

> *. . the school is developing emotional intelligence, inter personal skills and strategies to raise achievement. We've been doing it for a long time and the last two and a half years we have been looking at learning, we've been looking at people skills for seven years . . it's the fact that we have been looking at how children learn, it's the actual process of doing that that's important.*

The school was already involved in a number of external partnerships and networks: it had had Technology College status for several years, was a Beacon school, and was one of the leading schools in a large NCSL Networked Learning Community as well as being linked to the local middle schools. The school's achievements in these areas were confirmed by the results of an Ofsted inspection early in 2003. The inspectors identified important ways in which the school had improved since the previous inspection in 1997. Things that were cited were that, results and attendance had improved, good quality teaching had been maintained; the sixth form had expanded as more students were staying on post 16; a range of community partnerships and national projects had been undertaken and facilities and resources had been improved. The inspectors reported that the head teacher and senior staff provided very good leadership and promoted an inclusive and engaging spirit in the school. They recognised that the leadership team encouraged staff in believing that they could affect the direction of the school. The school was said to be aspirational for its pupils. They reported that the management of the school in implementing these principles was good, that the governors carried out their responsibilities well and that the quality of teaching and learning was good across the school.

The headteacher had been in post for some four years at that point and he confirmed that the school was a thriving community when he arrived.

> *Yes there was a lot going on. The previous head had done a fantastic job and had created a vision and direction for the school and the role of the school in the community as an organisation leading the community through regeneration was very significant and very unusual - the Ofsted report commented on that. We wanted to continue that work and embed it.*

The head was committed to an agenda about promoting and sustaining learning and also to a distributed style of leadership. The senior leadership team led the drive for learning and the head described the culture of the school as being,

> *not one of a hierarchy of subjects but it is one that says learning, whatever it's called, learning is a priority and will be celebrated whatever its form is and everybody has a part to play in that.*

The senior leadership team were encouraging staff to take a whole school view of learning, the deputy with curriculum responsibility said, *virtually every policy that we write we put the emphasis on teaching and learning.* The head acknowledged that he felt it had taken staff

some time to become used to his style of leadership but that now they were familiar with it. He described the system as:

> there is a lot of delegated authority but not delegated responsibility. In other words if it all goes pear shaped we're there to look after it. I think it's a belief in outcomes rather than process, we know where we want to go and that's shared and accepted by everybody but how we get there is a decision that we take and that's really a decision that people will take in teams.

A year and a half after the first project visit, data gathered on visits to the school demonstrated that it could still be described as an established/mature learning community and was continuing to improve on several of the PLC characteristics. A number of factors that appear to have helped to promote and sustain the professional learning community are discussed below.

Managing the core tasks
The day-to-day school administration and management tasks appeared to be very well handled, sound administrative systems were in place and information about what action to take in particular circumstances was available for staff. Relationships between pupils and staff were very good and generally it was not difficult to recruit people to jobs. Examples of systems in place included a good pastoral system with a developed PSHE curriculum, form tutors were organised in year teams led by a Head of Year working with a deputy head of year. A second important feature was that there was careful and detailed analysis of pupil achievement data from the various Key Stage tests and GCSE and A level examinations as well as other tests that the school used. Data about pupil achievement was widely disseminated to the staff and each teacher would have information about individual pupil achievement and targets for each of their classes. Pupil achievement was carefully monitored and results were good and improving. The school had had IiP status for many years, procedures for induction of new teachers, supervision of student teachers, performance management and continuing professional development for staff were well established. Perhaps because the core management tasks were so well under control, staff had energy to devote to the learning agenda. A key change that was introduced during the life of the project was to re-organise the structure by setting up a new joint leadership group consisting of the subject heads and the heads of year, rather than having them in two separate teams. This was reported to be working very well and had made it easier to develop a school wide focus in discussion.

Continue to push forward with the learning agenda
One of the two deputy headteachers had a specific brief for developing learning across the school and she continued to stimulate initiatives in this area. During the course of the project the number of staff who understood and were committed to the learning agenda grew, the "critical mass" of people working in this way increased. Three strategies that had been introduced were especially powerful. The first was the Learning Forum, a voluntary after school meeting once each half term where issues about learning and teaching were discussed and good practice was shared. These meetings were usually attended by about a third of the staff. The second, was the Learning Leader initiative through which teachers could put forward a proposal to develop a learning project - if successful they were awarded one management point for a year. By the end of the project this scheme was coming to the end of its second year and approximately ten teacher leader projects were underway, the majority of which had cross-school implications. The outcomes of these projects were disseminated to staff and there was evidence of the learning leaders having an impact on their colleagues in departments and teams. The third strategy was an increase in classroom observation and

feedback as a means of professional development and learning, the Learning Walk. Indeed the deputy with lead responsibility for curriculum suggested that this had been

> *…the big leap that's been able to help us in the last two or three years is people are no longer defensive about being observed or intermingling with each other - there's a whole new culture*

Maintaining trust and support

Relationships between staff were reported to have been good for many years and many staff said that it was a caring school. The head and his senior colleagues actively sought to develop mutual trust and support. Several strategies were used: first, the training on emotional intelligence was ongoing, and there appeared to be wide awareness of ways of organising discussions and problem solving etc (eg. using thinking skills strategies). Second, the head tried to make himself accessible to staff, for example by going into the staff room at break time and having informal conversations with colleagues.

The senior leadership team worked to develop a culture in which learning was valued, where ever it happened, the focus was not skewed towards the big subject departments. Comments from several teachers indicated that they felt professionally supported and encouraged to develop, *You're encouraged to take risks and be a bit more creative and to work together and develop and share good practice.* Systems for mentoring, coaching and facilitation for staff had been introduced. One of the facilitators explained her role:

> *I've become a qualified facilitator to help other staff in the school who want to progress onto management, to help them feel they can voice their opinion, even if they're not on a level in management or leadership.*

Opportunities were available for staff to attend the NCSL Middle Leaders course which the school was helping to run with other schools in the Networked Learning Community. Some staff had worked in the school for many years but there was also a group of new, young teachers and the leadership team worked to encourage them and provide opportunities for their career development. One example of this was the learning leader initiative, which the head saw as a way of putting the focus on learning. He said:

> *So really, what we are actually looking for is leaders of people, influencers and motivators and that calls for personal skills just as much as subject knowledge - the emphasis is moving away from the subject knowledge if you like to the personal skills - who are the motivators, who are the influencers? You can be a fantastically effective motivator and influencer at 22.*

Continuing to build networks and partnerships

The school was a lead member of its Networked Learning Community and during the course of the project it was clear that this involvement was providing CPD opportunities for staff. In addition to the Middle Leaders' course, several staff from the school had participated in joint training days and conferences, had made presentations about their work and/or projects to staff in other schools in the Network or at national conferences. Examples of work in different schools were made available to all staff through a dedicated website for this Networked Learning Community. The deputy (learning) actively encouraged staff to bid for development opportunities, for example, two teachers successfully gained Best Practice Research Scholarships. School staff were also involved in initiatives with the local community, for example, a partnership had been developed to secure funding to build a state of the art football facility with artificial pitches. The management and use of this resource would be shared between the school and the local community. The headteacher said:

It represents us, the school, putting together a team of people who by working together could achieve a million pounds worth of facility. So it was a new partnership to achieve a particular end . . .

Senior staff were also working on a major bid with colleagues in the four other high schools in the valley to secure funding for a Virtual College. An increasing number of staff were making use of ICT and this facilitated exchange of ideas within the school, for example, resources were shared between colleagues via department or faculty websites, a number of the learning leader projects were exploring ways of using ICT to develop learning and teaching (eg. through a virtual learning environment). In the second year of the project a new enterprise initiative was being developed in the school led by one of the senior teachers, a range of activities was being developed, some directed at students in the Business Studies area but others had implications across the school and for partner schools. The strong impression gained when visiting the school is that staff are energised, seeking ideas and information, developing links with colleagues inside and outside the school and keeping focused on the core agenda issue which was to promote pupil learning.

m. Leadership and management

Creating, developing and sustaining a professional learning community is a major leadership and management task, one which emerged from the data as a critical strategic process. The key associated issues and examples are presented under here four headings: leadership values; developing and 'spreading' a learning vision and focus; building trust; and distributed leadership.

Leadership values
Did staff in the nursery schools have shared leadership and management values? This varied between the schools. In one school a newly appointed head had introduced an unfamiliar management style when she began to delegate some tasks. There was some resistance to this as, though staff wanted clear leadership, some felt that the delegated tasks should not be their responsibility. Comments from staff in the other two schools were supportive of the leadership and management values which were inclusive. Teachers and nursery nurses spoke of team-work, ongoing discussion about work, sharing with each other. A nursery nurse commented:
I would class her (the head) as the team leader, but we all work together as a team. I wouldn't say there was someone up there and the rest of us - I think we all gel very well.

Leadership and management values across the school are inevitably shaped by the leadership style of the headteacher and the cohesiveness of the team as much as anything else, questions about these values raise issues about the management of change. In one secondary school the headteacher, who was new in post, described how she was working to build a shared leadership vision in her senior team:
So when we formed the leadership team to take on the next stage of school improvement, the discussion wasn't on improving teaching and learning but rather to ask what everyone's vision for the school was.

In another school, the head was not confident that there were shared leadership and management values across the school, not least because she was aware of differences in approach among the middle managers.

The challenges facing heads as they sought to put their own ideas about leadership and management into practice were often context bound, as was evident in the experiences of the primary heads. One, faced with the task of closing the school, felt confident in saying:

> *There is not a member of staff who does not share the same professional values in the school. Right down as I said to cleaners and caretaker. They are all totally professional in their field, totally trustworthy. It's like a family. The sad thing is that if we do have to close I will miss so many people. They are not just colleagues – they've become good friends.*

In contrast, the experience of a new head is illustrated in the following vignette.

Vignette: the new primary head building shared values

This new head followed one with whom the staff had been comfortable but who did not promote innovation. She arrived, following a poor Ofsted report, with obvious energy, enthusiasm and the desire to move the school on and, by her own account, *took some getting used to*. The departure of the deputy enabled her to make key management changes but she found herself initiating everything:

If I'm totally honest my leadership values are not shared as much as I would want them to be across the whole school. Because of the situation we were in, post Ofsted, it was difficult to make them totally explicit to people. . . .I think that now we are in a position where we can re-visit things again, go over why we do things in a particular way and why we have a certain practical style.

Significantly, the new deputy said that she shared the head's leadership and management values - *Really in a way she is my role model*.

In the early interviews, all the staff felt generally happy about leadership although some felt that the SMT knew what was going on but there was a lack of communication for others. Recent visits showed an even more positive view. Staff seemed to be more used to the head's style. A positive Ofsted report had endorsed this:

> *Strong leadership provides clear and decisive direction for the school, which continues to improve. The quality of teaching and learning is good and enables pupils to make good progress in lessons. The school gives satisfactory value for money.*(Ofsted)

The new head read widely and reviewed educational sites on the web as one way of promoting her own learning. The NCSL *New Visions* programme had had *a massive impact* on her and provided the catalyst for significant curriculum change. Over a year after the programme had ended, she was still in contact with her *New Visions* group.

Of the new head, one teacher said:

> *We were just coasting along. And it helps to have someone pushing you. She makes you reflect on what we're doing and the standards the children are getting.*

In another primary school where change had taken place due to the appointment of a new head, the degree of shared vision and values increased over time. There was, by the end of the case study, a shared vision, driven by the head and directed at pupil learning.

The head of a secondary school was also unsure whether the staff shared his leadership and management values commenting:

> *My view is that I'm quite gentle with staff. I need to crank up expectations on some issues. This may mean stating ones where the leadership was previously understated eg. with a key thing, do not ask anyone else to do what you are not prepared to do. Now I model more demanding practice.*

In contrast, comments from another secondary headteacher, supported by staff comments, pictured an open style of leadership. For instance, staff at all levels in this school commented upon an open, approachable style of management in which there was less hierarchy and more delegation than in previous years. The head said:

> *Flexibility, innovation, risk taking, all the hall marks of good leadership. If it falls flat it's your fault, you have to do a u-turn*

It is important to note that there was never any suggestion that more delegation indicated a laissez faire approach; structures and systems were in place which enabled the senior leadership team to know what was happening in different areas of the school. The educational value framework seemed to be widely shared and possibly it was this fact that gave the leadership team the freedom to model teamwork and to be prepared to delegate.

Developing and 'spreading' a learning vision and focus

The leadership literature highlights the importance of vision building and leadership for learning. An emphasis on learning came through very powerfully, especially in two of the nursery schools, while the third appeared to have more of a focus on standards. One head played a significant role in driving the energy behind the learning emphasis. Daily discussions about learning and teaching took place with staff, with a regular task in two of the schools being a discussion of each child's progress. The addition of the family support unit in one nursery had given the head the opportunity to revisit the school's vision with all staff and, to her delight, she found that staff held very similar beliefs. She used every opportunity to keep returning to the vision and develop a common language. The head in another school was unashamedly focused on learning at all levels, as one teacher explained:

> *There's such a huge focus on learning in this school. [Name of head] is doing a course on learning about learning. A man came in to talk about it, so it's all learning, learning, learning all the time. He asked us what we learnt over the holiday. It was interesting.*

Introducing a clearer learning vision and focus could, however, be very challenging. In one nursery school new senior staff did not fully share belief in the customary curriculum activities because staff did not have an educational rationale for them, nor did they assess the children's learning. Two newer senior teachers launched a new curriculum initiative where the rationale was explicit for children's activities and their learning was assessed. The initiative stimulated resistance from many existing staff, leading to a high absence rate, reportedly linked to stress.

As far as talking overtly about 'the professional learning community' was concerned, the term was not used in the secondary schools, often very deliberately but, to a greater or lesser extent, the characteristics of a professional learning community were being worked on in all of the five schools. In two schools considerable effort was expended to promote a culture of innovation, one head operating an open-door policy to encourage staff to come to him with ideas. Teachers responded to such a culture, one commenting:

You're encouraged to take risks and be a bit more creative and to work together and develop and share good practice.

The focus on learning and teaching could be seen in all five secondary schools but it varied considerably, depending on the school's context, stage of development and interest and 'drive' of senior leaders. In three of the schools, development of the learning agenda was still clearly being steered by the head, even though others were involved to a greater or lesser degree. In the two other schools, while the head had an oversight of the process, the main energy was coming from other senior leaders, middle leaders and teachers, although in one of these schools, the headteacher talked about his intention to introduce more common structures across lessons across the school. In line with an increased emphasis on personalisation of learning, some of the secondary representatives at the third workshop conference also reported that their schools were drawing on student voice increasingly, for example using students as researchers, giving them increasing choice, and ensuring that they were at the centre of dialogue about learning.

In one school, interviewed staff reported that since the head's arrival, the culture within the school was becoming more upbeat, and they all referred to this positive atmosphere. A member of the senior leadership team also commented on how there was, *much greater focus*. The head explained how this had not been easy, but they had used a whole-school inset as a trigger:

> *. . . although it's been done to death, we went back to basics [good lesson]. Everyone was in the session; the LSAs too. I had something we felt I could work with, setting the scene, and gave them the focus. . . .we looked at a video of a good lesson and then went back to department groups to discuss what were three points. . . . It was interesting to see how much consensus there was".*

She felt it was important to challenge staff to think about what makes excellent lesson, enabling them to see improvement:

> *Throughout the year I've almost got a mantra: we're about a good lesson, how can I help you in this.*

She also hired new staff to this concept, including a deputy head with responsibility for teaching and learning, and staff and the community were all clear about her expectations. Gradually, strategies were introduced, *to bring a unity of purpose and direction for all staff.* These included focusing on literacy across the curriculum; setting up a teaching and learning group and the emphasis on the 'good lesson'. She kept a close eye on collaborative, cross-curricular developments in the school and one teacher said:

> *I think the head is pleased with it. She dropped by one meeting. It's an initiative being taken up. It's always on the agenda on teacher days: oracy and literacy.*

Another school was also increasingly focusing on learning and the head had developed guidelines about effective teaching and learning, as well as making some changes to the senior leadership team to reflect developing priorities. He felt there was still a consistency issue between departments but reflected:

> *I wouldn't imagine any of the staff would have difficulties with that. A range of strategies has been discussed therefore outcomes are important . . . It may be more difficult to work towards, but it's an ideal to work towards.*

The review of aims in a different school led to a stronger focus on teaching and learning, assessment for learning and, for the future, self-evaluation. Teams were encouraged to focus

on discussing good practice in meetings, and the senior management team did the same to model this approach. Learning and partnerships were now taking overt priority over the emphasis on care. As a member of staff explained:

> *The 'family' word has gone; it's not that it's gone away and there's any less strength, it's just that we don't need to talk about it all the time, it's an accepted undercurrent.*

In contrast, while there were examples of good practice in another secondary school, there were no mechanisms in place to spread these across the school. Departments were left to their own arrangements and organisation and curriculum initiatives were not seen to be coming from the senior management team.

There is always a certain amount of resistance to change and, in developing a PLC, heads found that they came up against some barriers that had to be dealt with. Thus, in the nursery school newly linked with the family support unit, the head found that there were some behaviours in the family unit that needed changing, and believed that encouraging staff to exchange roles for a day would provide opportunities to get some of these issues on the agenda. One example was to recognise that learning outside the classroom was just as important as learning in the classroom:

> *We're involved in children's learning whether inside or outside, not just supervisors who stand aloof. But I'm not sure whether they've gone through that thinking and I think it's a discussion I just need to have with them at some point in terms of outside being important as a learning time.*

However, changes resulting from external initiatives, or indeed from the headteacher, frequently faced resistance. This included, in some cases, teachers who had little desire to work collaboratively or engage in new learning. Even in a mature professional learning community, there were some less engaged staff, as one secondary school teacher commented:

> *I think there are loads of opportunities in school. I think the individual person influences as to how much of this learning they actually take on . . . there are some people in the school who are perhaps a little more cynical about things, who aren't accessing all the opportunities . . . The Learning Forum is a classic one and we do get a kind of core set of people going along. Some people wouldn't dream of going, so they're missing out on that learning opportunity, but it's there for everybody.*

In some cases, the headteacher made an active decision to 'sit it out', for example if the resisting teacher was due to retire shortly. In other cases, either a protracted situation was underway in relation to competency, or staff members had realised that the direction of the school was changing and had decided to leave through voluntary redundancy or getting a post elsewhere, or the headteacher had counselled a member of staff who had then chosen to leave. This sometimes took considerable time and energy and senior leaders were sensitive to the tensions that it sometimes raised among some staff but felt strongly that, for the good of the pupils and school development, there was no alternative.

In the secondary special school, the leadership team consisted of three people - the head, deputy and assistant head - who met weekly. There was also a wider senior management group - the leadership team plus subject coordinators/leaders, including two SNAs - who meet monthly to discuss policy development as needed. The Ofsted report said:

> *the headteacher has the vision and drive which gives the school a clear educational direction and all staff share this ideal. Each member of the leadership group has a particular area of expertise which is used very well to promote practical skills and broaden the knowledge and understanding of the needs of the pupils and students in the school*

At the residential school, the leadership and management group consisted of the principal and two deputies (the heads of 'education' and 'care') and, latterly, the CPD coordinator. This group met frequently. The Ofsted report said that:

Achievements are rising and teaching is improving as a result of excellent leadership from the principal and senior managers.

At the nursery, senior leadership came from the head and deputy but each of the teachers had different coordinating responsibilities (eg. for ICT) across the whole nursery. The Ofsted report said:

The head ... gives a clear focus to the work at all levels. She sets an expectation of total quality and enables everyone connected to the school to contribute fully.........The nursery benefits from the governing body being a true 'critical friend'.

Even in a successful school, external pressures on leadership can be seen as inhibiting the promotion of a *learning* community as they understand it. For instance, the special nursery school head's view was

'Once you are a school, into statutory education, with national literacy, national numeracy, all the SATs and everything else that everybody worries about, the flexibility's gone, and all the research that recognises that children learn by experience, that even when they're teenagers if they haven't had the basic experiences they can't think theoretically. All of that is just ignored and we're straight into all that rote stuff and sitting still'.

Building trust

To encourage risk taking and a culture in which collaboration and shared responsibility operate, action was needed from the headteacher and other senior leaders. There was discussion of engendering respect and creating a positive ethos where staff felt valued. Senior leaders' attitudes and the ways in which they lived out their beliefs were key.

This seemed to be rooted in the conviction that staff will perform well as a result, but also from a genuine care for the team as demonstrated by this nursery headteacher:

Staff are our greatest resource. If you don't collaborate, cooperate, challenge, have rigorous expectations, they won't do their best.

She appeared to have very high expectations on one hand while, at the same time, trying to nurture staff; for example, giving them laptops and stressing that they should not feel they need to work at home. The head of different nursery school was equally convinced of the importance of creating a staff culture in which staff felt valued. Factors that could have threatened the good professional relationships in this school were, first, when it practically doubled in size with the addition of another unit and second, by the uncertainly over support staff contracts which were being reviewed by the LEA. However, the headteacher worked to sustain relationships:

I suppose I am modelling partly things I do believe strongly in, like the fact that morale is paramount, staff morale. I just think having a positive feeling staff and a place where people actually enjoy coming to work just counts for so much in a school, not just for the children but for the staff commitment and everything else. I just feel at all times I want staff to want to work here really. I want them not resent the fact that it's the end of the holidays. Clearly we all say that, but when people actually come back they say 'Oh it's good to be back' and that's really nice and I'm so pleased people say that because they like to be back together and there's a warmth and

friendship within the staff team and I certainly want to go on fostering that and modelling that. But so does everyone else, so that's great.

Readiness to model good teaching and learning was seen as especially important in nursery schools. Two of the headteachers had at least a part-time teaching timetable, while the third head did not teach. One explained that when she arrived at the school a number of years previously:

No-one did monitoring: one person said one thing and one did another. I had to put myself up. I opted to be in the classroom, so they could see me teaching.

The other teaching head was clear there were benefits for her of being a teaching head as she could more easily monitor what was happening in the classroom and raise points for discussion with staff about how aspects of learning and teaching could be improved. A nursery officer in one of these schools found her head's teaching valuable to her own practice. When she had students, she got them to watch the head teach, and admired her observational skills:

She's a natural teacher; good teacher of children. . . When you first came, I wrote observations and said nothing at all. I looked at [the head's]. They were so succinct. I thought 'how can you do that?' You half inch it. Sometimes the language you use takes more practice.

With some longer standing staff who were suspicious of the new headteacher in another school and other staff hoping for greater stability after a lot of change, one staff member felt that there were drawbacks to the head not having some teaching responsibility: *The head does not teach, so they are not at all sure about her and what she stands for.* By the end of the project, the head was considering going back into the classroom two and a half days per week because thought she would be able to work more closely with the other staff and would know in more detail what was going on. She felt the need to monitor the teaching and learning process more closely and to be more involved in pedagogy with her colleagues. This would be a major change for her because she had insisted on being a 'non-teaching' head at the outset, having observed how several of her predecessors in the school had burned themselves out by trying to be both exemplary teachers and the headteacher.

Modelling professional learning was also important. The headteacher in the *mature* nursery school had two business mentors and a teacher had a mentor. Everybody had the chance to go out and do something with people in other walks of life. In the *early starter* nursery, however, while the headteacher had been offered a mentor, she was not sure that the person was appropriate and, being aware that she had entered a sensitive situation, she was a little uneasy to have someone else see this:

I didn't have the confidence to use that facility because I didn't know how confidential it would be and when I said who it was going to be the response from key people didn't make me feel that I could access it in the way that I might need to. I don't know whether I'm right or wrong. I just don't know.

In the nursery where staff exchanges between the nursery and the family support unit was encouraged, the nursery head and head of the family unit were also going to shadow each other for a day. The nursery head explained:

I think there's no point in swapping and coming and sitting in someone else's office, you don't learn from that. But I will shadow her for a day and she will shadow me and by doing that see what the practice is in the two different halves. That will be exciting professional development for all of us I think.

Some heads modelled effective leadership behaviour, for example in responding to personal as well as professional issues, with significant implications for the PLC. For example, a colleague of the head of the closing primary school said:

> *The head is a very good boss. She's very fair, not just in your professional life but also in your personal life. She's always there whatever the crisis. It could be something quite outside the school but she will do her utmost helping to get you where you want to be. She doesn't take sides. If two people have a problem she'll get them together and say 'Lets sort this out'. Staff are not afraid to come forward and say things like 'I've made a mistake'. That's when the quality comes through because people feel comfortable. Yes she is the boss and she is the head. But you can also say 'Can I come in and shut the door and speak off the record?' and you can. And I don't think there is a member of staff who wouldn't knock at her door and say this. Everybody is very open.* (School secretary)

In secondary schools, trust building occurred at several levels. The headteacher often played a major role. For example, in one school, the head had come in to a very difficult situation with both staff and governing body. A previous headteacher had also been very confrontational. One staff member noted how:

> *[Name] takes a female approach . . . She gets her way by other means. . . Parents are now behind us. Staff feel more supported . . . Pupils now want to achieve . . . I admire her.*

Another long-term staff member commented:

> *At the moment there is a very open management system. The headteacher is willing to try new ideas herself. She lives and breathes the school motto [respect, opportunity and achievement] and that sums up where you're at.*

At an observed meeting of the senior team prior to an HMI visit, she was adamant when some colleagues suggested they look at staff's lesson plans before the visit:

> *I don't feel comfortable swooping in. Given the KS3 strategy, I think we need to give people space here.*

Over the project period, the sense of coming together in this school was palpable, and trust was a factor that all those interviewed held as highly significant in their situation, in contrast to a few years ago when there was nothing but despair and distrust as a result of the blame associated with being in special measures.

Another secondary head reflected about the difficulty of building trust:

> *. . . by the time I left my previous school I felt people would trust me implicitly. It helped because the school had been through difficulties and it did not take a great deal to get people on board. I've been here [number] years. I assumed it would be the same here. It's not and I don't know why. There's an automatic distrust of the senior management team . . . I'm not that Machiavellian. I'm not that clever! It's just a small group. The [union] rep told me that staff didn't want me to mix it. There isn't the same automatic trust here and it puzzles me. In the end you have to stick to the key principles and get on with it. I refer back to the school mission statement and check back. If the principles are right, the people will come with you.*

Modelling teamwork at SLT level was important in secondary schools. There were differences between the schools in the extent to which the senior leadership teams operated as

a cohesive group. Where the senior team were not fully united and did not send out a unified message, the staff soon picked this up. In two of the schools where there was not a unity of purpose, senior staff were trying to work to build their own team. A senior teacher said of one relatively new headteacher that:

> *After some initial suspicion, [name] has now built trust and earned the respect of the SMT. She has done this by establishing processes and also gaining the confidence of the people concerned. She has listened and used staff according to their skills, and this has enabled them to grow in self-esteem. She has her vision, which is now better understood by some in SMT who previously were suspicious.*

In one school with a changing leadership team, the need for the SLT, *to continue to review its operational teamwork as well as to refine individual roles within the team,* was outlined in its school improvement plan. One member of the team reflected: *We are establishing our roles. Informally we are strong, but the perception we give out is not so strong.*

Relationships among the senior team in another school were extremely good and the headteacher maintained contact by ensuring he spent a little time with each member every day:

> *. . . informal moments really which are almost not intrusive to the day, when actually a lot of work is done. . . I do that [make sure that everyone is going in same direction] by trying to keep my finger on if you like being the centre of the spider's web.*

Where teams and departments were making good progress with their collaborative learning agendas, the senior leaders in two schools had a deliberate policy of highlighting their successes and encouraging others to follow them.

Equally, productive collaboration in secondary schools also depended on positive working relationships in smaller or sub-PLCs. There were examples of tensions between staff members both within and between departments. One head of department described challenges between her and her second in department and how they had worked hard to try to resolve these:

> *One of the major issues [name] and I have to resolve is in communicating the way forward. With the rest there's shared understanding of where we are going and why. [Name] found it difficult to become part of the team, and I accept part responsibility. We have now seen eye to eye and will change.*

In special schools, too, the quality of relationships, especially between leaders and other staff, was seen as crucial to the development of the learning community. The leader's personal style could be the key to mutual trust and respect between staff and to striking a balance between driving the school along and not driving so hard that everyone breaks. This inevitably varied between the schools. In one, the head's style was to give people clarity about what was happening and to ensure that they were consulted and could contribute to school decision-making. In another, the head's clear sense of values and vision, and the confidence to model good practice was apparent**:**

> *The thing that you need to remember about the school is that it's run on a very simple philosophy. It's principles, process and practice. The principles are very simple. Those are 'Love one another' and 'Make sure we've got a safe, positive environment'. You could write lots about this, obviously. Those are the principles and we will not change those. You defend them. But you need a process for that, so the process is the how – and so you've got the why, how and what. Why do we do any of this? So we always refer back to those principles. With practice, I have a tendency to say 'Can*

you do this? OK, I'll do it' and gradually you're building people and people watch what you do. So you're modelling all the time.

The importance of achieving the right mix of styles in a leadership team was also emphasised in a school where the headteacher and deputy were seen as complementary - one good at driving things forward and the other as the 'people' manager to whom staff turned when necessary.

In special schools, too, colleagues' expectations of leaders at department level were of fundamental importance:

I want someone who is constant and who doesn't vary. Of course working within school values. If you question something, then R (the unit leader) will give you a consistent answer. Because he believes in these values and he is strong. He's got lots of experience. There's nothing that happens that he hasn't seen before and he just doesn't waver. And it's working with someone who can be that professional really. You can learn - you can feel what you're doing is right because you can see it being modelled every day. (LSA**)**

Distributed leadership
Involving others in leadership was important in nursery schools, small as they were. It was generally the headteacher who was the key person who brought in new ideas, although this was certainly shifting in the *mature* school. Nonetheless, each person's role was significant. As one head reflected:

I don't know whether I am key. Logic dictates that as head you have to be key. Research on organisations say a head is, but I can almost work myself out of a job by creating an environment where others have leadership roles. It's difficult to say one person is more important than others. If [name], the school keeper, wasn't here for his 19 hours, or [name], the administration officer – my life is deadly if she's not here. The lunch people are also critical lynchpins. All people are critical in a small school.

There were a number of examples of all three headteachers giving other teachers increased leadership opportunities. Although the senior teacher in one school was supposed to lead the weekly planning meeting, in reality this was often rotated and shared. At an observed meeting, a nursery officer was chairing the meeting and the senior teacher was taking notes on a laptop. Teachers were also left in charge when the head was out, and the administrative officer in one nursery spoke of how the head was increasingly delegating tasks:

[Name] is much more likely to delegate jobs completely now. When I started, she gave precise instructions. Now, she says, 'This policy needs updating; I've received a letter, can you do this?

Staff in another school also had considerable input into the school development plan about the curriculum area for which they were responsible:

In our curriculum areas we decide what we want to do so we all have to write a part of it.

This was also connected to performance management in that the curriculum areas were deliberately connected so that people had to work together, as one nursery officer explained:

One of my targets is to link with another curriculum coordinator and do dance sessions with them so that the curriculum areas are linked in some way.

Two of the nurseries had a senior management team, one of which had just been recently set up. The headteacher of the third school was considering officially setting one up, although the administrator in this school already considered herself to be part of a senior management team. In the school with the family support unit, its manager was part of the team, which was one way of creating a wider learning community.

It was not always easy getting other staff to take on greater leadership responsibilities. In the case of support staff, there was the issue that they were paid less and had certain expectations about their own roles. Nevertheless, nursery officers in two schools were assigned as key worker to a group of children in the same way that teachers were, and in one school, each member of the teaching staff (including nursery officers), had responsibility for an area of the curriculum. In the third school, however, a new headteacher was trying to delegate more responsibility to other staff, a number of whom did not see this as their responsibility and who were looking for more 'decisiveness' on the part of the head.

Across all five primary schools there was a distinct tendency to adopt a distributed leadership approach but the ways in which this worked out in practice also varied according to context and personal style. Moreover, those in formal distributed leadership roles had particular perspectives, especially when taking up leadership for the first time:

> *As a subject coordinator I don't really think of myself as a leader. I'm me and I go about things my way. Obviously I was attending the courses and taking all the updates, so I'm expanding my personal knowledge of the subject and my bank of ways to deliver the curriculum areas. I suppose that's the first part of being a leader, to know your stuff and know what you're talking about. If you don't, who will? It is your responsibility to know or aim to know as much or more about the subject as the next person. So I suppose building up your own knowledge and idea of pedagogy there is an important step, but then it's realising that just because you're the subject leader it doesn't mean that other people know nothing. They have something vital to contribute.* (NQT and subject coordinator)

Shared leadership and management values – broadly focused on distributed leadership - were also evident in all three special schools. In the secondary school, the head and deputy in particular had shared ideas about how to move the school forward: they wanted staff to work together in, *a much more collaborative and cooperative way than we do at the moment*. At the nursery, an LSA suggested that the family ethos and lack of hierarchy helped their particular children - a different set up would confuse them. In the residential school, a comment from a senior member of staff illustrated how this worked out across the school:

> *We all have input. What you saw today was quite typical when the head asked me for my ideas for the policy paper. He tends to kick off with some ideas and then he puts them out for discussion and he does respond. Everybody has got an input from the cleaners and kitchen staff to the teachers. It's a great place to work - we've got strong leadership and staff get on pretty well. It's a nice community here.*

Distributed leadership takes on particular forms in secondary schools. Thus, in line with increasing national attention to middle leaders, they were also focusing attention on this area. One reason this was important was in developing smaller and, often subject-based, PLCs. Sometimes, new department heads faced particular challenges, for example, dealing with issues raised by their predecessor or, in one school, a young Asian female department head found that her Asian male colleagues struggled with her leadership role.

The more successful department heads built positive relationships and found ways to involve and stretch colleagues' thinking, build trust by delivering what they said they would deliver and, *not taking themselves too seriously,* as well as offering colleagues leadership opportunities. Within one year, a new head of history had brought together the department in planning sessions, based on his two goals:

> *. . . collaborative lesson planning and damn good lessons . . This is the idea of planning every single lesson to make it really good in line with the principles of the school, which here is the four-part lesson.*

Taking a *softly softly* approach, he 'sold' collaborative lesson planning as less work, and now the department members do it informally together every evening for 60-90 minutes except on Fridays when the male teachers all play football together after school. For the first couple of months he just observed, looking for who'd be responsive, and used a skills and motivation matrix to get to know his staff.

The quality of work in this department was endorsed by a group of students who, when speaking about their experiences of learning history, commented:

> *"Everyone learns from history"; "It's really interesting. You learn many different things".* They continued: *"If we're in history and the teachers don't know something, they would tell you" "They learn about you and how you work best. They are always learning about their teaching techniques".*

Senior leaders in several schools were requiring more of a decision-making role from middle leaders and, therefore, getting them more involved. To try to get them to plan ahead more and identify major issues that need addressing, one school gave its department heads control of their own development budget. As the deputy headteacher responsible for CPD commented:

> *I want them to question: 'Is this the best use of money?. . . There isn't a bottomless pit of money. They have to take responsibility for making decisions about how it's spent .*

Several of the schools had identified middle leaders to participate in NCSL's Leading from the Middle programme, and one headteacher regularly circulated research and other papers (eg. from NCSL) on aspects of school leadership to both middle level leaders and senior leaders, to use as a working document. Senior leaders were also trying to build the monitoring role of middle leaders. After some initial difficulties in one school, the CPD coordinator reported:

> *. . . heads of department have stopped saying that they are not free to observe. They are hoping to bring in the use of video evidence for teachers to video their own lessons, with the head of department moving towards the role of critical friend. They are also starting to look at other ways to evaluate their departments. Just before Christmas, three heads of department, who have built in monitoring, were sharing their experiences and countering the argument that "it works elsewhere but not here". This is a shift for the school.*

Developing middle leaders in terms of what they might offer across the school was another feature. The head of one school explained how:

> *. . . this is perhaps where we are doing most work now, people having a whole school view and trying to get heads of department not to look at themselves in boxes but to see that they are part of a whole and that achievement in a particular department can't be at the expense of other departments. That's often quite difficult to do in the era of performance targets and performance management.*

There was a particular emphasis in two schools on appointing ASTs as part of the strategy to develop middle leadership, although in one school the headteacher was concerned about what he felt were mixed messages coming through from the LEA who had put one person off because they said that this was incompatible with applying for senior leadership positions: *I've taken this up with the LEA. Too often the focus of senior leaders is not teaching and learning in the classroom,* (headteacher). Heads sometimes saw the priorities for middle leadership development as identifying their vision and moral purpose, and encouraging them to be more innovative. One head, however, thought that middle leaders were competent in management but needed to improve general leadership skills as well as motivation and inspiration.

The leadership structure was changed in two schools to include a larger team of middle leaders. A team leaders' forum was set up in one school *"to enhance the leadership of teams"* (headteacher) and the head would meet with them fortnightly:

> *It's developing really, really well and we're pleased with the way it's developing because it has heads of department and heads of year. I chair it although I want that to be debated.* (Headteacher)

The strategic development group in another school included a group of middle leaders with cross-curricular responsibility. The aim with this group was to have them look at whole-school issues and lead to greater consistency across the school. It was also intended to be a professional development opportunity for these middle leaders.

Vignette: ASTs and distributed leadership

Three ASTs were appointed. A key part of their brief was to work with and coach other colleagues across the school, focusing on curriculum, ICT and classroom behaviour support as well as promoting arts across the school. They worked alongside teachers, helping with pair and group work, focusing particularly on starters and providing resources which subject leaders could take away and use or develop with their teams. They introduced newsletters highlighting, for example, learning styles, starters, and courses people have done. Gradually, they began to work on brief tutorial materials. After operating for just over a year, they were beginning to feel that their role was more accepted and that people were coming to them more spontaneously, but it took time, patience and effective support to build trust and overcome some suspicion about their role.

Secondary schools differed in the extent to which they offered staff opportunities to take on leadership roles, as the survey results demonstrate. In a small minority (11%), it was reported that nearly all staff (80-100%) had such opportunities, while in 45 per cent of the secondary schools, most staff (50-79%) received such opportunities. In nine per cent, however, only a few (0-19%) were reportedly given these opportunities. Notably, two thirds of those responding to the survey (67%) thought that the opportunities had increased within the last two years.

In all five secondary schools, potential leaders, often quite young or junior members of staff, were spotted and their potential identified. They were provided with a range of opportunities, such as joining cross-school teams, doing presentations to other staff, representing the school at a community event. One school was investing most of its hope in promoting the development of the professional learning community in young staff, particularly young heads

of department. The head thought that as more younger teachers arrived, bringing with them enthusiasm, ideas and willingness to learn, professional learning community processes would develop and grow. Enthusiastic team members in another school were given responsibilities for developing the school's agenda within their team. In the school where the female department head was having difficulties with her male colleagues, the headteacher was mentoring her to help her develop her leadership. This headteacher also saw development as a continuum:

> *. . . any person who comes in and works here, we can take them from a starting point and develop them to their potential*

Internal promotions of young staff in several schools were also sending out messages to young staff that they could progress and get opportunities in the school even in a school where there was low staff turnover.

A variety of strategies were being used to increase teacher leadership in the secondary schools. Headteachers and other senior leaders described how they used their antennae to spot people. Teachers who were keen to take a lead in developing new learning strategies with their own pupils or more broadly were often encouraged by being invited to join cross-school teams, lead professional development or take the lead on learning projects and policies

Staff also felt that good ideas could be developed at any level in the school:

> *There's more opportunities for more people because more people are wanting the opportunities because they see that it's good to be involved.   People are inducted and given a chance.* (Teacher)

> *He said we must provide the opportunities for staff here to motivate them and give them the opportunities they want, because even if they're not in a position of so called responsibility with allowances, they are very much part of the school and of value to the school and I think that's where we are going because we are trying to lead from the middle and give everybody the opportunities.* (Department head reporting something the headteacher had told all the middle leaders)

Letting go did have its challenges for headteachers. One headteacher reflected on the tension he faced between a desire to promote distributed leadership increasingly actively, and how,

> *it is easier to say 'just do it' when you know what you want to achieve, with people thinking they can't do it.*

He thought that monitoring and evaluating were even more important where more staff were involved in leadership. The other side of this, seen in a few cases, was where teachers' willingness and energy was not channelled or supported, and their leadership potential and enthusiasm for the school waned.

Chapter 5   Summary of Main Findings

1.   INTRODUCTION

In this chapter we address three of the Project's main aims by seeking to identify and convey:
- the characteristics of effective professional learning communities and what these look like in different kinds of school setting;
- innovative and effective practices in managing human and financial resources to create time and opportunity for professional learning and development and optimise its impact;
- the key enabling and inhibiting factors – at national, local, institutional, departmental/team and individual levels – which seem to be implicated in the initial creation, ongoing management and longer-term sustaining of such communities.

First, we offer a working definition and then go on to consider what it means for a professional learning community (PLC) to be effective, summarising our research findings on impact and effectiveness. In so doing, we also explain the relationships between the four survey factors, the eight PLC characteristics and the four PLC processes. Next, we present a summary and synthesis of our research findings on the eight characteristics (aim i) and four operational processes for creating, developing and sustaining a PLC (aims ii and iii). However, the characteristics and processes are presented as twelve dimensions, re-sequenced to be consistent with the *Provisional Model of a School Operating as an Effective Professional Learning Community* which is described in Chapter 6.

2.   DEFINITIONS

The literature review made it clear that there is no universal definition of a PLC and that it may have shades of interpretation in different contexts. Nevertheless, five key characteristics did emerge from the review - shared values and vision, collective responsibility, reflective professional inquiry, collaboration and group, as well as individual, learning.

Taking these as one starting point and our consultations with members of the Steering Group and several focus groups as another, the following initial definition was adopted for use in the survey questionnaire:

> *An effective professional learning community has the capacity to promote and sustain the learning of all professionals and other staff in the school community with the collective purpose of enhancing pupil learning.*

The questionnaire respondents broadly supported this definition. However, some raised particular issues, especially about PLC membership, what was meant by the term '*professional*' and why trained support staff were not, by implication, professional, as did the Steering Group and participants in the first Workshop Conference and various early dissemination conferences. Accordingly, we dropped the term '*other staff*' and adopted the following working definition for the case studies and in our interim dissemination papers:

> *An effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning.*

As we shall see, each of the elements of the definition remained, to varying degrees, problematic.

3.   EFFECTIVENESS

Initially, in accordance with the research brief, we adopted the idea of '*effective professional learning communities*' both for the project title and as the basis for the survey questionnaire and early dissemination activities. However, we took a somewhat different stance as the study progressed. It became evident that the original idea could be interpreted as implying that a, possibly highly successful, school might not qualify as a PLC because it was insufficiently effective, as measured by as yet unclear 'PLC' criteria. This led to some unproductive debates in early dissemination conferences. Accordingly, for the case studies, we adopted the position that every school is likely to exhibit particular PLC characteristics, for example the five identified in the literature review, to a greater or lesser extent *ie* to be more or less well developed in these respects. We also took the view that the ultimate and fundamental purpose of a PLC must be to enhance pupils' learning and that, in order to achieve this, its intermediate purposes must be to enhance the individual and collective learning and performance of teachers and other adult workers in the school. Consequently, working in a PLC was also assumed to have intrinsic value for its members, so achieving this second set of purposes was likely to involve enhancing staff work experience and morale. Thus, 'effectiveness' should be judged along two main outcome dimensions: most importantly, impact on pupils' learning and, secondly, impact on the professional learning, work experience and morale of the staff – teachers, school leaders and other adult workers. Furthermore, at any one time a PLC itself might operate more or less effectively and such operational effectiveness may vary over time: so a third – process dimension of effectiveness was identified.

The survey analysis concentrated on investigating effectiveness in terms of impact on pupil outcomes. Factor analysis was used to investigate the relationship between Part 1 questionnaire items. Four PLC factors were identified:
   1. Professional and pupil learning ethos
   2. Within school policy, management and support for professional learning
   3. Enquiry orientation (external and internal)
   4. Participation of non-teaching staff in PLC

The relationship between the PLC characteristics based on the 'opinion' items in Part 1 of the questionnaire[17] and pupil outcomes were investigated by examining the relationship between these four factors and specific pupil outcomes. At the primary level, positive and statistically significant correlations were found between schools' Factor 1 score and their 2002 KS2 performance – both raw and value-added. At the secondary level, positive and statistically significant correlations were also found for both Factors 1 and 2 – but only in terms of schools' value-added GCSE performance; not their raw GCSE performance.

Although, as expected, the relationships were fairly weak, these findings demonstrate a positive link between PLC characteristics and pupil outcomes – in particular value-added performance. It appears that *the greater the extent of reported staff involvement in professional and pupil learning, the higher was the level of pupil performance and progress in both primary and secondary schools*. Moreover, in secondary schools, *the greater the reported extent of internal support for professional learning, the higher was the level of pupil progress*. We also examined the relationship between pupil outcomes and the individual 'process' items in the opinion section of the survey and the findings support those from the PLC factor results.

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[17] See Part 1 of the survey in Appendix 3.1 – Sample Questionnaire

Finally, we also examined the relationship between pupil outcomes and the individual 'factual' items in the survey[18]. Not surprisingly, some of the most positive significant correlations were found between pupil outcomes and items related to the status of the school such as being a Beacon or Specialist school or *having other formal links*. A school's involvement in these kinds of initiatives appears to be related to enhanced performance and effectiveness.

The findings about impact on pupils from the 16 case study schools (Chapter 4) may be summarised as follows. Overall, the interviewees' responses indicate that they perceived the PLC's impact to be positive on their pupils' attendance, interest in learning and actual learning. However, there was little evidence of differential levels of impact related to the PLC's stage of development, whereas the respondents did perceive contextual influences (eg. socio-economic and demographic factors) to have a strong impact on pupils' attitudes and learning.

Considering perceived outcomes for staff, the interviewees' responses suggest a positive impact on practice (eg. *participation in collective activities*) and morale in most cases. There were widely reported examples of impact on *individual* professional learning arising from particular CPD, work-based or incidental learning opportunities. Examples of impact on *collective* professional learning for whole staff and sub-groups were reported in the majority of cases.

In designing the survey and the case studies, we had hypothesised that a school might be at one of *three stages as a PLC*: mature, developing, starter. The face validity of these distinctions was broadly confirmed by responses to the survey. Virtually all respondents were ready to assess their school's current position in relation to the working definition of a PLC without comment, indicating that they were comfortable with the distinctions between stages. More importantly, statistically significant differences were found between schools' self-reported PLC categories (*ie mature*, *developer*, or *starter*) in terms of their responses to the majority of the relevant survey items (Chapter 3, Table 4). Generally, respondents in *mature* PLC's reported a higher percentage of staff involvement in PLC activities (*ie* those specified in Part 1 of the Survey), while those in *starter* PLC's reported a lower percentage of staff involvement. These findings indicate that schools' reports of themselves as a PLC at one of three developmental stages were generally consistent with their reports of a higher or lower extent of staff involvement, thereby providing some positive evidence of the PLC concept's validity. However, there were some exceptions to this general pattern reflected in the findings from the factor results: for example, in terms of Factor 3: *Enquiry orientation* where secondary school responses of the extent of staff involvement did not show a statistically significant difference between any of the three stages; Factor 2: *Within school policy, management and support for professional learning* where primary responses did not show a statistically significant difference between *starter* and *developer* PLC's; and Factor 4: *Participation of non-teaching staff* primary responses did not show a statistically significant difference between *mature* and *developer* PLC's. Although, responses to the items about factual aspects of PLC operation did not generally differentiate between the three stages, there were important exceptions to this overall pattern relating to the extent and use of management data, IiP status, non-permanent staff being included in CPD policy, and governors actively contributing to the PLC.

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[18] See Part 3 of the survey in Appendix 3.1 sample questionnaire

Notwithstanding these exceptions, we judged it appropriate to continue using the three-stage categories in the case studies, mainly because of the overall consistent pattern and because they clearly had face validity for all 16 of the case study school questionnaire respondents. From the case studies, we found that all five of the main characteristics derived from the literature review were reflected to some degree in each school-wide PLC or smaller PLC (for example a department in a secondary school operating as a professional learning community). Furthermore, there appeared to be a loose positive association between stage of development and expressed characteristics, especially across the nursery phase and, to a somewhat lesser extent, the primary phase. However, it was also apparent that a PLC might vary over time with respect to the extent to which the characteristics of effectiveness were expressed and that there was always the possibility of a decline in effectiveness, for whatever reason. We will return to these points later.

4.   PLC CHARACTERISTICS, PROCESSES AND THE SURVEY FACTORS

Our study suggests that professional learning communities display eight characteristics and are created, developed and sustained by four broad processes. Most of these characteristics and processes were identified – although not necessarily with the same name or degree of emphasis - in the literature review (Chapter 2). One of the three, newly highlighted characteristics - *mutual trust, respect and support* - emerged clearly in a workshop conference and was subsequently confirmed as important in the case studies. Another characteristic, *Inclusive membership*, emerged first from the case studies and was confirmed by the survey in relation to Factor 4: *Participation of non-teaching staff in the PLC* and was subsequently confirmed in the case studies and workshop conferences. The third new characteristic - *Openness, networks and partnerships* - was brought out most powerfully in the case studies and the workshop conferences, and was also linked to Factor 3: *Enquiry orientation (external and internal)*. One of the processes – *promoting individual and collective professional learning* – is directly consistent with Factor 2: *Within school policy, management and support for professional learning*; the other three, which emerged most clearly from the case studies and workshop conferences, are arguably also linked to Factor 2. Three characteristics – *shared values and vision, collective responsibility for pupil learning* and *collaboration focused on learning* – are consistent with Factor 1.

5.   TWELVE DIMENSIONS OF A PLC

The following summaries are based on a synthesis of the relevant findings from the survey and case studies (Chapters 3 and 4) and from the workshop conferences. The eight characteristics and four processes are now presented as twelve dimensions, reflecting our view that their key features may be exhibited to a greater or lesser extent. They have also been re-sequenced to be consistent with the *Provisional Model of a School Operating as an Effective Professional Learning Community* in the next chapter.

a. Characteristics

1.   Shared values and vision

Shared values and vision directed towards the learning of all pupils (students) emerged as a key characteristic in the literature. Replying to the survey, 75% of primary school and 43% of secondary school respondents said 'nearly all' teachers *shared a common core of educational values*. Most secondary school respondents also reported increases in this characteristic in the past two years.

In designing the case studies, we distinguished between 'shared educational values and vision' and shared leadership and management values. We found that in nine of the 16 schools, 'shared educational values and vision' appeared to be high, while in five schools the same was true of shared leadership and management values. In only one school – an early starter – did we judge both to be low. Near the end of the project, we asked interviewees to reflect about change in their school over the course of the last year. The expression of both aspects of this characteristic had increased in seven schools and diminished in one, a mature PLC, while staying the same in the other eight schools.

2.   Collective responsibility for pupils' learning

Greater reliance on the staff as a collective group to reinforce objectives, rather than on individual autonomy, was also a key characteristic in the literature. This was confirmed in the survey, where the highest average level of survey responses was for *collective responsibility for pupil learning* and *create conditions for pupils to feel the confidence to learn,* which suggests these characteristics are very common in all schools. Certainly, 81% of primary and 66% of secondary school respondents said 'nearly all' teachers *took collective responsibility for pupil learning* and most secondary school respondents reported increases in this characteristic in the past two years.

Over 70% of primary school respondents said 'nearly all' staff *created conditions for pupils to feel the confidence to learn*, *set individual learning targets for pupils* and *regularly monitored pupil learning and progress*. In addition, over 35% reported an increase in all aspects of support for pupil learning and 56% reported a significant rise in the setting of learning targets for individual pupils by teachers, both in the last two years. Furthermore, 26% said 'nearly all' staff *use ICT data bases to monitor pupil progress* and that this was increasing.

Forty seven per cent of secondary school respondents said 'nearly all' staff *created conditions for pupils to feel the confidence to learn* while 53% reported that 'nearly all' teachers *set individual learning targets for pupils* and that this practice was increasing. Fifty per cent reported that 'nearly all' teachers *regularly monitored the learning and progress of individual pupils* and this was increasing. Forty seven per cent said 'nearly all' teachers *use ICT data bases to monitor pupil progress* and this was increasing.

In the case studies, *collective responsibility for pupil learning* was judged to be high in nine of the 16 schools – including the three special schools – medium in four and low in three.

3.   Collaboration focused on learning

Collaboration in activities focused on pupil learning and mutual professional learning was a key characteristic in the literature. In the survey, 65% of primary and 34% of secondary school respondents reported that 'nearly all' teachers *share their professional experiences and successes* while 68% of primary and 84% of secondary school respondents said 'nearly all' teachers are *members of at least one professional team*. Twenty five per cent of primary and, encouragingly, 54% of secondary school respondents said this collaborative culture had noticeably increased in the past two years.

Collaboration focused on teaching and learning was judged to be high in six of the 16 case study schools, including the three special schools, medium in nine and low in one, secondary,

school. Over the course of one year, the expression of this characteristic was judged to have increased in five schools and diminished in none.

4.   Professional learning: individual and collective

Professional learning is central to a PLC and so featured prominently in both the survey and case studies. The literature review indicated that, in a PLC, group as well as individual learning is promoted because professional learning is more frequently collective rather than solitary, and all teachers are learners with their colleagues. In addition, distinctions between formal professional development, work-based and incidental learning opportunities are expressed in the literature, which also highlights the difficulties of moving from an emphasis on individual to collective learning, of the transfer of learning and, finally, of the creation of knowledge in a school setting.

In the survey, 72% of primary and 43% of secondary school respondents said 'nearly all' teachers were *learning with colleagues*, 72% of primary and 45% of secondary school respondents said 'nearly all' teachers were *learning from each other*, and a majority of all respondents reported an increase for both in the past two years. In addition, 48% of primary and 27% of secondary school respondents said 'nearly all' *staff take responsibility for their own professional learning.* The majority (74%+) of all survey respondents reported that most/nearly all teachers in their schools *learn together with colleagues*, *take responsibility for their own learning* and *use performance management to enhance professional learning.* Over 80% gave these responses in nursery, primary and special, deemed primary, schools.

Promotion of collective professional learning was judged to be high in only one of the 16 case study schools, medium in 13 and low in two schools, both *early starters,* demonstrating the complexity of knowledge transfer and knowledge creation. In the course of one year, the *range of professional learning opportunities* was judged to be high or increasingly high in seven schools and low throughout in one school – an *early starter*.

5.   Reflective professional enquiry

The literature review indicated that *reflective professional enquiry* was integral to the work in a PLC. This included analysing achievement and examination data, ongoing conversations about educational issues, frequent examining of practice with colleagues, mutual observation, joint planning and curriculum development. In the survey, 50% of all respondents said 'most' teachers were *informing their practice through the routine collection, analysis and use of data* while 79% of primary and 68% of secondary school respondents reported that these numbers had increased in the past two years. All respondents said *they used at least one form of review of pupil outcome and progress data*; almost 90% said *that pupil outcome and progress data were reviewed by the headteacher and individual class teachers*; and over 80% of all respondents said that *the SMT and governors reviewed pupil outcome and progress data*. Finally, all respondents said they used at least one of the listed data sources[19] for school improvement purposes; over 76% of primary and 81% secondary respondents reported using each one of the named types of data; 51% of primary respondents said they used PIPS data; and 58% of secondary respondents said they used ALIS/YELLIS/PIPS data.

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[19] Data sources included: Autumn package; Panda; Ofsted report; ALIS/YELLIS/PIPS; LEA analysis of data; school based/other attainment data; pupil/parent/staff or other questionnaire data; and other data for school improvement.

Reflective professional enquiry was judged to be high in three of the 16 case study schools, medium in 11 and low in two schools, both '*early starters*'. Over the course of one year, the expression of this characteristic was judged to be increasing in six schools and diminishing in none.

6.   Openness, networks and partnerships

The literature review concluded that school staff appear to need to look beyond the school boundaries, through obtaining external support, networking and other partnerships in order to promote, sustain and extend their PLC. In the survey, 96% of primary and 98% of secondary respondents said they had at least one formal working link with other schools; 67% of primary and 83% of secondary respondents said they were involved in one or both of a within phase network or a cross phase cluster/pyramid group; over 18% of primary and up to 33% of secondary respondents said they were a Specialist, Training or Beacon school, part of the Excellence in Cities initiative or in a NCSL networked learning community; about 10% of all respondents were in an Education Action Zone; and one third of secondary school respondents reported other formal working links, including being members of a Sixth Form Consortium.

In terms of their participation in national initiatives, 56% of primary and 80%+ of secondary respondents said they were accredited as, or working towards, Investors in People; 83% of primary and 95% of secondary respondents had at least one teacher involved in at least one of nine listed initiatives; and 19% of primary and 37% of secondary respondents had at least one teacher involved in sabbaticals, Best Practice Research Scholarships, bursaries and international CPD in the last two years.

Concerning participation in national initiatives on leadership development, 42% of primary and 50% of secondary heads had participated in the LPSH; 36% of primary and 37% of secondary heads had participated in the NCSL's Talking Heads online community; 16% of primary and 23% of secondary heads had participated in both LPSH and Talking Heads; 56% of primary and 60% of secondary respondents had at least one teacher involved in deputy head training courses; 6% of primary and 39% of secondary respondents had one or more advanced skills teachers; and 83% of primary and 57% of secondary respondents said that 'most/nearly' all *teachers have opportunities to take on leadership roles*.

In the course of one year, in the case study schools, *the range of external networks and partnerships* was judged to be high or increasingly high in five schools and low throughout in two schools – both *early starters*. Another key aspect of this characteristic is an open, outward looking and flexible orientation.   Evidence for this came from all sources. Significantly more *mature* PLC respondents than *early starter* respondents in both primary and secondary surveys reported that a higher percentage of their teachers *experiment and innovate in their work* and the same was true in relation to *see the school as stimulating and professionally challenging.* This openness of more *mature* PLCs also appeared to be a sign of confidence about being able to deal with external change. As participants in the workshop conferences told us, this was connected with:

> *being able to respond when you have to and being flexible, standing up to external change – we'll do this when we think the time is right,* '*taking control'* and *connecting with 'the great outdoors'.*

7.   Inclusive membership

Inclusive membership is a characteristic related to two issues in relation to a professional learning community: first, whether the community extends beyond teachers and school leaders; second, whether the community is school-wide or partial, perhaps consisting of smaller groups of staff, such as secondary school departments. With respect to support staff, there were few direct references to inclusive membership in the literature review: most earlier studies assumed, explicitly or implicitly, that membership of the learning community was mainly restricted to teachers. In the survey, over half of all respondents said that learning support assistants (LSAs) were *valued by teachers* and *had opportunities for professional development*; 74% of primary and 42% of secondary respondents said 'nearly all' LSAs *share responsibility for pupil learning*; 77% of primary and 57% of secondary respondents reported that 'nearly all' LSAs *actively contribute to the school as a professional learning community*; and more than half of all respondents reported an overall increase in the last two years. In addition, 47% of primary and 35% of secondary respondents said support staff were involved in reviewing pupil outcome and progress data while more than three quarters of all respondents reported that temporary and supply staff were included in CPD activities.

In all 16 case study schools**,** the overall PLC was seen as including teachers and those support staff working most closely with them (eg. LSAs, nursery nurses, technicians) to promote pupil learning. The teachers always lead the teaching and learning and may be regarded as constituting the 'core' of the PLC with the most highly trained support staff (eg. nursery nurses) being generally close to this 'core' and, sometimes actually part of it, especially in nursery, special and primary schools where support staff typically worked most closely with teachers. The demarcation between teaching and support staff was most apparent in secondary schools. Other support staff, parents or governors were sometimes perceived as members of the learning community where they contributed to educational activity. However, administrative, cleaning, care-taking and school meals staff were more likely to be regarded as part of an extended school community, often with some pastoral responsibility for pupil welfare and behaviour, though particular, enthusiastic individuals were sometimes closely involved in the PLC, especially in the smallest schools. External 'professionals', like educational psychologists or those in higher education, generally made inputs into their sphere of responsibility rather than into the PLC as a whole, although there were some exceptions, for example if there was a close relationship with an LEA link advisor.

There were several references in the literature to departmental and other potential smaller or sub-PLCs within a school. Groups with some PLC characteristics existed in most of the 16 case study schools, depending partly on school size and degree of specialisation. Thus, departments and SMTs featured most strongly in this way in larger organisations, especially the secondary schools. Such groups were normally integrated with the rest of the staff and were never the main PLC. An illustration of this comes from one of the secondary case study schools where the deputy head used the metaphor of a lava lamp with moving oil blobs to represent the school's professional learning community and smaller communities:

> *The learning community is the lamp but different things move around. At the moment the history department is rising and is near the top of the lamp, but in three years time [name – head of department] may not be in the same role and it may look different.*

8.   Mutual trust, respect and support

This cluster of inter-related characteristics was identified in the initial literature review but no specific items about mutual trust were included in the survey questionnaire: hence our

findings here are relatively tentative. However, from the outset, workshop participants told us how important and necessary good relationships between staff are for the growth of a learning community. In the course of one year in the case study schools, the *extent of interpersonal caring* was judged to be high or increasingly high in six schools and low but increasing in one school – an *early starter*. At our final workshop, participants representing all school phases concluded that:

> *It's essential to have professional trust, respect, consideration, openness, and to unpick the words. It's not touchy feely. Then you can inject the challenge to keep the setting moving forward.*

One secondary deputy head added that this is:

> *the underpinning . . . the key thing . . . one of the key elements.*

b. Processes

In addition to the eight characteristics presented above, we also investigated the following four key processes of PLC operation.

1.   Optimising resources and structures

This first process reflects the finding that decisions taken about the way a school is organised and how resources are allocated can have a profound influence on its development as a professional learning community. There may be some factors over which the staff have limited control, such as the quality of the buildings and the number of school sites but others, such as the timetable and the allocation of time for professional learning, reflect leadership decisions at different levels in the school.

The survey data indicated that the majority of responding schools, 93% of primary and nursery and 88% of secondary, operated on a single site; 90% of primary/nursery and 75% of secondary schools had a general staff room but there was a sharp contrast in the number of additional staff workrooms, the highest response from the primary sector was 31% with one additional room whereas 47% of the secondary schools reported having eight rooms or more. Although 46% of primary/nursery reported that 'nearly all' staff *use the staff room at break times for professional links*, this was true of only 20% of secondary respondents.

The two main facilitators and inhibitors to both developing and sustaining a professional learning community in the view of survey respondents in all phases were time and resources, as this respondent's comments illustrate:

> *Time to carry out individual and collective learning. Funding to enable this to take place - not by bidding or grants received on an annual basis (or not received at all) as hoped*; and *Time (=money) to work together on our vision for this. Time (= money) to support everyone's development/learning. Time (= money) for professional teams to work together, and to communicate about learning.*

Workshop participants were also clear that systems and structures were needed to support development of PLC but also time and space for creativity and 'thinking outside the box'.

2.   Promoting individual and collective professional learning

This second process was identified in the literature review where a range of ways to promote professional learning emerged. In the survey, just under half of all respondents said that most/nearly all teachers had *dedicated or protected time for classroom observation* and for *joint planning and development,* 27% primary and 9% secondary said that 'most/nearly all'

teachers *received financial support from school for award-bearing courses* but only 21% primary, and no secondary, respondents reported that half or more of their staff had the opportunity in their school to *experience job rotation*. Despite these low percentages, job rotation was reported to have increased in the past two years.

It is worth noting, first, that the lowest average level of response was for *experience job rotation* and *have opportunities for work shadowing,* which suggests these characteristics are not common in schools; and, second, that there was a lack of consensus between schools on *have dedicated time for classroom observation* and *have some protected time for joint planning and development*, which suggests that these characteristics are very variable across schools.

Regarding CPD management, 88% of primary and 98% of secondary school respondents noted that someone had specific responsibility for managing CPD in their schools; 70% of primary and 57% of secondary school respondents reported that this person was allocated 0-2 hours per week for the role. The Standards Fund was the principal source of funding for staff professional development across all phases in the year 2001/02. Regarding supply cover for 2001/02, primary respondents said they used 60 days average (median) supply cover days, with 31 days used specifically to cover CPD, whereas the corresponding figures for secondary schools were 262 and 80 respectively.

The provision and management of professional learning opportunities varied between the 16 case study schools, though it is important to note that the range of planned opportunities was loosely correlated with stage of development. All 16 school used the available external opportunities, but to a greater or lesser extent. This variation was sometimes for financial reasons (eg how much of its own resources a school was prepared to put into, say, supporting staff on external, award-bearing courses). There were several examples of good induction practice but schools' capacity to provide this varied. Staff in all schools were encouraged to attend external courses but take-up varied and some declined to participate. Many schools increasingly preferred to focus on within-school professional development, rather than sending staff out.

There were also variable opportunities for informal CPD and work-based learning. All staff had potential incidental learning opportunities in their normal work, especially when undertaking new tasks, and there were examples of good practice in several schools, but there was less evidence of general awareness of this potential or of attempts to harness it. Although there were also some good examples of deliberate attempts to support staff with transfer of learning (eg observation, feedback and linked coaching), these were relatively rare.

Successful practice to promote learning often involved the more focused use of time and internal arrangements: for example, by ensuring that staff meetings dealt with pupil and staff learning (eg discussing a piece of writing or photos of an activity in a primary school); by holding a meeting of the key staff every three weeks to review the progress of their common students in an EBD school; and by encouraging staff to teach each other (e.g. ICT skills in a secondary school).

Headteachers managed provision in smaller schools, including all nursery schools, but were sometimes temporarily diverted because of their other roles. Most heads saw performance management as integral to CPD. In larger schools, a senior member of staff rather than the head normally had responsibility for the coordination of CPD. In secondary schools, heads of department were key figures but how far they promoted professional learning varied.

3.   Evaluating and sustaining a PLC

This third process raised several problematic issues. For example, a PLC might be considered in terms of evolution over time, such that some schools may be at a very early stage of developing the relevant characteristics (*early starters*), others may be further along the process (*developers*), while some may be more established (*mature*). This, in turn, raises the question of how such characteristics might be acquired or developed over time and of how far purposeful leadership and management could contribute to this. We received some indications about these issues from the survey – specifically from the factor analysis results which pointed to four key factors - professional and pupil learning ethos; within school policy, management and support for professional learning; enquiry orientation (external and internal); and participation of non-teaching staff in the PLC. Interestingly the differences in the extent of staff involvement in PLC activities between the three PLC stages – *mature, developers, starters* – suggested by the PLC factor findings indicated that for primaries the greatest developmental differences related to factors 2 and 3 and for secondaries the greatest differences related to factors 1 and 4.

Our principal sources of evidence here were the case studies and the workshop conferences. First, we investigated the processes of PLC operation in the 16 schools, concluding that all heads were key promoters but not necessarily consciously or explicitly and that they were not the only staff providing leadership for the PLC. In some schools, particularly secondary, the day-to-day leadership and development of the PLC was provided by another member of the leadership team (eg. a deputy head). . Significantly, we found that, although *the process* of operation was sometimes evaluated, this was the case in only a small minority of schools and it was not done systematically.

We then looked closely at the management and coordination structures and arrangements used to promote a PLC. Examples of managing s*taff roles* included developing teaching assistants to work more closely with teachers; including a learning focus in the brief of all members; supporting secondary school heads of department as leaders of professional learning; appointing and supporting beginning teachers to bring new ideas into the school; internal promotion for staff with leadership potential. Examples of managing s*tructures and procedures* included creating more non-contact time to enable staff to work alongside each other and engage in mutual observation; a system of regular planning meetings for different groups; use of performance management to identify individual needs; senior staff delegating managerial responsibilities not directly related to teaching and learning so that they can concentrate on this core professional focus; fostering professional dialogue by creating shared spaces and time for staff to interact. Examples of managing *professional development* included seeking and maintaining *Investors in People* status and the systematic use of professional development folders. A key feature of managing *external initiatives* was to promote active but selective involvement in such initiatives.

We were asked to investigate the actual and potential contribution of *Investors in People* (IiP) because it is clear that there is considerable congruence between the IiP principles and indicators and the major characteristics of a PLC. We did so by carrying out a specific sub-study across seven case study schools. Opinions voiced at the second workshop conference were supported by this survey: the minimum levels of practice required to achieve the Standard were seen as necessary but insufficient for the development of a PLC. Despite a strong initial impact, which helped the head and senior staff to lay down a firm foundation for a PLC, in later cycles there seems to have been a progressive decline in influence. It is, thus, clear that the Standard provides a framework of indicators that could be used for further systematic development. But, amongst the schools in this survey, the reservations over its

continuing influence reflect the caution expressed in the Project conference: that IiP only takes schools a part of the way along the journey to becoming a fully-fledged PLC.

We also looked closely at the management and coordination structures and arrangements used to sustain a PLC. Examples of *retaining an emphasis on professional learning* included heads retaining a constant focus on pupil and adult learning, whatever external pressures and threats might arise; reviewing statements of core purpose occasionally with all staff so that they remain relevant as the PLC evolves; using distributed management to promote professional learning as a shared responsibility. Examples of *appointing and inducting new staff* included appointing new staff both to fit in with and lead activities; discussing core values with incoming staff; and inducting all new staff into core values.

The 'lava lamp' quote above also provides an illustration of the non-linear movement over time of professional learning communities and the elusive nature of sustainability. As a primary school respondent to the survey noted, when asked what helps to sustain a professional learning community:

> *An understanding that the job of sustaining a professional learning community is never finished – it will always be ongoing. An optimistic view of change*.

A different mix of facilitating or inhibiting factors for the PLC was identified in each case study school, indicating the importance of both external and site-level contextual factors and underlining both the opportunities and the limitations of headteachers' and staff capacity to exercise control over factors that are often complex and dynamic. Examples of *external facilitators* included bringing in support for the head or staff via networks with other heads, projects, LEA staff and cluster groups. Examples of *external inhibitors* included central government and LEA policies affecting resources and budgets and, in one case, even the closure of the school; policy ambiguity or changes deflecting attention from PLC promotion; dependence on external CPD of weak quality and relevance; school location leading, for example, to a sense of isolation felt in rural schools and constraints on the range of external sources of professional learning; responding to requests to support other schools or LEA staff in difficulties.

Examples of *internal facilitators*, several of which are necessarily linked to other processes, included a secure starting base, for example in having behaviour and discipline under control; a strong lead from the head and senior staff; strong and focused CPD coordination; collaborative professional relationships and mutual support amongst staff; conscious efforts to build trust and respect and demonstrate caring; the drive and enthusiasm of individual staff – new and senior – to foster engagement with continual professional learning; an adequate budget, with earmarked money for specified CPD; site facilities that helped create space and time for collaborative working and professional dialogue. Examples of *internal inhibitors* included a change of headteacher; other staff changes, especially at senior level; the multi roles of staff in small schools.

Similar factors could have different effects at different times in the same school, as well as in different schools. Examples of such *differential effects* were that the time spent on writing bids for external funding was seen as well spent or not depending on the success of the bid; that the cost of investing time and energy in external networking might be that less time was available for internal collective learning opportunities; that inspections could both stimulate and depress, depending on the outcome; that major changes, like a move to a new site, could have the same mixed effects.

Finally, we investigated the evolution of the 16 PLCs over the one-and-a-half-year lifetime of the case studies. In general, the data indicated that headteachers and other senior staff varied over how far they explicitly used the PLC concept and consciously promoted and attempted to sustain an effective PLC. We concluded that no PLC had stood still. Evolution was a fact of life and, moreover, it could be swifter for one aspect of the operation than another. A significant enhancement of the PLC appeared to have occurred in four schools, in three apparently because of the appointment of a new head. In virtually all schools, there was some shift towards a more collective approach to professional learning. Schools that already had a collective operation maintained a strong focus on professional learning suggesting that this is sustainable unless major external inhibitory factors arise. Even in small schools, evolution was likely to be incremental and only partially amenable to control by senior staff. Three key features were confirmed as making a significant contribution to PLC operation: the range of accessible professional learning opportunities, participation in external networks and interpersonal caring and support.

4.   Leading and managing the EPLC

The strategic and crucial importance of leadership and management in promoting the overall processes of creating, developing and sustaining an effective PLC, evident from the literature review, also emerged clearly in the written comments on many of the questionnaires. Key facilitators highlighted by respondents included: '*appropriate and effective leadership', 'the senior management team need to lead by example',* and *'strategic vision and direction of the school'.* Furthermore, 83% of the primary and 57% of the secondary survey respondents reported that more than half of their staff *have opportunities to take on leadership roles* and this had gone up in the last two years in 43% of the primary and two thirds of the secondary schools. Unsurprisingly, this theme, confirmed in the workshop conferences, underpins and runs through earlier sections of this chapter and the preceding chapters.

In the case studies, there were consistent messages across all schools. Thus, the contribution of the head and senior staff was seen as crucial in all three nursery schools, not least in achieving positive working relationships. This was also true of the primary schools where we concluded that the dynamism, energy and commitment of heads and senior staff were of central importance for the development of the PLC. In the five secondary schools, the emphasis was often on the senior leadership team and the roles of heads of department, but the conclusions about their contribution were broadly similar and the leadership of the head, while sometimes appearing less overt in relation to developing a PLC, nonetheless, proved significant. In the three special schools, strong leadership by the head and senior staff also figured prominently, although here, too, teamwork and distributed leadership were important.

Thus, there were a number of notable common threads. Several successful leaders had a clear sense of their own values and vision, and the confidence to model good practice. Distributed leadership – in a variety of forms – was apparent in most case study schools and several headteachers and senior staff referred to providing mentoring and coaching support for leaders at different levels in the school. All leaders sought to promote learning and to varying degrees, they saw a PLC as the way forward. It is, however important to note that the term *professional learning community* was relatively unfamiliar to most of them and, hence, they did not initially use it themselves or with colleagues, though most of them did by the end of the project.

Fundamental to this approach, however they referred to it, was a commitment to actively build and maintain mutual respect and trust as well as to encourage mutual support amongst

all staff in a variety of ways – bonding meetings, modelling, consistency, fairness and the like – without which, leadership and collaboration could not function effectively to promote learning.

Significantly, for all of them, it was their context that critically affected what they were able to do to promote a PLC and also influenced their colleagues' responses. As made clear in the findings and accounts presented in Chapter 4, the general observations and conclusions about leadership and management and, indeed the earlier summary findings, must therefore be interpreted in the context of particular school settings.

The main conclusions from this study, and their implications, are discussed in the final chapter.

Chapter 6   Conclusions and Implications

1.   INTRODUCTION AND BACKGROUND

In the *Creating and Sustaining Effective Professional Learning Communities* project, funded by the Department for Education and Skills (DfES), the General Teaching Council for England (GTCE) and the National College for School Leadership (NCSL) from January 2002 to October 2004, we were asked to find out how feasible and useful the idea of a professional learning community (PLC) was and what practical lessons could be learned from experience here and elsewhere. Accordingly, over the 34-month period of the project, we carried out four main research activities - a literature review, a questionnaire survey and detailed statistical analysis of this alongside pupil outcomes data, case studies in 16 school settings and three workshop conferences for representatives from the case study schools and the project Steering Group. We also carried out an extensive range of dissemination activities, including setting up a Project website (www.eplc.info)

Our working definition was:

> *An effective professional learning community has the capacity to promote and sustain the learning of all professionals in the school community with the collective purpose of enhancing pupil learning.*

Our first finding was that the practitioners in the survey and case study schools generally responded positively to the idea of a PLC and, for the most part, to the working definition. Even though not many were familiar with the term, or used it in their everyday professional conversations, most appeared to find it helpful and also to understand what it conveyed. Taken together with the evidence, from the survey and case studies, about impact on pupil and professional learning, as summarised below, our overall, general conclusion is:

- **Conclusion 1**   The idea of a PLC is one well worth pursuing as a means of promoting school and system-wide capacity building for sustainable improvement and pupil learning.

2.   WHAT ARE THE CHARACTERISTICS OF EFFECTIVE PLCS?

Our first task was to identify and convey *the characteristics of effective professional learning communities* and, implicitly, *why they are worth promoting*.

The Project findings all confirmed the existence and importance of the five PLC characteristics identified in the literature review - shared values and vision, collective responsibility for pupils' learning, reflective professional inquiry, collaboration focused on learning and group as well as individual, professional learning. In addition, three more characteristics were found to be important: inclusive membership; mutual trust, respect and support; openness, networks and partnerships.

- **Conclusion 2**   Effective professional learning communities fully exhibit eight key characteristics: shared values and vision; collective responsibility for pupils' learning; collaboration focused on learning; individual and collective professional learning; reflective professional enquiry; openness, networks and partnerships; inclusive membership; mutual trust, respect and support.

We investigated the question *are PLCs worth promoting* in terms of their effectiveness. Being a PLC is clearly not an end in itself; rather it is a means to an end. We argued that its 'effectiveness' should be judged in relation to two main outcomes: impact on the professional learning and morale of the staff – teachers, school leaders and other adult workers – and, most importantly, impact on pupils.

The highest reported mean level of teacher involvement reported by survey respondents was for two items: *collective responsibility for pupil learning* and *create conditions for pupils to feel the confidence to learn.* More importantly, some survey findings demonstrated a positive, though weak, link between full expression of PLC characteristics and pupil outcomes – in particular value-added performance. The case study findings, including certain Ofsted reports, supported the conclusion that the more fully a PLC expressed the characteristics, the more they impacted positively on pupils' attendance, interest in learning and actual learning, as well as on the individual and collective professional learning, practice and morale of teaching and support staff.

It is important to recall the overall limitations of the survey, as discussed below in section 8, including the fact that the findings on impact are based on statistical correlations and thus do not in themselves confirm any causal links. Nevertheless these statistical relationships were all positive and none were negative. Similarly, the case study findings were generally positive, especially with respect to impact on staff learning.

- **Conclusion 3** Pupil learning was the foremost concern of people working in PLCs and, the more developed a PLC appeared to be, the more positive was the association with two key measures of effectiveness - pupil achievement and professional learning.

3. WHAT PROCESSES PROMOTE AND SUSTAIN EFFECTIVE PLCs?

Our next two, linked, tasks were to identify and convey:
- *the key enabling and inhibiting factors – at national, local, institutional, departmental/team and individual levels – which seem to be implicated in the initial creation, ongoing management and longer-term sustaining of such communities;*
- *innovative and effective practice in managing human and financial resources to create time and opportunity for professional learning and development and optimise its impact.*

In the light of the literature review and the case study findings, with some support from the survey findings, we identified four key PLC processes for promoting and sustaining an effective PLC: optimising resources and structures; promoting individual and collective learning; specifically promoting and sustaining the PLC; and leadership and management. Moreover, it was evident from the case studies that the effectiveness of these processes varied between schools, and over time in the same school, for example in terms of their impact on individual teaching-related practice and on leadership and management practice. So, a third dimension of effectiveness – process - was identified

- **Conclusion 4** Professional learning communities are created, managed and sustained through four key operational processes: optimising resources and structures; promoting individual and collective learning; explicit promotion and sustaining of an effective PLC; and leadership and management. Furthermore, the extent to which

these four processes are carried out effectively is a third measure of overall PLC effectiveness.

A different mix of facilitating and inhibiting factors, both internal and external, was identified in each of the 16 case study schools, indicating the importance of both external and site-level contextual factors and underlining both the opportunities and the limitations of headteachers' and staff capacity to exercise control over factors that are often complex and dynamic. Facilitators included individual staff commitment and motivation, links with other cluster-group schools, focused CPD coordination and site facilities that helped collaborative work and professional dialogue. Inhibitors included resistance to change, staff turnover, central and local policies affecting resources and budgets and staff changes, especially at senior level. Some evidence from the survey also suggested support for related inhibiting contextual factors at the primary level such as a high percentage of free school meals and of English as a second language.

There were many examples of innovative ideas and methods employed to make best use of human and physical resources including a competitive 'Learning leaders' scheme in a secondary school, ensuring that all staff in a nursery school had non-contact time, using regular staff meetings to promote collaborative work and professional learning in a primary school and three-weekly case conferences for all staff working with individual children in a special school.

- **Conclusion 5** Staff in more developed professional learning communities adopt a range of innovative practices to deal with the inhibiting and facilitating factors in their particular contexts. Many of these practices are potentially useful for other schools.

We were specifically asked to look at *Investors in People* and did so in relation to the case study schools and at the second workshop conference, where it was found to be especially helpful in starting the process of promoting a PLC, but less helpful once schools were quite far along the process of PLC development. In summary, it was a useful, perhaps necessary, but not sufficient method for achieving a PLC.

- **Conclusion 6** *Investors in People* is a useful tool and could profitably be used alongside other approaches in the early stages of developing a more effective PLC.

4. DO PLCs GO THROUGH STAGES OF DEVELOPMENT?

We hypothesised that a school might be at one of three stages as a PLC – *starter*, *developer* and *mature*. The survey respondents and the case study interviewees accepted these common-sense distinctions. In the survey, *mature* PLC respondents reported a higher, and *starter* PLCs a lower, percentage of staff involvement in key PLC activities: thus, their reports of their schools being at a particular stage were consistent with their other replies, thereby providing some support for the validity of the 'stages of development' concept. Nevertheless, it should also be noted that, when applying the stringent criteria of statistical significance, there appeared to be some exceptions to this pattern suggesting that the concept of developmental progress may be less appropriate to some aspects of PLCs than others. From the case studies we found a loose positive association between stage of development and the expression of the eight characteristics of PLCs especially across the nursery phase and, to a somewhat lesser extent, the primary phase. Evidence from the case studies about differential levels of impact related to the PLC's stage of development was inconclusive.

In the light of these findings, it is reasonable to suppose that PLCs in all types of English school – nursery, primary, secondary and special – are likely to exhibit the eight characteristics identified above, that they will do so to varying degrees and that their 'profile' on the eight characteristics will change over time as circumstances change in each school. However, although the face validity of the three stages of development was supported, they need to be modified if they are to be of further use to practitioners and researchers, as argued below.

- **Conclusion 7**   Professional learning communities change over time in ways and in particular aspects that may or may not be planned or visible. The idea of three stages of development – starter, developer and mature – provides some useful insights into these changes and ways of responding to them but needs modifying to be of real help for practitioners and researchers.

5.   WHAT DO PLCs LOOK LIKE IN DIFFERENT SETTINGS?

A key part of the three tasks was to find out what these characteristics and processes *look like in different kinds of school setting*. Context and setting are crucial to any understanding of how these characteristics and processes play out in practice. For example, the survey found that primary school respondents were generally more likely than those in secondary schools to say that the eight characteristics were exhibited to a greater extent, but not in all cases. These differences between primary and secondary schools were, broadly, confirmed in the case studies, which also indicated important similarities between nursery and special schools. For instance, nursery, primary and special support staff typically worked most closely with teachers whereas the demarcation between teaching and support staff was most apparent in secondary schools. In the latter, the departmental structure often produced small PLCs, with their own distinctive ways of working together, although one-teacher departments in smaller secondary schools faced quite different issues. Location was also sometimes crucial, for example staff in relatively remote schools found it difficult to share experience beyond their own school.

- **Conclusion 8**   Although PLCs have common characteristics and adopt similar processes, the practical implications for developing a PLC can only be understood and worked out in the specific conditions – like phase, size and location – of particular contexts and settings.

6.   DEFINITIONS AND PRINCIPLES OF EFFECTIVE PLCs

Our fourth task was to:
> *generate models which illuminate the principles of effective professional learning communities and assess the generalisability and transferability of such models.*

We began the study with a working definition, presented above, that found broad acceptance with practitioners. We also began with a model of the ways in which we thought a PLC might operate (Appendix 1.1). In the light of our findings, we now summarise our current thinking on the somewhat problematic issues embedded in the working definition and the model.

The term 'professional' was rarely explicitly challenged in the case study interviews but it figured prominently, and often controversially, in discussions at various dissemination events about the related issue of PLC *membership*. Thus, one key issue was to do with who was, or

should be, thought of as a member of a *professional* community in a school. The literature on PLCs, most of it American, tended to assume that only teachers were members. This was always unlikely to be true in England, especially in nursery and special schools where, our data confirmed, teaching assistants and support staff of all kinds were, more often than not, integral to teaching and learning. Moreover, '*Investors in People'*, quite well established in our sample and more broadly across the country's schools, also included support staff in its definitions and standards. Finally, the introduction of the Workforce Agreement (www.teachernet.gov.uk) made it essential that support staff be considered directly as potential PLC members and this continues to be the case.

This immediately raised the question: who counts as a *professional* and by what criteria? We take it as axiomatic, first, that teachers and headteachers are trained, qualified, paid and held accountable for the standards of teaching and learning in a school and, second, that support staff are entirely legitimate members of a professional learning community. We were advised on several occasions that it was more productive to focus on people 'being *professional*' rather than 'being *a* professional'. We agree and, therefore, suggest a way forward that depends on the adoption of professional standards as the basis for deciding what counts as professional behaviour by any and all members of a PLC.

Teachers and headteachers now have professional standards in the form of the GTCe *Code of Professional Values and Practice for Teachers* and the NCSL's *National Standards for Headteachers.* We suggest that these two sets of standards should be used to inform the work of a school staff seeing themselves as a *professional* learning community. We also suggest that appropriate professional standards be developed for support staff and that, when this is done, each school staff should ensure they are mutually consistent.

With respect to professional *learning*, our findings lead us to conclude that the view of professional learning adopted in our research rationale is broadly satisfactory. In summary, we assumed that it was focused either directly on promoting effective pupil learning or indirectly on creating conditions to enable effective pupil learning to be promoted. Such learning might arise from both intended and incidental opportunities and might be individual or collective, whether involving a group within the PLC or all members. Any actual professional learning that might result was inevitably an individual experience at one level, although new learning and understandings about practice could also be shared through a process of joint knowledge creation, and it would be here where collective learning had taken place. We conceived learning from such opportunities that improved practice as entailing transfer of learning plus additional learning in and on the job in order to integrate whatever had been learned into skilful performance in the job setting. This would normally require support with transfer of learning into skilful workplace performance, for example through coaching or observation with constructive feedback on practice. Our research found the transfer of practice to be one of the least developed processes of PLCs.

When the case study interviewees spoke of their school, department or group as a *community,* they were usually referring, implicitly or explicitly, to such key characteristics as *inclusiveness*, *shared values*, *collective responsibility for pupil learning*, *collaboration focused on learning* and, most of all, a sense of experiencing *mutual trust, respect and support*. We suggest that this is a useful way of summarising the community dimension of a PLC in schools.

However, our findings also indicate that there is a further important aspect of PLC membership – namely *pupil voice* – that we only touched on in this project. It became clear as the project progressed, especially from the workshop conferences, that the case study

schools' staffs were, to varying extents and using a range of different methods, seeking to take account of pupils' views and opinions about their own learning and about the school more generally. This was true of all types of school, including nursery and special. Hence, we suggest that this aspect be included in future thinking and practice about the membership and operation of PLCs.

A further key component of the working definition relates to an issue that has already been discussed above – the *effectiveness* of a PLC. In summary, we suggest that a PLC's effectiveness should be judged on three criteria:
- its ultimate impact on pupil learning and social development;
- its intermediate impact on professional learning, performance and morale;
- its operational performance as a PLC.

Our findings on *sustaining a PLC* indicated that this was relatively weak in most of the case study schools, although the limited time frame of the project made this more difficult to explore. In part, the relative weakness was because a number of the issues involved are often intractable and beyond the control, or even influence, of heads and senior staff. The most dramatic examples were the closure of one school, due to falling rolls, and the departure of the head in another, but there were several more typical occurrences, notably those arising from key staff changes, especially at senior level. Succession planning and management are familiar and notoriously difficult tasks, especially to those responsible for appointing headteachers. We found in our case study schools that, on the whole, neither governors nor LEAs were much involved in directly supporting PLCs as such, so it is unclear how far those appointing a new head would take this aspect of the school's work into account. It seems unlikely that they would, for the simple reason that the idea of a PLC, still less the terminology, is not yet familiar or widely used.

This also had consequences for new staff coming in as replacements for key staff. Of course, there is always a balance to be struck between maximising the value of 'new blood' and ensuring that successful practice is maintained. There were some very good examples of induction arrangements that achieved this, but the overall concept of a PLC was rarely used as the rationale. Moreover, we also found that neither the impact of professional learning nor the process of PLC operation were normally monitored or evaluated and neither, therefore, was follow-up action taken to maximise their effectiveness. Clearly, the implied question here is: how necessary is it to make explicit use of the idea of a PLC, and the terminology, and to seek a shared understanding of it in order to promote and sustain a PLC? We suggest that it is very necessary.

In seeking to arrive at a revised or updated definition of a PLC, we were conscious of the various issues raised in this section and of Conclusion 8, above, that each school's context and setting must be taken into account. It was in this spirit that, at our first workshop conference, an eminent American researcher in this field expressed the view that each school staff will probably need to formulate its own working definition of a PLC. We agree and, accordingly, we suggest that the working definition should stand as a useful trigger for this to happen.

- **Conclusion 9**   The project's working definition offers a practical basis for staff in schools wishing to promote an effective PLC. In so doing, they should take account of the issues associated with the components of that definition, as discussed in this section and, in particular, relate the definition to their own context.

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- **Conclusion 10**   Staff in schools wishing to promote and sustain an effective PLC should monitor and evaluate the development of their characteristics and implementation of their processes over time, and take appropriate follow-up action to maximise their effectiveness.
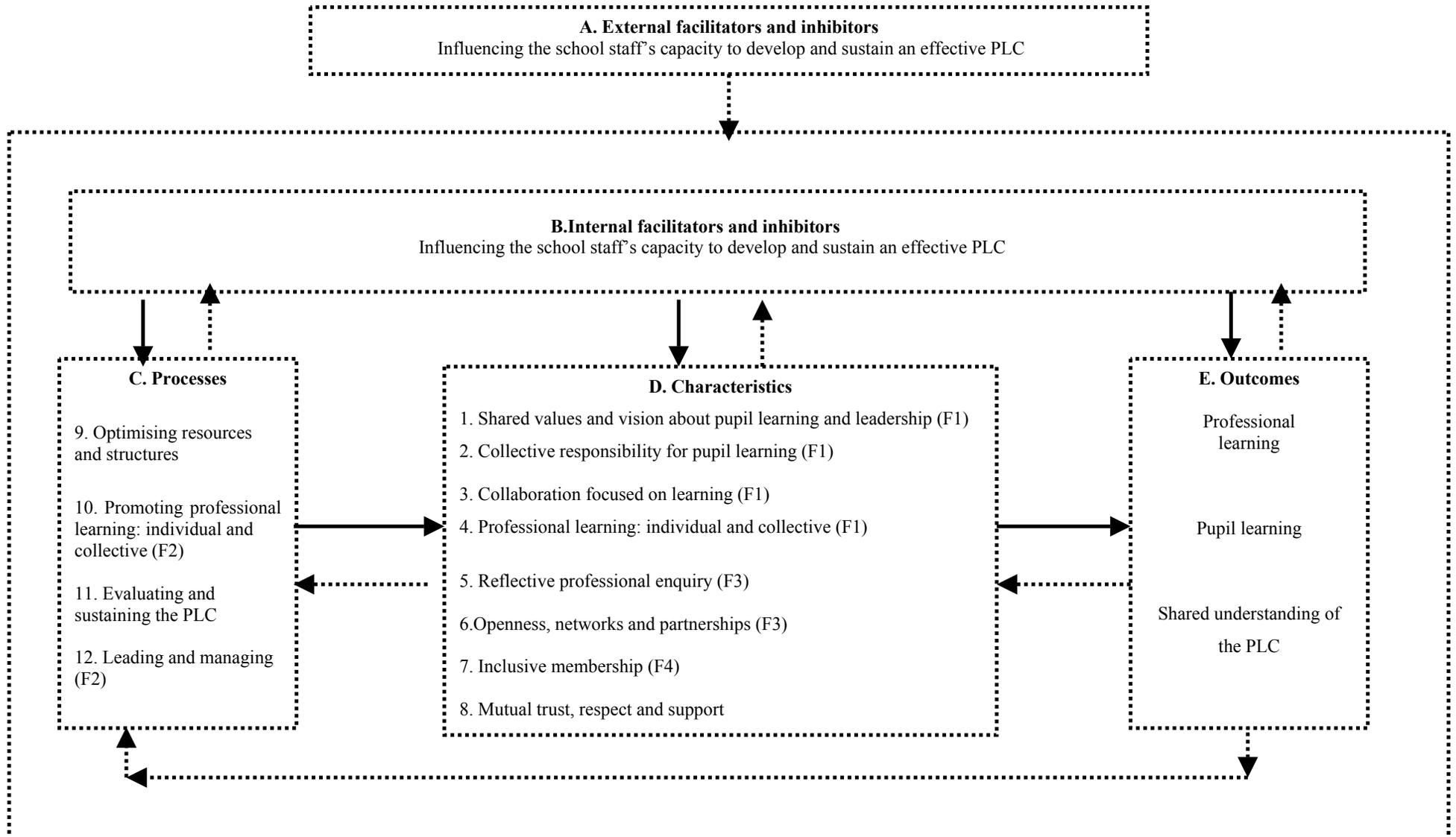
7.   A PROVISIONAL MODEL AND A DEVELOPMENT PROFILE

Earlier models used to frame the research were based, in part, on the idea that PLCs may progress through three stages of development. As indicated above (Conclusion 7), although this idea is a useful starting point, the distinctions are somewhat crude. We, therefore, suggest that a revised model, together with a development profile, both based on the eight characteristics and four processes found to be important in our research findings, might offer a useful basis for practice and research. Hence, we now propose the *Provisional Model of a School Operating as an Effective Professional Learning Community* as represented in Diagram 6.1.

The *Provisional Model* builds on the earlier heuristic model (Appendix 1.1) and has been produced in the light of our findings from four sources - the literature review, the survey, the case studies and the conferences. Its main purpose, especially for practitioners, is to summarise our findings in a reasonably accessible form. Hence, it portrays a professional learning community operating within a school – the outer dotted line – influenced by two sets of inhibitors and facilitators – those which are external (Box A) and internal (Box B) to the school. The unbroken arrows linking the four processes (Box C) to the eight characteristics (Box D) and the three sets of outcomes (Box E) indicate the presumed broad causal direction of PLC operation. The arrows are not intended to imply a simplistic, unidirectional, causal chain and the provisional model is best thought of as cyclic and recursive. Hence, the unbroken arrows indicate the ways in which the phenomena in each of the five Boxes are presumed to be reciprocally influencing each other. The presumed relationships between the characteristics and processes, on the one hand, and the four survey factors (F1, F2 etc) on the other, are as explained in the previous chapter.

Of course, it is not possible to convey the complexity and dynamism of the operation of a PLC in a diagram. In essence, it should be seen as a potentially useful tool, to be tested out in practice and research. For practitioners, in addition to its summary function, it is intendedto clarify the research rationale for the *Development Profile* (Table 6.1). For researchers, it is intended to help to generate hypotheses for future research (see section 8 below), perhaps using path analysis. (Silins and Mulford, 2002)

Diagram 6.1: Provisional Model of a School Operating as an Effective Professional Learning Community

```
┌─────────────────────────────────────────────────────────────────────┐
│                 A. External facilitators and inhibitors              │
│   Influencing the school staff's capacity to develop and sustain an  │
│                          effective PLC                               │
└─────────────────────────────────────────────────────────────────────┘
                                    │
                                    ▼
┌─────────────────────────────────────────────────────────────────────┐
│           B. Internal facilitators and inhibitors                    │
│   Influencing the school staff's capacity to develop and sustain     │
│                     an effective PLC                                 │
└─────────────────────────────────────────────────────────────────────┘
```

C. Processes

9. Optimising resources and structures

10. Promoting professional learning: individual and collective (F2)

11. Evaluating and sustaining the PLC

12. Leading and managing (F2)

D. Characteristics

1. Shared values and vision about pupil learning and leadership (F1)

2. Collective responsibility for pupil learning (F1)

3. Collaboration focused on learning (F1)

4. Professional learning: individual and collective (F1)

5. Reflective professional enquiry (F3)

6. Openness, networks and partnerships (F3)

7. Inclusive membership (F4)

8. Mutual trust, respect and support

E. Outcomes

Professional learning

Pupil learning

Shared understanding of the PLC

- **Conclusion 11**   The *Provisional Model* summarises findings from this study and should prove productive in further illuminating issues associated with EPLCs for practitioners and researchers.

Each of the model's dimensions may be exhibited to a greater or lesser extent and so the third aspect of PLC effectiveness proposed above (Conclusion 4) may be usefully thought of as having 12 dimensions. Hence, we also propose an extension of the model in the form of a *Development Profile* that reflects the dynamic and changing nature of a PLC. As indicated below, we suggest that such a revised model would benefit from trialling in a research and development project. In the meantime, schools may wish to adapt it for use as a self-audit tool, perhaps as part of their self-evaluation strategy under the new Ofsted arrangements. If they do, we suggest that it would be useful to rate the effectiveness of each of the twelve dimensions on a simple but practical high/low scale, as outlined in Table 6.1

Table 6.1   PLC Development Profile

High-------------------------Low

1. Shared values and vision
2. Collective responsibility for pupils' learning
3. Collaboration focused on learning
4. Professional learning: individual and collective
5. Reflective professional enquiry
6. Openness, networks and partnerships
7. Inclusive membership
8. Mutual trust, respect and support
9. Optimising resources and structures to promote the PLC
10. Promoting professional learning: individual and collective
11. Evaluating and sustaining the PLC
12. Leading and managing the PLC

- **Conclusion 12**   Schools wishing to promote a PLC might usefully adapt the *Development Profile* for use as a practical self-audit tool, possibly within the framework of their Ofsted self-evaluation strategy.

8.   IMPLICATIONS FOR THEORY BUILDING

A PLC may usefully be seen as a complex metaphor, one that is multi-dimensional and which needs to be 'unpacked'. The findings should, we hope, inform this 'unpacking' process and thus contribute to theory building as the basis for future research. In summary, they supported the importance of the five main characteristics identified in the initial literature review - shared values and vision, collective responsibility for pupil learning, reflective professional inquiry, collaboration and group, as well as individual, learning. They also indicated the importance of three further characteristics – inclusive membership, networks, partnerships and openness and mutual trust, respect and support – and four operational processes –

leadership and management, optimising resources and structures, promoting individual and collective professional learning and promoting, and evaluating and sustaining the PLC.

Furthermore, PLCs and the ways in which they exhibit the twelve dimensions look very different in different phases of schooling and in different contexts and settings. They also change over time along these dimensions, sometimes as a result of deliberate planning and action by heads and senior staff but also in unplanned ways and as a result of factors beyond their control. (*nb* applying criteria of statistical significance points to little developmental progress in some aspects of PLC) Although it may be helpful initially to see this as progression through three stages – *starte*r, *developer* and *mature* – it is probably more productive to see it as a continuum made up of the twelve dimensions in the *Provisional Model* rather than as three, uni-dimensional, discrete stages. As indicated in the *Development Profile*, a PLC may progress or regress on any one or more of the dimensions in a given time period. Hence, the importance of heads and senior staff both of having a coherent and explicit concept of a PLC, of deliberately sharing their understanding with colleagues in order to seek their interpretations of its implications, and of monitoring and evaluating its progress on each dimension so that appropriate action can be taken. Of course, a school staff that, at a particular point in time, locate their school at the high end of all or most of the 12 dimensions might find it helpful to see itself as having a more *mature* profile at that time, while one that rates itself at the low end could see itself as having an *early starter* profile.

The idea of a PLC undoubtedly overlaps with the earlier concept of a 'learning organisation' and with work in the school improvement tradition. We suggest that the concept of 'community' offers the possibility of new insights especially in conjunction with the associated characteristics of inclusive membership, mutual trust, respect and support, and the particular emphasis on the collective learning of professionals within the community. Certainly this is worthy of further investigation. We also suggest that the concept of sustainability illuminates current discussions about capacity building and school improvement more generally. The rapid nature of change facing schools indicates that it is unhelpful to think in terms of specific changes being institutionalised: rather, continuous and sustainable professional learning and improvement, sharply directed at pupils' learning, are required.

Unsurprisingly, relatively few of our case study respondents used the term 'professional learning community' explicitly to inform their practice in schools. Yet most of them, especially those in senior positions, embraced it readily as a term that captured the essence of what they were trying to do. As one said, quoting Moliere, '*Gracious me! I've been talking prose for the last forty years and have never known it.*' More importantly, hardly any used the idea of a PLC as a basis for staff discussion or to monitor and evaluate progress in the school. Our suggestion that they should is based on Argyris' notion of double-loop learning (Argyris et al, 1985) which, we further suggest, is worthy of further investigation in the context of sustaining an effective PLC.

9. IMPLICATIONS FOR FUTURE RESEARCH AND DEVELOPMENT

This was an exploratory study of a relatively sophisticated and complex approach to capacity building and school improvement. Its limitations will be apparent. One survey questionnaire, designed to be completed by the headteacher or CPD coordinator, in consultation with other staff, was sent to each school. Although the response rate was low, the responses were judged

to representative. Clearly, in any future study, it would be helpful to collect survey data from other staff and, ideally, to increase the response rate (though the latter would continue to be problematic). The case study data were collected in 16 schools of various types. Although the latter were selected with great care, they are not, of course, representative of all schools in England. The findings from this study should thus be regarded as indicative rather than conclusive and they certainly do not offer easy solutions or quick fixes. Nevertheless, we believe them to sufficiently robust as to represent a significant step forward in understanding the idea and potential of a professional learning community for schools in England and to be potentially valuable in informing future research in this field.

Some important issues about becoming and developing a school as a PLC were not fully explored in the survey (*eg* extent of mutual trust between staff, leadership at all levels). These included trust, responsiveness, flexibility, dynamic energy, creativeness, risk taking, taking initiative, taking control, ownership, leadership at all levels, organisational confidence, independence, personal caring and capacity/confidence to deal with changes positively. Further development of the survey instrument would need to examine these aspects and it is also possible, if this were done, that new factors would be identified that support more fully the twelve dimensions of the *Developmental Profile*. The development of a new survey instrument to provide feedback to a larger sample of schools should also be useful in this context. This would require the development of the analysis and format of feedback provided to schools. Further analysis and modelling of pupil outcomes (eg in specific academic subjects and pupil attitudes) in relation to PLC characteristics and operational processes would also be productive.

In addition, a more refined version of the *Development Profile* could usefully be the focus of a follow-up development project. This would be designed to build upon the research findings in order to provide practical, self-audit instruments and tools for schools wishing to promote and sustain themselves as an EPLC, using an enquiry-oriented approach. These instruments could be developed to promote the Primary and Secondary strategy approaches to CPD and school improvement and the shift to self-evaluation by Ofsted. This study could also investigate further key questions like: 'How far it is necessary for schools to have a secure starting base, for instance in terms of pupil behaviour or a critical mass of committed staff as a necessary take-off platform?' and 'How might governors become more integrally involved in developing and sustaining a PLC?' At the third workshop conference it was suggested that sets of practical 'Source Materials' should be developed, providing structure but not telling people 'How to do it'. One possibility would be to explore the potential of a simulation game. Such materials could be based on the rich data from the case studies and generate key professional discussion points for schools wishing to use the *Development Profile* to promote a PLC.

As also mentioned earlier, the timeframe for the entire project was 34 months, and the case study period took place over an 18-month period. While it was possible to get a retrospective sense from *mature* PLCs about how they had developed over time (as illustrated in Chapter 4), we could not explore in depth their continued development or fluctuations. It would, therefore, be valuable to be able to return to the same schools in a few years to see what has happened to them in the interim period and whether the dimensions that seemed to be developing are still doing so.

- **Conclusion 13** Serious consideration should be given to the possibility of funding further research and development work along the lines outlined above.

10.   CONCLUSION: MESSAGES FOR KEY STAKEHOLDERS

At the outset of the Project, the idea of a professional learning community was relatively new in this country; it is now central to the NCSL's revised National Standards for Headteachers and the DfES' Core Principles for raising standards in teaching and learning. In many ways this was a pioneering study, at least in this country. The practical implications of a concept that has gained wide currency have been investigated for the first time on a national scale using a mix of quantitative and qualitative methods. It is, by its very nature, an exploratory study but we believe the findings have significant messages for policy-makers, practitioners and researchers. The main message was contained in our first conclusion: that the idea of a PLC is one well worth pursuing as a means of promoting school and system wide capacity building for sustainable improvement and pupil learning.

The key messages for schools emerging from this project will by now be clear. Essentially we suggest that all actual and potential members of a PLC – heads, teachers, heads of department, LSAs, other support staff and governors – should seriously consider adopting the PLC approach and the methodology proposed above. The complementary message for external support agencies, LEA staff, initial trainers, CPD trainers and consultants, and those involved in leadership development is that they, too, should consider the implications of these findings for their own work in supporting people in schools as they seek to promote and sustain a PLC. Finally, we recommend policy decision makers at national level and especially our sponsor – the DfES, NCSL and GTCe – to take forward these ideas.

- **Conclusion 14**   Given our substantive general conclusion that the idea of a PLC is one well worth adopting in order to promote school and system wide capacity building for sustainable improvement and pupil learning, we suggest that schools, external support agencies and national policy makers should take forward the findings and conclusions contained in this report.

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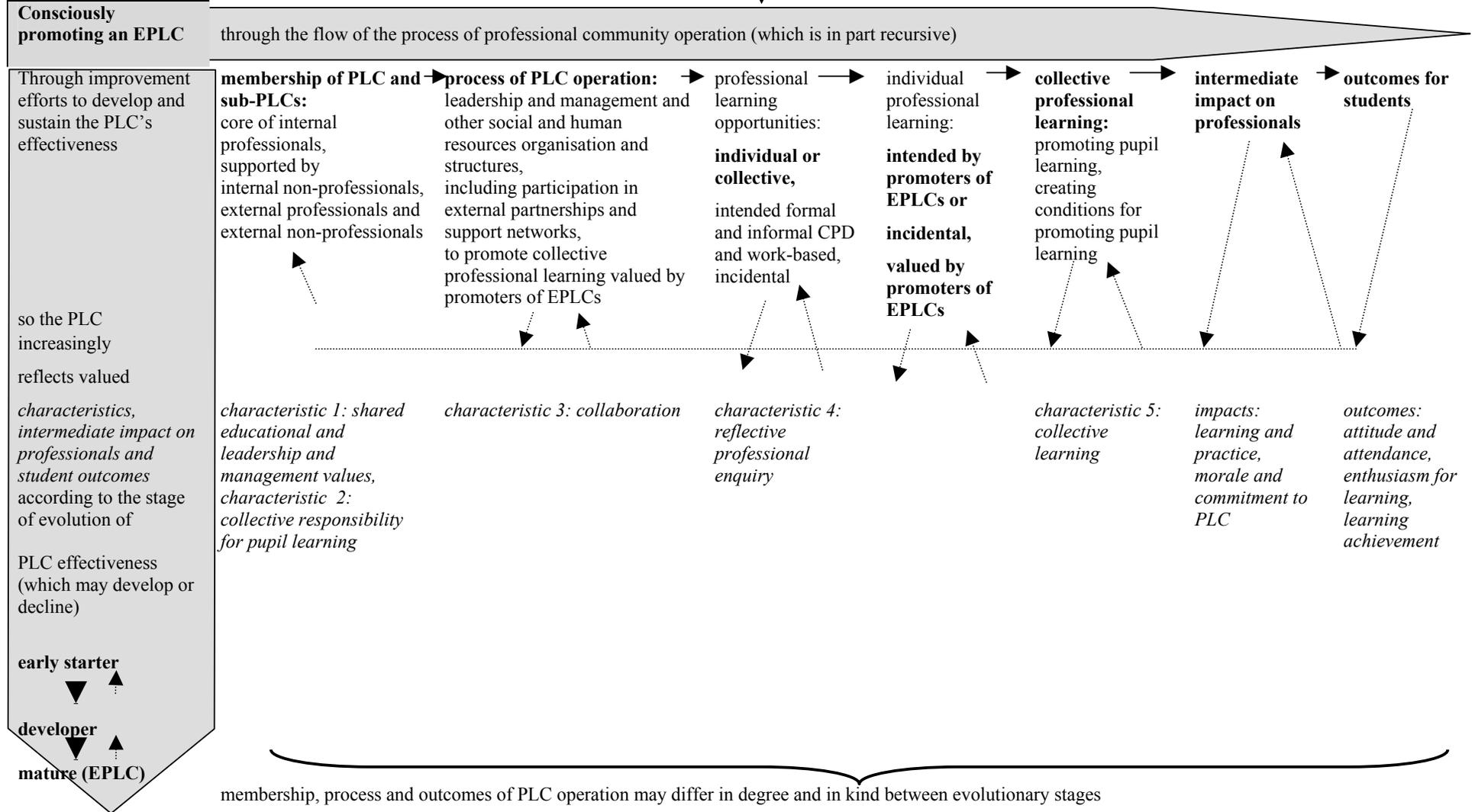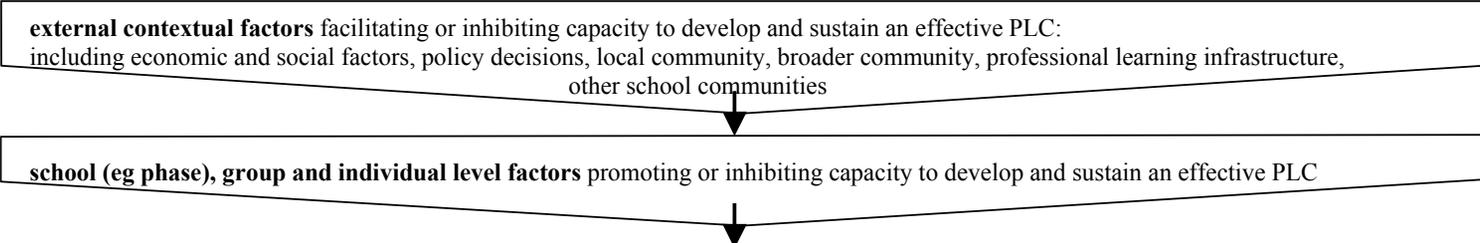
Appendices

Glossary of terms

EPLC glossary

Abbreviation	Full
ALIS	Advanced level information system
ANOVA	Analysis of Variance
AST	Advanced Skills Teacher
ATL	Association of Teachers and Lecturers
BPRS	Best Practice Research Scholarship Programme
cpd	Continuing Professional Development
DfES	Department for Education & Skills
EAZ	Education Action Zone
EBD	Emotional and Behavioural Disorder
EiC	Excellence in Cities
EPLC	Effective Professional Learning Community
FSM	Free School Meals
FTE	Full Time Equivalent
GA	General Assistant
GTP	Graduate Teacher Programme
HEI	Higher Education Institution
ICT	Information and Communication Technology
IEP	Individual Education Plan
IiP	Investors in People
INSET	Inservice Education and Training
LEA	Local Education Authority
LMS	Local Management of Schools
LPSH	Leadership Programme for Serving Headteachers
LSA	Learning Support Assistant
NNEB	National Nursery Examination Board
NPQH	National Professional Qualification for Headship
NQT	Newly Qualified Teacher
NTSS	Non Teaching Support Staff
NVQ	National Vocational Qualification
OCN	Open College Network
Ofsted	Office for Standards in Education
PD	Professional Development
PGCE	Postgraduate Certificate in Education
PIPS	Performance Indicators in Primary Schools
PLC	Professional Learning Community
PSHE	Personal, Social and Health Education
SATS	Standard Attainment Tests
SCITT	School Centred Initial Teacher Training Scheme
SENCo	Special Educational Needs Co-ordinator
SLT	School Leadership Team
SMSA	School Meals Service Assistant
SMT	Senior Management Team
SNA	Special Needs Assistant
TA	Teaching Assistant
TES	Times Educational Supplement
WFR	Work Force Reduction
YEllis	Year 11 information system

Appendix 1.1 Diagram Revised framework: The processes of operation and development of professional learning communities (PLCs) in schools

external contextual factors facilitating or inhibiting capacity to develop and sustain an effective PLC:
including economic and social factors, policy decisions, local community, broader community, professional learning infrastructure, other school communities

school (eg phase), group and individual level factors promoting or inhibiting capacity to develop and sustain an effective PLC

Consciously promoting an EPLC   through the flow of the process of professional community operation (which is in part recursive)

Through improvement efforts to develop and sustain the PLC's effectiveness

so the PLC increasingly

reflects valued

characteristics, intermediate impact on professionals and student outcomes according to the stage of evolution of

PLC effectiveness (which may develop or decline)

early starter

developer

mature (EPLC)

membership of PLC and sub-PLCs:
core of internal professionals, supported by internal non-professionals, external professionals and external non-professionals

process of PLC operation:
leadership and management and other social and human resources organisation and structures, including participation in external partnerships and support networks, to promote collective professional learning valued by promoters of EPLCs

professional learning opportunities:

individual or collective,

intended formal and informal CPD and work-based, incidental

individual professional learning:

intended by promoters of EPLCs or

incidental,

valued by promoters of EPLCs

collective professional learning:
promoting pupil learning, creating conditions for promoting pupil learning

intermediate impact on professionals

outcomes for students

characteristic 1: shared educational and leadership and management values,
characteristic 2: collective responsibility for pupil learning

characteristic 3: collaboration

characteristic 4: reflective professional enquiry

characteristic 5: collective learning

impacts: learning and practice, morale and commitment to PLC

outcomes: attitude and attendance, enthusiasm for learning, learning achievement

membership, process and outcomes of PLC operation may differ in degree and in kind between evolutionary stages

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Appendix 3.1

creating and sustaining *E*ffective *P*rofessional *L*earning *C*ommunities
(EPLC)
A QUESTIONNAIRE FOR SCHOOLS

SCHOOL NAME :

LEA CODE:

Dear Colleague,

Can you help us to identify the features of a learning community? The *EPLC* project is an exciting initiative funded by the DfES with the GTC and NCSL, which is investigating professional learning communities in schools in England (further details in the attached leaflet).

The idea is comparatively new and we want to find out what you and your colleagues think of it. We plan to investigate the factors that facilitate or hinder the development of a professional thriving learning community and its links with pupil learning and achievement.

The research is a joint enterprise between the Schools of Education in the Universities of Bath and Bristol and is co-directed by Louise Stoll, Mike Wallace and Ray Bolam in Bath and Sally Thomas and Agnes McMahon in Bristol.

Please help us by completing this questionnaire. If you do, we will be able to provide you with customised feedback on the responses to this survey and updates about the project findings.

- **The questionnaire should be completed by the Headteacher/CPD coordinator and/or a senior member of staff.**
- **Please return the questionnaire as soon as possible and preferably not later than the return date specified in the accompanying letter.**

The data that you provide will be treated in confidence and no school will be identified in any report.

We are most grateful for your help in this matter.

The *EPLC* project team

If you have any queries, please contact us at:
***EPLC* project, Graduate School of Education, 8-10 Berkeley Square, Bristol, BS8 1HH**
Telephone: 0117 928 7144

Part 1   Professional Learning in this School

In completing this section, please:
- circle whichever of the following best reflects the position in the school;
- consult with your (senior) colleagues and others as you judge necessary.

For each statement, please circle one number on scale A and one number on scale

SCALE A

How many staff does this apply to?

1 = All or almost all staff (more than 80%)
2 = Most staff (approximately 50-80%)
3 = Some staff (approximately 20-49%)
4 = Few or no staff (less than 20%)
5 = Don't know

SCALE B

Has this changed in the last two years?

1 = Yes: gone up (increased)
2 = No change
3 = Yes: gone down

Teachers in this school:	SCALE A *How many staff does this apply to ?*						SCALE B *Has this changed in the last two years?*			
	Over 80%	50 to 80%	20 to 49%	Under 20 %	Don't know		Yes : gone up	No change	Yes : gone down	
1) take collective responsibility for pupil learning	1	2	3	4	5	[8]	1	2	3	[9]
2) base their approach to change on the use of good evidence	1	2	3	4	5		1	2	3	
3) create conditions for pupils to feel the confidence to learn	1	2	3	4	5		1	2	3	
4) learn together with colleagues	1	2	3	4	5		1	2	3	
5) ensure pupils receive constructive feedback about their work	1	2	3	4	5		1	2	3	
6) actively seek ideas from colleagues in other schools	1	2	3	4	5	[18]	1	2	3	[19]
7) set learning targets for individual pupils	1	2	3	4	5		1	2	3	
8) use ICT data bases to monitor pupil progress	1	2	3	4	5		1	2	3	
9) carry out classroom-based research	1	2	3	4	5		1	2	3	
10) routinely collect, analyse and use data and evidence to inform their practice	1	2	3	4	5		1	2	3	
11) have low expectations of children	1	2	3	4	5	[28]	1	2	3	[29]
12) seek out and use external research that is relevant and practical to inform their work	1	2	3	4	5		1	2	3	
13) have dedicated time for classroom observation	1	2	3	4	5		1	2	3	
14) use university staff for professional learning	1	2	3	4	5		1	2	3	
15) actively seek and use feedback from pupils	1	2	3	4	5		1	2	3	
16) regularly monitor the learning and progress of individual pupils	1	2	3	4	5	[38]	1	2	3	[39]
17) use professional/subject associations for professional learning	1	2	3	4	5		1	2	3	
18) share a common core of educational values	1	2	3	4	5		1	2	3	
19) use the staff room at break times for professional links	1	2	3	4	5	[44]	1	2	3	[45]

Teachers in this school:	SCALE A *How many staff does this apply to ?*						SCALE B *Has this changed in the last two years?*			
	Over 80%	50 to 80%	20 to 49%	Under 20 %	Don't know		Yes : gone up	No change	Yes : gone down	
20) are satisfied with their job	1	2	3	4	5	[46]	1	2	3	[47]
21) use e-learning opportunities	1	2	3	4	5		1	2	3	
22) say their workload is too heavy	1	2	3	4	5		1	2	3	
23) are involved in seeking solutions to problems facing the school	1	2	3	4	5		1	2	3	
24) are members of at least one professional team	1	2	3	4	5		1	2	3	
25) regularly discuss teaching methods	1	2	3	4	5	[56]	1	2	3	[57]
26) share their professional experiences and successes	1	2	3	4	5		1	2	3	
27) experiment and innovate in their work	1	2	3	4	5		1	2	3	
28) receive training in how to work and learn in teams	1	2	3	4	5		1	2	3	
29) have opportunities to take on leadership roles	1	2	3	4	5		1	2	3	
30) see the school as stimulating and professionally challenging	1	2	3	4	5	[66]	1	2	3	[67]
31) routinely share information with parents and the community	1	2	3	4	5		1	2	3	
32) learn from each other	1	2	3	4	5		1	2	3	
33) take responsibility for their own professional learning	1	2	3	4	5		1	2	3	
34) give priority to learning more about pupils' learning	1	2	3	4	5		1	2	3	
35) have dedicated time to be mentored in a new role	1	2	3	4	5	[76]	1	2	3	[77]
36) experience job rotation	1	2	3	4	5		1	2	3	
37) use LEA advisers/support staff for professional learning	1	2	3	4	5		1	2	3	
38) have opportunities for work shadowing	1	2	3	4	5		1	2	3	
39) want to leave the profession	1	2	3	4	5		1	2	3	
40) engage in team teaching	1	2	3	4	5	[86]	1	2	3	[87]
41) learn about their own learning	1	2	3	4	5		1	2	3	
42) use performance management to enhance professional learning	1	2	3	4	5		1	2	3	
43) use professional development profiles/portfolios	1	2	3	4	5		1	2	3	
44) receive financial support from the school for award-bearing courses	1	2	3	4	5		1	2	3	
45) have some protected time for joint planning and development	1	2	3	4	5	[96]	1	2	3	[97]
46) say they experience undue stress in their work	1	2	3	4	5		1	2	3	
47) use private consultants for professional learning	1	2	3	4	5		1	2	3	
48) systematically feed back the outcomes of external courses to colleagues	1	2	3	4	5		1	2	3	
49) give priority to learning more about subject knowledge	1	2	3	4	5	[104]	1	2	3	[105]

Teaching assistants in this school:	SCALE A *How many staff does this apply to ?*						SCALE B *Has this changed in the last two years?*			
	Over 80%	50 to 80%	20 to 49%	Under 20 %	Don't know		Yes : gone up	No change	Yes : gone down	
50) are valued by teachers	1	2	3	4	5	[106]	1	2	3	[107]
51) share responsibility for pupil learning	1	2	3	4	5		1	2	3	
52) have opportunities for professional development	1	2	3	4	5		1	2	3	
53) actively contribute to the school as a professional learning community	1	2	3	4	5		1	2	3	

Non-teaching support staff in this school:	SCALE A *How many staff does this apply to ?*						SCALE B *Has this changed in the last two years?*			
	Over 80%	50 to 80%	20 to 49%	Under 20 %	Don't know		Yes : gone up	No change	Yes : gone down	
54) are valued by teachers	1	2	3	4	5		1	2	3	
55) share responsibility for pupil learning	1	2	3	4	5		1	2	3	
56) have opportunities for professional development	1	2	3	4	5		1	2	3	
57) actively contribute to the school as a professional learning community	1	2	3	4	5	[120]	1	2	3	[121]

Part 2   A Professional Learning Community

The idea of the school as a professional learning community is relatively new and the purpose of this project is to investigate its feasibility and relevance. The provisional, working definition used in this project is:

> *'An effective professional learning community has the capacity to promote and sustain the learning of all professionals and other staff in the school community with the collective purpose of enhancing pupil learning.'*

58) What is your overall assessment of the school's current position in relation to the above working definition?

Overall this school is :   *(please read all categories before ticking <u>one</u> box)*

a mature/established professional learning community …………………………………..   ☐

a developing professional learning community ………………………………………………   ☐

starting the journey to becoming a professional learning community ………………………   ☐

working to re-establish what we had previously achieved as
a professional learning community ………………………………………………………………   ☐

not yet started on becoming a professional learning community …………………………...   ☐   [122]

59) How would you change the working definition? What is your definition?
[123]

60) How useful is the idea of a professional learning community for your school and pupils?
[124]

61) What do you see as the main facilitators to:
[125]

(a) becoming a professional learning community?

(b) sustaining a professional learning community?

62) What do you see as the main barriers to: [126]

(a) becoming a professional learning community?

(b) sustaining a professional learning community?

Part 3   Factual Information about the School

About you

63) Please indicate your position in this school? *(please tick the one which applies)*

Headteacher/Acting Headteacher ...…………………………………………………….. ☐

Deputy/Assistant Headteacher/Acting Deputy/Acting Assistant Headteacher ...……………... ☐

Other   (eg. Member of Senior Management Team) ...………………………………… ☐ 127]

Please specify   _____ [128]

64) Do you manage, co-manage or coordinate Continuing Professional Development in this school?

	Yes	**No**
	☐	☐ [129]

65) Approximately how many years have you worked in this school?   ☐☐ [131]
(e.g. For two years insert 02 in the boxes)

School Facilities

66) How many *sites* does this school operate on?   ☐

67) How many *general staff rooms* exist in this school?   ☐

68) How many *staff/work rooms* exist for *specific departments/sections* in this school?   ☐☐ [135]
(e.g. For five rooms insert 05 in the boxes)

Using Management Information

69) What data are used in your school for school improvement?

	Yes	**No**
Autumn package (including P scales) ……………………………………………	☐	☐
Panda ………………………………………………………………………………..	☐	☐ [137]
OFSTED inspection reports ………………………………………………………..	☐	☐
ALIS/YELLIS/PIPS ………………………………………………………………..	☐	☐
LEA analysis of data ……………………………………………………………....	☐	☐
School based or other attainment data (eg. NFER) …………………………..	☐	☐
Pupil, parent, staff or other questionnaire data …………………………………	☐	☐ [142]
Other ………………………………………………………………………………..	☐	☐

Please specify   _____ [144]

70) Pupil outcome and progress data are regularly reviewed by:

	Yes	**No**
the headteacher …………………………………………………………………..	☐	☐
senior management team ………………………………………………………..	☐	☐
heads of year, heads of a department or key stage team ……………………….	☐	☐ [147]
individual class teachers ………………………………………………………..	☐	☐
support staff …………………………………………………………………..	☐	☐
the governing body ……………………………………………………………..	☐	☐

71) Please explain briefly how the data are used: 151]

Professional Development in this school

72) Professional Development in this school: Yes   No

     the headteacher has participated in an LPSH programme ………………………….. ☐ ☐ [152]

     the headteacher has participated in the Talking Heads on line community ……….. ☐ ☐

     Investors in People accreditation has been achieved ……………………………….. ☐ ☐

     we are working towards *Investors in People* accreditation ………………………….. ☐ ☐

     temporary and supply staff are included in the CPD policy ………………………….. ☐ ☐

     governors actively contribute to the school as a professional learning community .. ☐ ☐

     there is a member (or members) of staff with specific responsibility
for coordinating/managing CPD …………………………………………………………… ☐ ☐ [158]

73) How many hours per week is/are the coordinator(s)/manager(s) allocated for the management of continuing

    professional development?

    (Please indicate the approximate total number of hours to the nearest whole hour. e.g. For three hours insert 03. If not

    applicable, insert zeros in the boxes)

     Total allocated hours per week   …………………………………………………………… ☐☐ [160]

**74) Approximately how many teaching staff have participated in each of the following national initiatives during
the last two years?**
    (For each category insert the number of teachers in the boxes. e.g. For two teachers insert 02. If not applicable, insert zeros)

     Sabbaticals ……………………………………………………………………………… ☐☐

     Best-practice research scholarships ………………………………………………… ☐☐ [164]

     Professional bursaries ………………………………………………………………… ☐☐

     Teachers' international professional development …………………………………… ☐☐

     NPQH ……………………………………………………………………………………… ☐☐

     Early professional development for teachers in second and third year ……………… ☐☐

     Deputy Head training courses ………………………………………………………… ☐☐ [174]

     Other …………………………………………………………………………………… ☐☐

       Please specify _____ [177]

75) How many Advanced Skills Teachers are there in this school?

    (Please indicate the total number of teachers. e.g. For four teachers insert 04. If not applicable, insert zeros in the boxes)

     Total number of Advanced Skills Teachers …………………………………………… ☐☐ [179]

76) What is the budget for staff professional development for the financial year 2001/2002?
                   (please round figures to the nearest pound)

     From the Standards Fund   £ ☐☐☐☐☐ [185]

     Additional allocation from school budget   £ ☐☐☐☐☐ [191]

     Other funding sources   £ ☐☐☐☐☐ [197]

       Please specify these [198]

77) Approximately how many teaching days since September 2001 have been

     covered by supply teachers in total? …………………………………………………… ☐☐☐ [201]

     covered by supply teachers specifically for continuing professional
development purposes? …………………………………………………………………… ☐☐☐ [204]

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Exernal Links

78) Does the school have any formal working links with other schools?   Yes   No

    in a cross-phase cluster/pyramid (eg primary & secondary) group ………………… ☐ ☐ [205]

    in a within-phase network (eg primary only) …………………………………………… ☐ ☐

    in a sixth form consortium …………………………………………………………………… ☐ ☐

    in an Education Action Zone ………………………………………………………………… ☐ ☐

    in an Excellence in Cities initiative ……………………………………………………… ☐ ☐

    as a Training School ………………………………………………………………………… ☐ ☐ [210]

    as part of a NCSL Networked Learning Community ………………………………….. ☐ ☐

    as a Beacon School …………………………………………………………………………… ☐ ☐

    Please specify main areas of expertise _____

[213]

    Specialist school (eg Arts; Technology) …………………………………………….. ☐ ☐

    Please specify _____

[215]

    Other formal working links …………………………………………………………… ☐ ☐

    Please specify _____

[217]

79) Please give any further information that you think may help us to understand the school context.   [218]

80) Please add any further comments that you may have about professional learning communities and [219] **continue on a separate sheet if necessary.**

Thank you for taking the time to complete this questionnaire.
Please return it in the s.a.e. provided to:

EPLC Project, Graduate School of Education, University of Bristol, 8-10 Berkeley Square, Bristol, BS8 1HH.

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Appendix 3.2

Sampling Frame for EPLC questionnaires

The EPLC questionnaire was administered to two distinct school samples agreed by the EPLC steering committee in June 2002 and January 2003:

1st Sample June 2002
- a representative sample of schools in 5 LEAs in different parts of the country (Bath & N.E. Somerset, Birmingham, Cornwall, Hammersmith & Fulham, Newcastle). A total of 630 schools, made up of 43 nursery; 356 primary; 160 secondary; 71 special were sent questionnaires.
- a purposive sample of 150+ schools who were reported to have good CPD programmes/ be mature/established professional learning communities (total of 172 schools, made up of 16 nursery; 77 primary; 65 secondary; 14 special).

2nd Sample January 2003[20]
- A further representative sample of primary and secondary schools in 5+ LEAs in different parts of the country (Derbyshire, Essex, Hampshire, Hull, Lancashire, Leeds, Liverpool, Manchester, Newham, Norfolk, Nottinghamshire, Sheffield, Southwark, S. Gloucestershire, Surrey, Tower Hamlets, Warwickshire,). This consisted of 813 primaries and 686 secondaries.

The total number of schools sent questionnaires and those returned by schools are detailed in the following table. The overall response rate is 17%.

	nursery	primary	secondary	special	total
sent	59	1246	911	85	2301
returned	16	207	158	12	393
response rate	27%	17%	17%	14%	17%

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[20] a 2nd sample was required due to the poor response rate to the first EPLC survey administration - in spite of reminder letters and selected telephone requests to return the questionnaire.

Appendix 3.3

<p align="center">National and EPLC school and pupil sample sizes</p>

	Primary	Secondary
PLASC Schools data	Overall school n: 25617	Overall school n: 25617
All state schools open in 2002	School n:17986 **School n, yr2 pupils:15578** **School n, yr6 pupils:14530**	School n: 3472 **School n, yr9 pupils:3164** **School n, yr11 pupils:3140**
All schools open in 2002 in 54 LEAs	School n: 8575 **School n, yr2 pupils:7317** **School n, yr6 pupils:6760**	School n:1615 **School n, yr9 pupils:1450** **School n, yr11 pupils:1449**
PLASC schools data **EPLC survey sample open in 2002**	*Overall school n:207* *Valid: 206* Missing: 1 (Anonymous) Note: 2 recoded error on dfes id 1 new school with little PLASC data	Overall school n:158 Valid: 157 Missing: 1(Welsh) note: 1 recoded error on dfes id 1 new school with little PLASC data
Pupil n in PLASC/KS match datasets (54 LEA sample)	PLASC Pupil (year 6) 2002 n: 266714 KS2 Pupil 2002 n: 267986 KS1 Pupil 1998 n: 274449 **Matched pupil n:254069**	PLASC pupil (Year 9) 2002 n: 275494 KS3 pupil 2002 n: 277863 KS2 1999 pupil n: 268267 **Matched pupil (Year 9) n: 266385** PLASC pupil (Year 11) 2002 n: 247230 KS4 pupil 2002 n: 248739 KS3 pupil 2000 n: 247089 KS2 pupil 1997 n: 241088 Matched pupil KS4-KS3 n: 234300 **Matched pupil KS4-KS3-KS2 n: 224807**
School n in PLASC/KS match datasets (54 LEA sample)	PLASC School (year 6) 2002 n: 7271 KS2 School 2002 n: 6746 KS1 School 2000 n: 7573 **Matched school n:6744**	PLASC school (Year 9) 2002 n: 1789 KS3 school 2002 n: 1447 KS2 school 1999 n: 6726[21] **Matched school (Year 9) n: 1448** PLASC school (Year 11) 2002n: 1512 KS4 school 2002 n: 1446 KS3 school 2000 n: 1460 KS2 school 1997 n: 6847 **Matched school KS4-KS3 n: 1429** **Matched school KS4-KS3-KS2 n: 1427**
Pupil n in PLASC/KS match datasets (EPLC survey sample)	PLASC pupil (year 6) 2002 n: 6676 KS2 pupil 2002 n: 6731 KS1 pupil 1998 n: 6124 **Matched pupil n:6473**	PLASC pupil (Year 9) 2002 n: 29647 KS3 pupil 2002 n: 29958 KS2 pupil 1999 n: 6074[22] **Matched pupil (Year 9) n: 28833** PLASC pupil (Year 11) 2002 n: 26540 KS4 pupil 2002 n: 26660 KS3 pupil 2000 n: 26263 KS2 pupil 1997 n: 5469[22] **Matched pupil (Year 11) n: 25551**
School n in PLASC/KS match datasets (EPLC survey sample)	PLASC School (year 6) 2002 n: 187 KS2 School 2002 n: 187 KS1 School 1998 n: 182 **Matched school n: 187** Note: KS2 Missing: 20 (17 infant schools; 1 anonymous; 2 other)	PLASC school (Year 9) 2002 n: 154 KS3 school 2002 n: 154 KS2 school 1999 n: 186 **Matched school (Year 9) n: 154** PLASC school (Year 11) 2002 n: 153 KS4 school 2002 n:153 KS3 school 2000 n: 153 KS2 school 1997 n: 186 **Matched school KS4-KS3 n: 153** **Matched school KS4-KS3-KS2 n: 153**

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[21] This is a much larger number as these are primary schools feeding into secondary schools.
[22] This number is very small as it is only identifying those pupils who were in an EPLC school at KS2.

Appendix 3.4

EPLC survey part 1 Items comparison between PLC stage and phase of education

The following tables describe the means and standard deviations of Part 1 EPLC questionnaire responses, where response values are coded as follows: 1 = 0 to 19% staff, 2 = 20 to 49% staff,. 3 = 50 to 79% staff, 4 = 80 to 100% staff. (All other responses are considered missing for the purpose of this analysis). A univariate ANOVA was carried out for each item analysing the relationship between PLC stage and phase of schooling. *=PLC stage factor statistically significant (0.05); +=Phase factor statistically significant (0.05); #=PLC stageXphase interaction statistically significant (0.05).

Note that the sample sizes are as follows:

Stage Phase	Mature		Developing		Starting		Missing Stage	Total
	n	%	n	%	n	%	n	N
Nursery	5	31.3%	8	50%	2	12.5%	1	16
Primary	47	22.7%	123	59.4%	33	15.9%	4	207
Special (primary)	4	100%	0		0		0	4
Total Primary	**56**	**24.7%**	**131**	**57.7%**	**35**	**15.4%**	**5**	**227**
Secondary	22	13.9%	107	67.7%	27	17.1%	2	158
Special (secondary)	4	50%	3	37.5%	1	12.5%	0	8
Total Secondary	**26**	**15.7%**	**110**	**66.3%**	**28**	**16.7%**	**2**	**166**
Total	**82**	**20.9%**	**241**	**61.3%**	**63**	**16.0%**	**7**	**393**

Note: Special schools are deemed to be Secondary for the purpose of this analysis if they have at least one pupil who is 12 or 13 years old. All other special schools have been deemed primary.

		Mature PLC			Developing PLC			Starting PLC			*All EPLC Schools*		
		Mean	Std Dev	Valid N	Mean	Std Dev	Valid N	Mean	Std Dev	Valid N	Mean	Std Dev	Valid N
Q1a: collective responsibility for pupil learning *	Nursery, primary, special	3.95	.23	56	3.80	.45	131	3.30	.98	33	3.77	.56	224
	Secondary, special	3.92	.27	26	3.69	.46	108	3.18	.72	28	3.64	.54	164
Q2a: base their approach to change on the use of good evidence *+	Nursery, primary, special	3.72	.56	54	3.57	.56	129	2.88	.93	33	3.50	.68	219
	Secondary, special	3.50	.65	26	3.13	.62	105	2.69	.88	26	3.11	.71	159
Q3a: create conditions for pupils to feel the confidence to learn *+#	Nursery, primary, special	3.93	.26	56	3.79	.43	131	3.29	.84	34	3.74	.52	225
	Secondary, special	3.92	.27	26	3.40	.56	108	2.96	.69	28	3.40	.61	164
Q4a: learn together with colleagues *+	Nursery, primary, special	3.98	.13	56	3.73	.48	130	3.30	.73	33	3.73	.51	223
	Secondary, special	3.65	.49	26	3.26	.74	109	3.00	.82	28	3.28	.74	165
Q5a: ensure pupils receive constructive feedback about their work *+#	Nursery, primary, special	3.75	.44	56	3.51	.60	131	2.91	.83	34	3.48	.66	225
	Secondary, special	3.15	.61	26	3.16	.69	108	2.89	.79	28	3.11	.69	164
Q6a: actively seek ideas from colleagues in other schools *+	Nursery, primary, special	3.25	.84	56	2.84	.87	128	2.41	1.05	34	2.90	1.02	222
	Secondary, special	2.60	1.00	25	2.29	.79	108	2.11	.89	27	2.31	.84	162
Q7a: set learning targets for individual pupils *	Nursery, primary, special	3.71	.53	56	3.63	.66	131	3.15	1.08	34	3.57	.75	224
	Secondary, special	3.65	.56	26	3.43	.76	108	2.89	.99	28	3.36	.81	164
Q8a: use ICT data bases to monitor pupil progress *+	Nursery, primary, special	2.67	1.22	52	2.49	1.13	131	2.13	1.13	32	2.47	1.16	218
	Secondary, special	3.12	1.03	26	3.19	.94	108	2.70	.99	27	3.11	.98	163
Q9a: carry out classroom-based research *+	Nursery, primary, special	2.08	1.11	53	1.77	.94	124	1.48	.87	29	1.81	1.00	209
	Secondary, special	1.67	.82	24	1.50	.74	103	1.22	.58	27	1.47	.73	156

		Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Q10a: routinely collect, analyse and use data and evidence to inform their practice *+	Nursery, primary, special	3.36	.91	55	3.26	.83	130	2.82	1.04	33	3.23	.90	221
	Secondary, special	3.16	.85	25	2.91	.91	109	2.39	.96	28	2.86	.93	164
Q11a: have low expectations of Children *	Nursery, primary, special	1.04	.27	55	1.05	.28	128	1.47	.83	34	1.11	.44	221
	Secondary, special	1.00	.00	26	1.06	.27	106	1.48	.85	27	1.12	.44	161
Q12a: seek out and use external research that is relevant and practical to inform their work *+	Nursery, primary, special	2.39	1.00	54	2.13	.90	122	1.69	.82	32	2.13	.94	210
	Secondary, special	1.92	.64	25	1.72	.82	100	1.48	.64	27	1.71	.76	154
Q13a: have dedicated time for classroom observation *	Nursery, primary, special	2.95	1.13	55	2.43	1.25	131	1.97	1.19	33	2.48	1.25	222
	Secondary, special	2.54	1.14	26	2.38	1.13	106	1.75	1.00	28	2.28	1.13	162
Q14a: use university staff for professional learning *	Nursery, primary, special	1.74	1.04	53	1.46	.79	119	1.09	.39	32	1.48	.84	207
	Secondary, special	1.46	.78	24	1.29	.64	98	1.16	.47	25	1.30	.64	149
Q15a: Actively seek and use feedback from pupils *+	Nursery, primary, special	3.02	.99	55	2.80	.87	127	2.15	1.08	34	2.75	.98	219
	Secondary, special	2.28	.84	25	2.33	.96	107	1.44	.70	27	2.17	.95	161
Q16a: regularly monitor the learning and progress of individual pupils *+	Nursery, primary, special	3.91	.29	56	3.65	.63	131	3.18	.88	33	3.65	.65	224
	Secondary, special	3.62	.50	26	3.47	.69	109	2.93	.77	28	3.39	.70	165
Q17a: use professional/subject associations for professional learning *	Nursery, primary, special	2.52	1.11	54	2.34	1.01	117	1.83	.99	30	2.31	1.05	204
	Secondary, special	2.17	.92	24	2.04	.84	89	1.88	.67	25	2.04	.82	140
Q18a: share a common core of educational values *+	Nursery, primary, special	3.93	.26	56	3.72	.50	131	3.26	.79	34	3.71	.55	225
	Secondary, special	3.68	.48	25	3.37	.59	107	2.89	.80	27	3.34	.65	161
Q19a: use the staff room at break times for professional links *+	Nursery, primary, special	3.39	.96	54	3.11	1.02	126	2.79	.99	33	3.12	1.02	216
	Secondary, special	2.76	1.13	25	2.65	.97	97	2.07	1.12	28	2.55	1.05	152
Q20a: are satisfied with their job *	Nursery, primary, special	3.40	.72	53	3.06	.78	121	2.87	.76	31	3.13	.78	208
	Secondary, special	3.43	1.38	23	3.14	.83	96	2.64	.78	28	3.09	.94	149
Q21a: use e-learning opportunities *	Nursery, primary, special	2.57	.98	54	2.49	1.00	118	1.84	1.02	32	2.41	1.03	206
	Secondary, special	2.30	.82	23	2.41	.94	98	2.08	1.62	26	2.34	1.07	149
Q22a: say their workload is too heavy	Nursery, primary, special	3.33	1.00	55	3.35	.91	128	3.35	.92	34	3.35	.93	221
	Secondary, special	3.42	.76	26	3.36	.86	103	3.32	.98	28	3.35	.87	159
Q23a: are involved in seeking solutions to problems facing the school +	Nursery, primary, special	3.45	.77	55	3.25	.88	129	3.15	.86	34	3.29	.85	222
	Secondary, special	2.85	.78	26	2.89	.78	107	2.50	.92	28	2.82	.82	163
Q24a: are members of at least one professional team +	Nursery, primary, special	3.73	.66	52	3.63	.72	120	3.45	.85	31	3.64	.72	206
	Secondary, special	3.92	.41	24	3.77	.59	107	3.81	.48	27	3.80	.55	160
Q25a: regularly discuss teaching methods *	Nursery, primary, special	3.66	.58	56	3.58	.62	130	2.91	1.03	34	3.49	.75	224
	Secondary, special	3.62	.57	26	3.22	.74	107	2.86	.76	28	3.23	.75	163
Q26a: share their professional experiences and successes *+	Nursery, primary, special	3.79	.46	56	3.62	.53	130	3.06	.95	34	3.58	.64	224
	Secondary, special	3.50	.76	26	3.14	.71	106	2.89	.70	27	3.16	.73	161
Q27a: experiment and innovate in their work *+	Nursery, primary, special	3.31	.77	55	3.04	.73	130	2.30	1.10	33	3.00	.86	221
	Secondary, special	3.08	.69	26	2.60	.74	107	2.00	.89	26	2.59	.82	161
Q28a: receive training in how to work and learn in teams *	Nursery, primary, special	2.69	1.26	55	2.61	1.20	122	2.32	1.27	34	2.58	1.23	213
	Secondary, special	2.85	1.12	26	2.32	1.04	103	1.79	.88	28	2.31	1.06	159
Q29a: have opportunities to take on leadership roles *+	Nursery, primary, special	3.52	.76	56	3.24	.79	129	3.21	.84	34	3.31	.80	223
	Secondary, special	2.85	.83	26	2.57	.80	109	2.39	.74	28	2.59	.80	165
Q30a: see the school as stimulating and professionally challenging *+	Nursery, primary, special	3.57	.63	54	3.32	.73	124	2.62	1.08	29	3.29	.82	209
	Secondary, special	3.32	.75	25	2.88	.69	104	2.52	.77	25	2.90	.74	156

Question	Group	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Q31a: routinely share information with parents and the community *+	Nursery, primary, special	3.84	.42	55	3.64	.66	130	3.41	.82	34	3.66	.64	223
	Secondary, special	3.58	.64	26	3.33	.89	109	2.85	1.06	27	3.30	.91	164
Q32a: learn from each other *+	Nursery, primary, special	3.95	.23	56	3.64	.58	130	3.18	.81	33	3.65	.60	223
	Secondary, special	3.65	.63	26	3.34	.67	108	2.68	.77	28	3.29	.74	164
Q33a: take responsibility for their own professional learning *#	Nursery, primary, special	3.70	.57	56	3.26	.77	130	2.42	.90	33	3.24	.85	222
	Secondary, special	3.36	.64	25	3.00	.76	108	2.79	.88	28	3.01	.78	163
Q34a: give priority to learning more about pupils' learning *+	Nursery, primary, special	3.26	.89	54	3.00	.86	129	2.30	.92	33	2.96	.92	218
	Secondary, special	2.84	.75	25	2.51	.84	106	2.15	.78	26	2.50	.83	159
Q35a: have dedicated time to be mentored in a new role *+	Nursery, primary, special	2.60	1.32	53	2.17	1.10	114	1.94	.95	32	2.24	1.17	203
	Secondary, special	2.08	1.18	24	1.81	.95	104	1.44	.75	27	1.79	.96	157
Q36a: experience job rotation *+#	Nursery, primary, special	2.24	1.23	55	1.65	.94	125	1.81	1.15	32	1.83	1.07	214
	Secondary, special	1.15	.37	26	1.14	.35	104	1.07	.26	28	1.13	.34	160
Q37a: use LEA advisers/support staff for professional learning *+	Nursery, primary, special	3.27	1.00	56	3.11	.99	129	3.03	1.09	34	3.14	1.01	221
	Secondary, special	2.85	1.01	26	2.31	.96	109	2.33	.73	27	2.41	.95	164
Q38a: have opportunities for work shadowing *+	Nursery, primary, special	2.02	1.20	53	1.69	.97	127	1.55	.87	33	1.75	1.03	215
	Secondary, special	1.92	1.02	26	1.30	.63	102	1.07	.27	27	1.36	.71	157
Q39a: want to leave the profession	Nursery, primary, special	1.39	.71	46	1.41	.73	92	1.29	.55	24	1.43	.91	164
	Secondary, special	1.25	.55	20	1.15	.44	67	1.43	.60	21	1.22	.50	110
Q40a: engage in team teaching	Nursery, primary, special	2.05	1.21	55	1.94	1.06	126	1.76	.89	34	1.94	1.08	217
	Secondary, special	1.96	1.08	26	1.66	1.10	104	1.36	.68	28	1.67	1.04	160
Q41a: learn about their own learning *	Nursery, primary, special	2.82	1.15	49	2.33	1.03	117	1.81	.97	32	2.38	1.10	199
	Secondary, special	2.39	1.20	23	2.26	.96	89	1.64	.70	25	2.17	.98	139
Q42a: use performance management to enhance professional learning *	Nursery, primary, special	3.59	.80	56	3.31	.90	129	2.61	1.05	31	3.29	.94	218
	Secondary, special	3.52	.77	25	3.14	.84	106	2.85	.99	27	3.16	.87	160
Q43a: use professional development profiles/portfolios *+	Nursery, primary, special	3.13	1.16	56	2.74	1.18	124	2.45	1.27	29	2.81	1.20	210
	Secondary, special	2.69	1.19	26	2.45	1.12	103	2.11	1.12	27	2.41	1.14	158
Q44a: receive financial support from the school for award-bearing courses *+	Nursery, primary, special	2.24	1.53	55	1.92	1.15	118	1.53	1.02	32	1.95	1.26	207
	Secondary, special	1.83	1.09	24	1.37	.80	101	1.26	.71	27	1.42	.85	153
Q45a: have some protected time for joint planning and development *	Nursery, primary, special	2.80	1.34	55	2.55	1.36	128	2.18	1.38	33	2.57	1.37	218
	Secondary, special	2.96	1.04	26	2.37	1.17	108	1.67	1.00	27	2.36	1.18	163
Q46a: say they experience undue stress in their work	Nursery, primary, special	2.25	1.21	53	2.25	1.20	120	2.24	1.09	29	2.25	1.19	205
	Secondary, special	1.91	.95	23	2.11	1.02	93	2.56	1.09	27	2.16	1.03	144
Q47a: use private consultants for professional learning *+	Nursery, primary, special	1.79	1.10	47	1.41	.76	91	1.29	.86	24	1.50	.90	163
	Secondary, special	2.48	1.26	25	1.63	1.00	76	1.52	.68	21	1.78	1.06	124
Q48a: systematically feed back the outcomes of external courses to colleagues +	Nursery, primary, special	3.29	.89	56	3.19	.99	130	2.85	1.06	33	3.16	.99	221
	Secondary, special	2.69	.97	26	2.82	.98	109	2.61	.99	28	2.77	.98	165
Q49a: give priority to learning more about subject knowledge *	Nursery, primary, special	2.88	1.04	52	2.67	.96	126	2.09	1.09	32	2.64	1.02	212
	Secondary, special	2.67	.96	24	2.64	.90	99	2.33	.92	27	2.59	.91	152
Q50a: TA are valued by teachers *+	Nursery, primary, special	3.98	.13	56	3.95	.21	131	3.82	.39	34	3.94	.23	224
	Secondary, special	3.77	.59	26	3.61	.61	108	3.26	.81	27	3.58	.66	163
Q51a: TA share responsibility for pupil learning *+#	Nursery, primary, special	3.79	.53	56	3.69	.61	131	3.50	.62	34	3.69	.59	224
	Secondary, special	3.50	.86	26	3.02	.99	107	2.52	1.12	27	3.02	1.03	162
Q52a: TA have opportunities for professional development *	Nursery, primary, special	3.95	.23	56	3.81	.51	131	3.47	.83	34	3.79	.54	224
	Secondary, special	3.92	.39	26	3.77	.52	108	3.61	.57	28	3.77	.51	164

Q53a: TA actively contribute to the school as a professional learning community *+	Nursery, primary, special	3.91	.29	56	3.69	.59	131	3.41	.89	34	3.71	.61	224
	Secondary, special	3.54	.76	26	3.43	.83	108	2.68	1.12	28	3.32	.92	164
Q54a: NTSS are valued by teachers +	Nursery, primary, special	3.88	.38	56	3.88	.35	128	3.82	.39	34	3.86	.37	221
	Secondary, special	3.81	.40	26	3.70	.57	109	3.59	.75	27	3.70	.58	164
Q55a: NTSS share responsibility for pupil learning *+	Nursery, primary, special	3.14	1.18	56	3.02	1.09	127	2.65	1.30	34	3.01	1.15	220
	Secondary, special	2.60	1.04	25	2.40	1.19	104	1.65	1.02	26	2.33	1.18	157
Q56a: NTSS have opportunities for professional development *	Nursery, primary, special	3.73	.56	56	3.55	.86	126	3.24	.99	34	3.55	.82	219
	Secondary, special	3.73	.67	26	3.66	.67	108	3.14	.93	28	3.59	.74	164
Q57a: NTSS actively contribute to the school as a professional learning community *	Nursery, primary, special	3.66	.75	56	3.34	.91	128	3.09	1.03	34	3.38	.90	221
	Secondary, special	3.24	.93	25	3.20	.96	108	2.23	1.18	26	3.06	1.05	161

Appendix 3.5

EPLC survey part 3 items comparison between PLC stage and phase of education

The following tables describe the means and standard deviations of Part 3 EPLC questionnaire responses. Questions have a variety of responses. Questions requiring a yes / no answer are coded 0(No), 1(Yes), and the mean response therefore indicates the percentage of respondents answering Yes. Where questions ask for a range of possible activities, the number of positive responses has been summed (as with Q69) and the maximum value is indicated in column 1. Some questions have continuous, numeric responses, such as budget and numbers of teaching staff. A univariate ANOVA was carried out for each item analysing the relationship between PLC stage and phase of schooling. *=PLC stage factor statistically significant (0.05); +=Phase factor statistically significant (0.05); #=PLC stageXphase interaction statistically significant (0.05).

Note that the sample sizes are as follows:

Stage / Phase	Mature		Developing		Starting		Missing Stage	Total
	n	%	n	%	n	%	n	N
Nursery	5	31.3%	8	50%	2	12.5%	1	16
Primary	47	22.7%	123	59.4%	33	15.9%	4	207
Special (primary)	4	100%	0		0		0	4
Total Primary	**56**	**24.7%**	**131**	**57.7%**	**35**	**15.4%**	**5**	**227**
Secondary	22	13.9%	107	67.7%	27	17.1%	2	158
Special (secondary)	4	50%	3	37.5%	1	12.5%	0	8
Total Secondary	**26**	**15.7%**	**110**	**66.3%**	**28**	**16.7%**	**2**	**166**
Total	**82**	**20.9%**	**241**	**61.3%**	**63**	**16.0%**	**7**	**393**

Note: Special schools are deemed to be Secondary for the purpose of this analysis if they have at least one pupil who is 12 or 13 years old. All other special schools have been deemed primary.

		Mature PLC			Developing PLC			Starting PLC			Total		
		Mean	Std Deviation	Valid N	Mean	Std Deviation	Valid N	Mean	Std Deviation	Valid N	Mean	Std Deviation	Valid N
Q66: No. of sites school operates on	Nursery, primary, special	1.20	.98	56	1.05	.34	131	1.03	.17	35	1.09	.56	222
	Secondary, special	1.12	.43	26	1.19	.48	110	1.14	.76	28	1.17	.53	164
Q67: No. of general staff rooms +	Nursery, primary, special	1.20	1.10	56	1.07	.50	131	1.14	1.42	35	1.11	.87	222
	Secondary, special	1.54	.81	26	1.23	.50	110	1.29	1.61	28	1.29	.84	164
Q68: No. of departmental staff/work rooms +	Nursery, primary, special	1.20	2.26	56	1.23	2.24	131	1.26	2.65	35	1.23	2.30	222
	Secondary, special	6.85	4.37	26	7.31	7.24	110	8.79	10.57	28	7.49	7.54	164
Q69: sum of management information *+ (Max=8)	Nursery, primary, special	6.13	1.19	55	6.13	.99	126	5.65	1.43	34	6.06	1.13	215
	Secondary, special	6.44	.92	25	6.47	.99	108	6.04	.79	28	6.39	.96	161

		Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
Q70: sum of pupil outcome and progress data *+ (Max=6)	Nursery, primary, special	4.57	1.16	56	4.61	1.00	126	3.76	1.35	34	4.47	1.14	216
	Secondary, special	5.12	.88	25	5.02	.90	107	4.64	1.03	28	4.97	.93	160
Q72(i): The headteacher has participated in an LPSH programme +	Nursery, primary, special	.46	.50	54	.48	.50	124	.38	.49	32	.46	.50	210
	Secondary, special	.65	.49	23	.51	.50	98	.56	.51	27	.54	.50	148
Q72(ii): The headteacher has participated in the Talking Heads on line community	Nursery, primary, special	.37	.49	51	.37	.48	119	.53	.51	32	.40	.49	202
	Secondary, special	.38	.50	21	.46	.50	94	.33	.48	27	.42	.50	142
Q72(iii): Investors in People accreditation has been achieved *+	Nursery, primary, special	.60	.49	53	.36	.48	128	.29	.46	31	.41	.49	212
	Secondary, special	.79	.41	24	.65	.48	105	.63	.49	27	.67	.47	156
Q72(iv): The school is working towards Investors in People accreditation +#	Nursery, primary, special	.13	.34	32	.34	.48	92	.13	.34	24	.26	.44	148
	Secondary, special	.25	.45	12	.32	.47	53	.53	.52	15	.35	.48	80
Q72(v): Temporary and supply staff are included in the CPD policy *#	Nursery, primary, special	.93	.26	54	.79	.41	128	.73	.45	33	.81	.39	215
	Secondary, special	.77	.43	26	.89	.31	103	.67	.48	27	.83	.37	156
Q72(vi): Governors actively contribute to the school as a PLC *	Nursery, primary, special	.88	.33	51	.86	.35	126	.63	.49	32	.83	.38	209
	Secondary, special	.92	.28	25	.75	.43	102	.54	.51	26	.75	.44	153
Q72(vii): a member/members of staff has/have specific responsibility for coordinating/managing CPD +	Nursery, primary, special	.93	.26	56	.90	.30	129	.88	.33	34	.90	.30	219
	Secondary, special	.96	.20	26	1.00	.00	109	.96	.19	28	.99	.11	163
Q73: Total number of hours per week allocated to the manager/coordinator of CPD +	Nursery, primary, special	1.09	1.92	56	1.11	2.51	131	.46	1.15	35	1.00	2.21	222
	Secondary, special	4.81	9.26	26	2.64	5.04	110	3.18	3.61	28	3.07	5.74	164
Q74(i): Number of teaching staff involved in the last two years in sabbaticals +	Nursery, primary, special	.15	.51	46	.16	.74	107	.00	.00	30	.13	.62	183
	Secondary, special	.68	1.84	22	.69	2.50	100	.35	.89	26	.63	2.20	148
Q74(ii): Number of teaching staff involved in the last two years in Best-practice research scholarships +	Nursery, primary, special	.27	1.01	45	.09	.45	106	.07	.37	30	.13	.63	181
	Secondary, special	1.08	1.69	24	.97	3.50	97	4.00	17.93	25	1.51	7.94	146
Q74(iii): Number of teaching staff involved in the last two years in professional bursaries +	Nursery, primary, special	.44	2.25	45	.33	1.63	108	.17	.53	30	.33	1.69	183
	Secondary, special	4.08	8.48	24	1.92	5.09	97	1.46	4.04	26	2.19	5.65	147
Q74(iv): Number of teaching staff involved in the last two years in Teachers' international professional development	Nursery, primary, special	.92	1.79	50	.86	3.54	108	.23	.67	31	.77	2.85	189
	Secondary, special	1.17	1.43	24	2.06	5.85	100	1.20	4.09	25	1.77	5.11	149
Q74(v): Number of teaching staff involved in the last two years in NPQH +	Nursery, primary, special	.47	.67	53	.62	1.10	113	.63	.67	30	.58	.94	196
	Secondary, special	2.36	2.94	25	2.06	3.04	104	2.15	3.81	27	2.12	3.15	156
Q74(vi): Number of teaching staff involved in the last two years in Early PD for teachers in their 2nd and 3rd year +	Nursery, primary, special	.52	.89	46	.42	1.04	108	.53	1.11	30	.46	1.01	184
	Secondary, special	3.88	4.61	24	3.67	6.02	91	1.70	2.53	23	3.38	5.38	138
Q74(vii): Number of teaching staff involved in the last two years in Deputy Head training courses	Nursery, primary, special	1.20	2.76	51	.85	1.10	113	.63	.85	30	.91	1.68	194
	Secondary, special	1.48	1.50	25	1.96	6.11	100	1.38	1.77	26	1.78	5.06	151
Q74(viii): Number of teaching staff involved in the last two years in other national initiatives +	Nursery, primary, special	3.72	5.46	25	1.47	3.25	64	.42	.77	19	1.81	3.78	108
	Secondary, special	3.89	5.71	9	9.98	17.37	41	3.90	7.71	10	8.05	15.04	60
Q75: Total number of Advanced Skills Teachers +#	Nursery, primary, special	.11	.47	53	.09	.33	128	.26	1.04	35	.12	.54	216
	Secondary, special	.56	1.00	25	.81	1.15	108	.36	1.03	28	.69	1.11	161
Q76: Sum of budget for Staff Professional Development from Standards fund, School funding and Other sources (No Max)	Nursery, primary, special	14,759.50	6,941.30	6	20,351.04	22,325.85	24	12,605.00	12,419.77	4	18,453.00	19,441.42	34
	Secondary, special	41,672.33	15,953.32	3	36,135.91	37,066.68	33	35,836.60	54,690.53	15	36,373.55	41,578.90	51
Q77(i): Total number of teaching days since September 2001 covered by supply teachers +	Nursery, primary, special	59.72	53.26	39	88.80	77.61	96	93.70	98.37	27	82.62	77.18	162
	Secondary, special	346.36	234.90	14	308.10	223.26	58	372.00	342.01	15	325.28	247.13	87

Q77(ii): Total number of teaching days since September 2001 covered by supply teachers specifically for CPD purposes +	Nursery, primary, special	41.41	41.14	41	52.81	51.18	98	40.13	41.74	30	47.79	47.44	169
	Secondary, special	152.44	144.82	16	116.85	143.54	55	155.25	256.91	16	130.46	168.61	87
Q78(i): The school is in a cross-phase cluster/pyramid group	Nursery, primary, special	.81	.40	52	.83	.38	127	.94	.25	32	.84	.37	211
	Secondary, special	.85	.37	26	.85	.36	107	.85	.36	27	.85	.36	160
Q78(ii): The school is in a within-phase network +	Nursery, primary, special	.83	.38	52	.72	.45	124	.68	.48	28	.74	.44	204
	Secondary, special	.55	.51	20	.64	.48	78	.53	.51	19	.61	.49	117
Q78(iii): The school is in a Sixth Form consortium +	Nursery, primary, special	.03	.17	35	.02	.14	98	.00	.00	24	.02	.14	157
	Secondary, special	.52	.51	23	.41	.49	91	.32	.48	22	.41	.49	136
Q78(iv): The school is in an Education Action Zone	Nursery, primary, special	.18	.38	40	.10	.30	100	.12	.33	26	.12	.33	166
	Secondary, special	.15	.37	20	.11	.31	84	.26	.45	23	.14	.35	127
Q78(v): The school is in an Excellence in Cities initiative +	Nursery, primary, special	.31	.47	45	.22	.41	102	.20	.41	25	.24	.43	172
	Secondary, special	.50	.51	22	.32	.47	91	.33	.48	24	.35	.48	137
Q78(vi): The school is a Training school	Nursery, primary, special	.24	.43	38	.19	.39	105	.20	.41	25	.20	.40	168
	Secondary, special	.41	.50	22	.33	.47	89	.24	.44	21	.33	.47	132
Q78(vii): The school is part of the NCSL Networked Learning Communities +	Nursery, primary, special	.13	.34	39	.07	.26	97	.04	.20	25	.08	.27	161
	Secondary, special	.22	.43	18	.16	.37	79	.32	.48	22	.20	.40	119
Q78(viii): The school is a Beacon school	Nursery, primary, special	.20	.40	45	.10	.30	101	.04	.20	25	.12	.32	171
	Secondary, special	.29	.46	21	.18	.38	80	.14	.36	21	.19	.39	122
Q78(ix): The school is a Specialist school +	Nursery, primary, special	.08	.28	36	.09	.29	96	.09	.29	22	.09	.29	154
	Secondary, special	.53	.51	19	.46	.50	82	.33	.48	21	.45	.50	122
Q78 (x): The school has other formal working links	Nursery, primary, special	.33	.48	27	.22	.42	85	.14	.36	21	.23	.42	133
	Secondary, special	.69	.48	13	.63	.49	62	.50	.51	18	.61	.49	93

Appendix 4.1

Context of the 16 case study sites in 2002/3

Nursery phase	1 - Crossroads	2 - Rockside	3 - Chestnut
stage (survey)	**early starter**	**developer**	**mature**
age range	3-5 nursery, 0-3 Surestart unit	3 - 5 nursery (0-5 family unit from September 2003)	3-5
no. on roll	80 half time in nursery, 10 half time or less in Surestart unit	40 full time (from September 2003 family unit 2x12 two day places)	100
region, LEA type	Southwest, county	Southwest, unitary authority	Southeast, borough
governance	community	community	community
location	small town, ex-mining area with high unemployment and social deprivation, in an Education Action Zone and Surestart area	inner city, ground floor of block of flats in an estate, in an Education Action Zone and Surestart area	large conurbation
free school meals	N/A (all pupils half time, mainly working class families)	63%	30%
ethnic minority group pupils	2%	68%	50%
SEN	high?	24%	15%
site	1970s purpose-built, with a temporary classroom for the Sure Start unit. The outside play area is designed to provide learning activities, surrounded by a high fence. Extensive renovation of the main building in 2003/4	1960s purpose-built nursery on the ground floor of a four and five storey block of flats, little open space or play areas outside	Building dates back to 1580 artisan's cottage. Urban area, smart housing belies the mixed intake
internal layout	two semi-open plan interconnecting nursery classrooms, with a library room. Curriculum activities for wet and dry activities are set up in the classrooms and children move between them. Another room is used for children making the transition from the Sure Start building to the nursery. Plus an audiology room where a peripatetic teacher provides support for babies with hearing impairment. There is a staffroom and the headteacher has a small office	one large open plan classroom leading onto a small tarmac area, part-covered for outside play in the rain, and a grassed garden space. A small room off the classroom is used for group work and displays and a windowless space is used for painting activities. (Additional space has been converted into a classroom area for the family support unit.)	Opened on this site in 1928. Bohemian ethos of outdoor play. Three key environments - classroom, outdoor area and outside local environment. Outdoor area includes different 'niches' based around garden area. Single, large classroom, small reading and computer area attached, opens out to the outdoor learning area. Staff room, headteacher's office, meeting room, reading group room and small room for special needs work upstairs
teacher and learning support staff characteristics	5 teaching staff, 6 LSAs, 3 NNEBs. All female. High turnover, headteacher appointed January 2003	2 teaching staff, 2 NNEBs, 1 secretary (family unit added in September 2003 with unit manager, deputy, 2 nursery officers). All female. Low turnover, headteacher in post for 12 years	3 teaching staff, 3 nursery officers. All female. Moderate turnover, headteacher in post for 8 years
management structures	headteacher in the process of establishing an SMT - headteacher, two most senior teacher, bursar	SMT - headteacher, lead teacher (from September 2003 head of family unit)	headteacher is also CPD coordinator and SENCO
external initiatives	Education Action Zone, Surestart, Early Excellence Centre	Education Action Zone, Surestart, IIP	cross-phase cluster, Excellence in Cities, multicultural initiative, IIP
OFSTED inspection	2000 - very good	2002 - good	2001 - very good

Primary phase	4 - Highdown	5 - Castlerise	6 - Churchley	7 - Westroad	8 - Minster
stage (survey)	**early Starter**	**developer**	**mature**	**early starter**	**developer**
age range	3-11	4-11	4-11	4-11	4-11
no. on roll	265, 47 half time nursery	110	112	200	110
region, LEA type	Midlands, borough	Northeast, county	Southwest, county	Southwest, unitary authority	Southwest, county
governance	county	county	C of E (VC)	county	C of E (VC)

Primary phase	4 - Highdown	5 - Castlerise	6 - Churchley	7 - Westroad	8 - Minster
Location	outlying area of large conurbation with 1960s council houses, high unemployment, in an Education Action Zone	urban area, 1950s estate, with an ageing population, high unemployment, in an Education Action Zone	rural village, 15 miles from a large city	expanding rural commuter village near to a small city, some new housing in the village	rural village, 2 miles from a town in the neighbouring LEA, in an area of scattered population
free school meals	48%	70%	3%	7%	1%
ethnic minority group pupils	3%	0%	8%	1%	0%
SEN	30%	10%	12%	11%	8%
site	1950s buildings, two storey junior wing, single storey infant plus nursery wing, large school hall and dining hall, adequate playground and playing field, fenced nursery playground	1950s good grounds and buildings, two storey junior wing, single storey infant plus nursery wing, large school hall and dining hall, adequate playground and playing field, fenced nursery playground	fairly new 1980s accommodation in a residential area in the village away from the main road. There is a spacious outside play area	1960s two storey building in quite large grounds, house for resident caretaker	rehoused in brand new buildings on a new site in 1994, an additional class built on in 2003 (by then surplus because of falling rolls), playing field
internal layout	corridors and 8 separate reasonably spacious classrooms, some interconnecting doors. There is a large staffroom, an office and headteacher's office	spacious and more than enough classrooms (falling rolls), large hall which doubles as gym plus dining room. Pleasant staff-room. Headteacher's room with a room off for small meetings. The secretary controls entrance for security.	4 classrooms adjoin a main hall. The headteacher's office is located between the reception office and the small staffroom	7 classrooms on two floors, corridor spaces used for shared work areas and mini-computer labs, large hall, staffroom, main office opening onto the headteacher's office	4 classrooms in the 1994 buildings, paired with connecting doors, served by a corridor, a hall, computer room, library, fifth classroom used for art and a local playgroup, small staffroom, small office, headteacher's office
teacher and learning support staff characteristics	14 teaching staff, 9 LSAs, NNEB. Female except for KS2 coordinator. Moderate turnover, headteacher appointed in 2002	9 teaching staff, 4 LSAs, 2 NNEBs. Female except for two teachers. High turnover due to falling rolls and closure, headteacher in post for 15 years	5 teaching staff, 4 LSAs. All female. Low turnover, headteacher in post for 5 years (male headteacher appointed January 2004)	9 teaching staff, 4 LSAs. All female except for male deputy (replaced by female in 2003, 2 male teachers appointed). Moderate turnover, headteacher appointed in 2001	
management structure	SMT - headteacher, deputy, key stage, KS1-2 links, SEN coordinators. All teachers have subject responsibility	headteacher and acting deputy (split and two-year junior classes due to falling rolls)	headteacher, key stage coordinators. All teachers have subject responsibility	Headteacher, deputy (who is KS1 coordinator) and KS2 coordinator form SMT, all teachers have subject responsibility, deputy holds regular meetings with LSAs	headteacher is sole formal leader. All teachers have responsibility for two or more subjects
external initiatives	Education Action Zone	Education Action Zone, cluster, IIP	cluster includes thinking skills initiative, IIP	cluster including a secondary school	cluster, IIP
OFSTED inspection	2003 - good and improving	1998 - satisfactory?	2003 - satisfactory	2003 - good (2001 - serious weaknesses)	2001 - Satisfactory

Secondary phase	9 - Poplar	10 - Southedge	11 - Princeland	12 - Kingsby	13 - Smeatham
stage (survey)	**early starter**	**developer**	**mature**	**developer**	**developer**
age range	11-16	11-18	13-18	11-18	11-18 (specialist school, technology)
no. on roll	550	650	1040	1300	1300
region, LEA type	Midlands, borough	Southwest, county	Northeast, county	East, county	Midlands, borough
governance	county	county	county	county	county

Secondary phase	9 - Poplar	10 - Southedge	11 - Princeland	12 - Kingsby	13 - Smeatham
location	urban	rural, in a village 20 miles from the nearest town, in an area of scattered population	rural, along a previously industrialised valley	urban	urban, in an area of terraced housing and social deprivation
free school meals	64%	9%	9%	15%	60%
ethnic minority group pupils	98%	1%	>1%	1%	98%
SEN	39%	18%	8%	14%	17%
site	school opened in the 1980s on two sites, merged into one in mid 1990s. School on three floors. Fenced, hard surface football pitch outside. City Learning Centre adjacent to the car park	1960s low rise buildings, mostly single storey, corridors and classrooms in subject blocks, ample playing fields, community indoor swimming pool, new drama and music block being built, large coach park as most pupils are bussed in	1960s two-storey buildings in poor condition, cramped classroom accommodation, wide corridors and stairs, large playing fields with floodlit sports pitch, garden area, old and recently constructed temporary classrooms	school built late 1930s but recent additions of sports block as a result of specialist school status, and vocational block. 11 staff workrooms. Community wing, leased out but also where meetings are held	split site school, with a 15 minute walk between the sites. The lower school is in a Victorian building, the upper school in 1970s accommodation. The outside area has been refurbished using Lottery money. There is an astroturf pitch but no green fields
internal layout	classrooms off corridors. Departments have adjacent classrooms. 5 staff workrooms. Staffroom upstairs near front of school and assembly hall	traditional classrooms, subjects divided into 8 departments, each with its own base room. There is a large staffroom which is used mostly used by support staff	classrooms off corridors, mostly grouped by subject, each curriculum team has a base room, large staffroom, abundant ICT provision	large building, covering a distance, core departments sited together, one staffroom that cannot seat all staff	some departments have adjacent classrooms, enabling staff to meet at the start of the day. There is a staffroom at each school site
teacher and learning support staff characteristics	37 teaching staff, 13 support staff (most from ethnic minorities). Only 8 women teaching staff, mostly white but increasing proportion from ethnic minorities, low turnover, female headteacher in post since 2001	40 teaching staff, 15 LSAs and technicians. Gender balance roughly equal, low turnover, female headteacher in post for 16 years	61 teaching staff, 8 LSAs and technicians. Gender balance roughly equal but 5/6 of leadership group are male, low turnover, male headteacher in post for 4 years	88 teaching staff, 9 LSAs and about 20 other support staff. Around 50% have had internal promotions in recent years. Roughly equal gender balance, moderate staff turnover, male headteacher in post for 6 years	90 teaching staff, 27 LSAs and technicians. Slightly more female than male staff moderate turnover? Male headteacher in post for 3 years
management structure	SLT - headteacher, 1 deputy, 3 assistant heads, 1 senior teacher. Reorganised in 2002. Department structure with learning support. Significant staffing changes in core departments	SMT - headteacher, deputy, two assistant heads. 8 subject departments, 'ethos team' for pastoral care	leadership group - headteacher, 2 deputies, 3 assistant heads. Combined pastoral and curriculum team, key stage coordinators	SLT – headteacher, 2 deputies, 3 assistant heads. Also a strategic leadership group. Subject departments, learning support team	SMT - headteacher, 2 deputies, 2 assistant heads. Subject departments, learning and behavioural support teams (merged into an inclusion team in 2004)
external initiatives	Excellence in Cities partnership, BPRS, Headlamp, , bidding for Specialist Status - Business and Enterprise, working towards IIP	LEA's diversity pathfinder, assistant head took NPQH (from summer 2003, Independent-State School Partnership, IIP)	technology college, beacon school, NCSL networked learning community, IIP, link with local university, leading bid to develop virtual FE college for the community	BPRS, Cross Phase Cluster, sixth form consortium, NPQH and Leading from the Middle, Training School, Specialist status - sports, IIP	Cross Phase Cluster, IIP, 'collegiate' of 5 secondary? schools and a special school, partnership with a local independent school
OFSTED inspection	2001 - improving (1999 serious weaknesses, 1996 special measures)	2001 - satisfactory	2003 - good	1999 - good	2002 - very good

Special phase:	14 - Sildon	15 - Mulberry	16 - Winspery
stage (survey)	early starter	developer	mature
age range	11-19 (severe learning difficulties)	8-18 (boys, emotional and behavioural difficulties)	2-5 years (special educational needs)
no. on roll	130	55	72 half-time
region, LEA type	Northeast, city - unitary authority	South, county (draws on 15 LEAs)	South, county
governance	maintained special school	non-maintained special school	maintained special nursery school
location	urban	rural, in spacious grounds, near a village	urban, in an area of social deprivation
Free school meals	52%	N/A - residential, all LEA funded	N/A (pupils attend for half days only)
ethnic minority group pupils	<2%	low - 11%?	low?
SEN	100%	100%	100%
site	a two storey 1960's/70's building, modified since the school opened on this site in 1999 to meet the needs of the pupils: lifts, buffer pads along corridors, wheelchair ramps, specialist equipment for lifting wheelchair-bound pupils. The school is built around two small courtyards: one has seating areas, the other is a small garden. There is a school swimming pool. The site is shared with a primary school	Opened in 1953 in buildings based around a large late-Victorian house and set in 23 acres of parkland in a rural area. Wide range of facilities and equipment in extensive grounds which include playing fields, motor bike and mountain bike trails, a flood-lit hard court and fishing ponds. Residential accommodation in the main building is 'of very good quality' (OFSTED inspection report).	Single storey 1950s building. Outside there is a play area (In September 2003 the school moved to another school's site for a year while the old school is rebuilt. The temporary site is more cramped than the old school and some parts of the building are shared with another nursery school)
internal layout	classrooms open off the main corridors. There is a large dining room, a hall with a stage, and a computer lab. There are few open-plan areas.Class sizes are generally small	Normal classrooms but small classes and high adult: pupil ratios give staff many opportunities to work alongside each other. Residential accommodation on site	accommodation is cramped: three classrooms (for 4 classes) each equipped for different uses (classes move between classrooms on different days and one class goes out on the bus each week). There is a small staffroom which doubles as a case conference room. The speech therapists operate in very cramped spaces, one in a large cupboard, the other in a corridor. The headteacher has an office which also houses some resources. Temporary accommodation is more cramped than the old school.
teacher and learning support staff characteristics	22 teaching and 22 learning support staff including SNAs. A small majority of staff are female, low turnover, male headteacher in post for 4 years since the school opened	13 teaching, 10 learning support, 15 care staff. A small minority of staff are female but the headteacher and deputies are male, moderate turnover, headteacher in post for 4 years	5 teaching and 15 learning support comprising LSAs and NNEBs 35 outreach workers. All female, lowturnover, headteacher in post for 18 years
management structure	leadership group - headteacher, deputy, assistant head, 2 senior SNAs, small subject departments, pastoral tutor groups	principal and two deputies (SMT/SLT?), junior department (8-12), main school (12-16), extended education unit (16-19)	headteacher and deputy, teaching team of one teacher and 2 LSAs for each class, each teacher has cross-nursery coordinating responsibility (eg for ICT)
external initiatives	Educational Action Zone, IIP, headteacher led the development of a link with an Australian special school	links with secondary schools (since 2004 working towards IIP status)	beacon school, Early Excellence Centre, outreach initiatives, headteacher involved in several networks, IIP
OFSTED inspection	2001 - very good	2000 - good	1998 - very good

Appendix 4.2

EPLC Project: Research Questions for the Case Studies

<u>**Baseline Data**</u>

Membership of PLCs

RQ1: At any time, what is the membership of the PLC connected with each case study school?

RQ2: Which categories of PLC member are at the core of each PLC and which categories are more peripheral?

- internal professionals (and para-professionals)
- internal non-professionals
- external professionals
- external non-professionals

RQ3: To what extent is there a single PLC, or a set of sub-PLCs within an over-arching constellation constituting the PLC, in each case study school?

RQ4: If there are sub-PLCs within a PLC, how are they related to each other?

Identifying the characteristics of an EPLC and degrees of PLC effectiveness

RQ5: At any time, to what extent does the PLC (and, if applicable, any sub-PLC) in each case study school embody the characteristics of an effective PLC that have been identified in the research literature?

- shared (educational and leadership and management) values and vision
- collective responsibility for pupils' learning
- reflective professional enquiry (into teaching and leadership and management)
- collaboration (focused on teaching and learning and its leadership and management)
- promotion of group (and organisation-wide) as well as individual learning

RQ6: are there any additional characteristics of EPLCs that may be variably expressed in each case study school?

'Stages of development' and transition between stages over time

RQ7: At any time, to what extent is it feasible to interpret the PLC (and, if applicable, any sub-PLC) in each case study school as lying at a specified developmental stage along a continuum from minimally expressing these combined characteristics (early starter), through partially expressing them (developer), to fully expressing them (mature)?

RQ8: in each case study PLC (and, if applicable, any sub-PLC), to what extent does the expression of each characteristic of an EPLC and their combination vary over time?

RQ9: how may variations in the expression of each characteristic and their combined expression be mapped according to the sequence of developmental stages and the transition between these stages?

Intermediate impact of more or less effective PLC operation

RQ10: At any time, to what extent does the process of PLC (and, if applicable, any sub-PLC) operation in each case study school impact on PLC members in ways that have been identified in the research literature?

- individual teaching-related and leadership and management practice;
- own morale and commitment to working in the school;
- experience of others' leadership and management practice;
- experience of participation in collectivities - groups, school-wide, inter-organisational.

Impact of more or less effective PLC operation on pupils

RQ11: *At any time, to what extent does the process of PLC (and, if applicable, any sub-PLC) operation in each case study school impact on pupils in ways that have been identified in the research literature?*

- attitude towards school and attendance;
- engagement with learning in the classroom;
- learning outcomes.

RQ12: How are the expression of each characteristic of EPLCs, their combined expression, and their variation over time associated with variations in effectiveness of the PLC as evidenced by intermediate impact on PLC members and impact on pupils?

Process of PLC Operation

Consciously promoting the development and sustaining of an EPLC

RQ13: How do headteachers, other senior staff and other supporters consciously promote the development and/or sustaining of an effective process of PLC operation and to what effect?

Provision of CPD and work-based learning opportunities

RQ14: What range of formal and informal CPD opportunities is provided in each case study school, and who receives these opportunities?

RQ15: In what work-based learning opportunities do members of the PLC (and, if applicable, any sub-PLC) in each case study school engage, and who participates in them?

RQ16: How is the provision of formal and informal CPD and work-based learning opportunities managed, and to what effect?

Provision of incidental learning opportunities

RQ17: What range of incidental learning opportunities arise for members of the PLC (and, if applicable, any sub-PLC) in each case study school?

Support with transfer of learning

RQ18: To what extent do professional learning opportunities that are not intrinsic to learners' current job include support with transfer of learning into skilful performance in the normal job setting?

Identifying effective processes of PLC operation

RQ19: To what extent does any intended or incidental individual professional learning take place among members of the PLC (and, if applicable, any sub-PLC) in each case study school as a result of their experience of CPD, work-based and incidental learning opportunities?

RQ20: How does any collective learning come about as a result of the individual or collective experience of CPD, work-based and incidental learning opportunities?

RQ21: To what extent does any learning resulting from the experience of CPD, work-based and incidental learning contribute directly or indirectly to promoting effective pupil learning?

Evaluating the process of PLC operation

RQ22: At any time, to what extent is the process of PLC operation perceived to be effective in terms of the management of CPD and work-based learning opportunities maximising the opportunities for individual and collective professional learning valued by conscious promoters of each EPLC?

RQ23: At any time, to what extent is the process of PLC operation perceived to be effective in bringing about individual and collective professional learning contributing directly and indirectly to effective pupil learning valued by conscious promoters of each EPLC?

RQ24: Over time, how may this process be conceived as promoting the development and sustaining of an EPLC?

RQ25: to what extent can the evolution of this process and its effectiveness be mapped against expression of the five characteristics of EPLCs, the developmental stage of the PLC (and, if applicable, any sub-PLC), any transition between developmental stages, and indicators of impact on PLC members and on pupils?

Facilitatory and/or inhibitory factors

RQ26: At any time, what external, school, group and individual factors affect the process of PLC (and, if applicable, any sub-PLC) operation and its perceived effectiveness?

RQ27: At any time, how do these factors facilitate or inhibit the process of PLC (and, if applicable, any sub-PLC) operation and its perceived effectiveness?

RQ28: How does the facilitatory and/or inhibitory effect of factors affecting the process of PLC (and, if applicable, any sub-PLC) operation evolve?

Appendix 4.3

Baseline Data: Headteacher (who is not CPD Coordinator) Interview Schedule

(for the first interview: purpose, duration, confidentiality, permission to tape)

1.   Background information (for the first interview)

What teaching responsibilities do you currently have?
(regular teaching commitment?
generalist/subject teaching?
particular subjects?
providing occasional cover?
taking assemblies?)

How long have you have been in your present post?
How long have you worked in this school?
What, very briefly was your previous teaching experience?
(generalist class teacher?
specialist teacher - subject/SEN specialism?)

2.   PLC Membership, sub-PLCs (RQ1,3)

Which colleagues do you work with most closely in your teaching role?
(headteacher's regular commitment to teaching within a department/key stage team?
providing occasional cover across the school?)

3.   Characteristics of an EPLC - shared educational values (RQ5,3,4)

How far do you think the colleagues you work with most closely in your teaching role
share your educational values and philosophy underpinning your teaching?
(extent of first-hand experience as basis for view?)

(If appropriate) How widely do you think your educational values and philosophy are
shared by all colleagues who work in your department/key stage team?
(extent of first-hand experience as basis for view?)

How widely do you think your educational values and philosophy are shared by
colleagues right across the school as the basis for a whole-school educational vision?
(extent of first-hand experience, especially as headteacher, as basis for view?)

4.   Characteristics of an EPLC - shared leadership and management values (RQ5,3,4)

How far do you think your beliefs and values about good leadership and management
practice are shared by all colleagues throughout the school?
(basis for view?
individuals with management responsibility?
individuals without management responsibility?)

5.   Characteristics of an EPLC - collective responsibility for pupil learning (RQ5,3,4)

As headteacher and a teacher, how far do you feel a sense of shared responsibility with
your closest colleagues for your own teaching to ensure that all pupils learn effectively?
(extent of first-hand experience, especially as headteacher, as basis for view?
example of taking collective responsibility?)

(If appropriate) How widely do you think that any sense of shared responsibility for pupils' learning is also shared by colleagues across your department/key stage team?
(extent of first-hand experience, especially as headteacher, as basis for view?
example of taking collective responsibility?)

How widely do you think that any sense of shared responsibility for pupils' learning is also shared by colleagues across the whole school?
(extent of first-hand experience, especially as headteacher, as basis for view?
example of taking collective responsibility?)

6.   Characteristics of an EPLC - reflective enquiry into pupil learning (RQ5,3,4)

In your teaching role, to what extent do you look for evidence that your actions have influenced your pupils' learning, and adjust your work according to what you find out?
(frequency of examining pupils' written work, using learning outcome and attitudinal data, classroom-based research, observation and feedback, consistency with statements about use of data in the survey return?)

To what extent do your closest colleagues for your own teaching contribute to looking for such evidence and adjusting teaching work?
(frequency of joint reflective enquiry?)

(If appropriate) To what extent do you think colleagues throughout your department/key stage team routinely look for evidence that their actions have influenced pupils' learning, and adjust their work accordingly?
(basis for view, especially as headteacher promoting reflective enquiry?
example of cross-department/key stage team reflective enquiry, use of data?)

To what extent do you think colleagues throughout the school look for evidence that their actions have influenced pupils' learning, and adjust their work accordingly?
(basis for view, especially as headteacher promoting reflective enquiry?
example of reflective enquiry beyond the interviewee's department/key stage team, use of data?)

7.   Characteristics of an EPLC - collaboration focused on teaching and learning (RQ5,3,4)

How far do you collaborate with your closest colleagues for your teaching, working as a team in preparing, carrying out and evaluating your own work to promote pupils' learning?
(extent of collaboration - preparation, teaching, assessment, record-keeping?
who takes initiatives?
if appropriate, do other colleagues in the department/key stage team support the headteacher over his/her work to promote pupils' learning?)

(If appropriate) How widespread is collaborating as a team over ways of promoting pupils' learning amongst colleagues across your department/key stage team?
(basis for view, especially as headteacher promoting collaborative teaching?
example of collaboration focused on teaching and learning?)

How widespread do you think collaborating as a team over ways of promoting pupils' learning is amongst colleagues across the whole school?
(basis for view, especially as headteacher promoting collaborative teaching?
example of collaboration focused on teaching and learning?)

8. Characteristics of an EPLC - promotion of collective learning (RQ5,3,4)

How far do you and your closest colleagues for your teaching share, formally or informally, what you are learning in your teaching role about ways of promoting pupils' learning?
(incidental learning, work-based learning, CPD?
example of promoting collective learning?)

(If appropriate) To what extent do you think colleagues throughout your department/key stage team routinely share with each other what they are learning about ways of promoting pupils' learning?
(do all colleagues share with all other colleagues including the headteacher?
basis for view, especially as headteacher promoting sharing?
example of promoting collective learning?)

To what extent do you think colleagues throughout the school routinely share with each other what they are learning about ways of promoting pupils' learning?
(basis for view, especially as headteacher promoting sharing?
example of promoting collective learning?)

9. Perceptions of intermediate impact (RQ10)

Overall, to what extent are your experiences of working with colleagues and of any CPD for you as a teacher helping you to learn and improve your practice in your teaching role?
(example of experience that makes a positive or negative impact?)

To what extent are such experiences affecting your morale and motivation as the headteacher and your commitment to working in the school?
(example of experience that makes a positive or negative impact?)

To what extent does the way the school is led and managed help you to learn in your teaching role and improve your practice as a teacher?
(support from the CPD coordinator with the headteacher's teaching?
support from a HoD/key stage team leader with the headteacher's teaching?
example of experience that makes a positive or negative impact?)

To what extent are your experiences of working with colleagues - whether in a group, across the whole school, or with colleagues in other schools - helping you to learn as a headteacher and a teacher and to improve your practice?
(example of experience, especially as headteacher to promote group learning, that makes a positive or negative impact?)

10. Perceptions of impact on pupils (Q11)

Overall, how far do you think the way you and your colleagues (if appropriate - in the department/key stage team) work together on promoting pupils' learning has a positive or negative effect on pupils' attitude towards school and their attendance?
(basis for view?
example of activity making a positive impact?)

How far do you think the way you and your colleagues (if appropriate - in the department/key stage team) work together on promoting pupils' learning has a positive or negative effect on pupils' enthusiasm for learning at school?
(basis for view?
example of activity where there is a positive impact?)

How far do you think the way you and your colleagues (if appropriate - in the department/key stage team) work together on promoting pupils' learning has a positive or negative effect on pupils' learning achievement in school?
(basis for view?
example of activity where there is evidence of making a positive impact?)

11.   Is there anything else you wish to add?

(thanks)

Appendix Table 4.4: Baseline - degree to which characteristics of effective PLCs were expressed

Nursery and Primary Schools	1. Crossroads Nursery	2. Rockside Nursery	3. Chestnut Nursery	4. Highdown Primary	5. Castlerise Primary	6. Churchley Primary	7. Westroad Primary	8. Minster Primary
Stage (survey)	**early starter**	**developer**	**mature**	**early starter**	**developer**	**mature**	**early starter**	**developer**
Characteristic:								
shared educational values and vision	low	high	high	medium	high	high	medium	high
shared leadership and management values	low	high	high	medium	high	medium	medium	medium
collective responsibility for pupil learning	high	medium	high	low	high	high	high	medium

Nursery and Primary Schools	1. Crossroads Nursery	2. Rockside Nursery	3. Chestnut Nursery	4. Highdown Primary	5. Castlerise Primary	6. Churchley Primary	7. Westroad Primary	8. Minster Primary
Stage (survey)	**early starter**	**developer**	**mature**	**early starter**	**developer**	**mature**	**early starter**	**developer**
Characteristic:								
reflective professional enquiry	low	medium	high	low	medium	medium	low	medium
collaboration focused on teaching and learning	medium	high	high	medium	medium	medium	medium	medium
promotion of collective professional learning	low	medium	medium	medium	medium	medium	medium	medium

Secondary and Special Schools	9. Poplar Secondary	10. Southedge Secondary	11. Princeland Secondary	12. Kingsby Secondary	13. Smeatham Secondary	14. Sildon Special	15. Mulberry Special	16. Winspery Special
Stage (survey)	**early starter**	**developer**	**mature**	**developer**	**developer**	**early starter**	**developer**	**mature**
Characteristic:								
shared educational values and vision	medium	medium	high	medium	high	high	medium	high
shared leadership and management values	medium	medium	high	medium	medium	high	medium	medium
collective responsibility for pupil learning	low	medium	high	low	medium	high	high	high
reflective professional enquiry	low	medium	high	medium	medium	medium	high	medium
collaboration focused on teaching and learning	low	medium	high	medium	medium	high	high	high
promotion of collective professional learning	low	medium	medium	medium	medium	medium	high	medium

4.5: Major facilitatory and inhibitory factors affecting the process of PLC operation

Nursery phase	1 - Crossroads	2 - Rockside	3 - Chestnut
stage (survey)	**early starter**	**developer**	**mature**
facilitators:			
external	headteacher retains strong links with headteachers in the area of her previous post who exchange ideas	strong cluster group arrangements provide external stimulus and support	support from LEA professional development centre enhances staff professional learning opportunities support from colleagues in other schools
site level	dedicated staff, especially those in senior roles positive working relationships among longer-serving staff	positive working relationships and trust between staff rapid integration of family unit staff headteacher has strong local networks and ready access to external support	very positive working relationships and trust between staff
inhibitors:			
external	ambiguity of central government policy on early learning and welfare requirement to bid for a high proportion of short term funding which diverts attention from teaching and learning, and resulting in short-term contracts that militate against commitment competition for pupils because of overcapacity in local primary schools and attempts to create nursery classes threatens the school's survival LEA has set a tight budget	introduction of unified pay and conditions for nursery and family unit staff LEA review of nursery provision may threaten survival of the school	imposition of central government and LEA priorities for in-service training diverts attention from what the staff think is most important introduction of delegated budget taking up the headteacher's time and the possibility of financial constraints threat to nursery school provision in the area political conflict amongst some governors diverting them from supporting the staff
site level	recent high turnover of senior staff high level of staff absence temporary disruption due to building work		small size of school puts pressure on all staff to take on multiple roles which is very tiring

Primary phase	4 - Highdown	5 - Castlerise	6 - Churchley	7 - Westroad	8 - Minster
stage (survey)	**early Starter**	**developer**	**mature**	**early starter**	**developer**
facilitators:					
external	Ofsted inspection temporarily fostered collaboration and mutual trust in coping with common adversity	impending closure temporarily fostered a survival spirit and commitment to ensuring that the pupils' education does not suffer from transition arrangements adequate LEA professional support	Ofsted inspection judgement of 'satisfactory' caused a temporary dip in staff morale	OFTED inspection judgement that standards are improving boosted staff morale strong cluster group arrangement	longstanding cluster group arrangement
site level	new headteacher's dynamism high staff commitment and positive working relationships amongst groups who work closely together flexibility of tutors for staff studying for NVQs being willing to teach in school	headteacher's unwavering commitment and leadership in extremely adverse circumstances strong sense of mutual trust and respect amongst longer-serving staff and welcoming of newcomers	small school, meaning that all the staff know each other very well	headteacher's energy and promotion of a team of staff who share professional values mutual trust is developing and there is more delegation of leadership tasks	positive staff working relationships

Primary phase	4 - Highdown	5 - Castlerise	6 - Churchley	7 - Westroad	8 - Minster
stage (survey)	**early Starter**	**developer**	**mature**	**early starter**	**developer**
inhibitors:					
external	Ofsted inspection halted curriculum development activity for a term and diverted attention from the direction of development sought by the headteacher having to teach-to-the-test in preparing for SATs in Year 6 uncertainty over future central government reforms which will require a response	impending closure will terminate the PLC		inadequate funding for cpd temporary problem over LEA termination of school meals service at short notice diverted attention from educational tasks	school situated close to the LEA border, so long distances for staff to travel for cpd falling rolls resulted in a redundancy, cutting back LSAs' hours,.and the headteacher taking class responsibility short-term cpd funding inhibits coherent direction for development requirement to bid for cpd support is time consuming LEA set tight budge
site level	lack of time needed to work in depth on curriculum development	staff changes and accompanying uncertainties	appointment of new headteacher brought temporary uncertainty for other staff small school with few staff limits potential for collaboration	not all staff are willing to support the headteacher's efforts	small school means that all teaching staff have multiple responsibilities, however inexperienced they are

Secondary phase	9 - Poplar	10 - Southedge	11 - Princeland	12 - Kingsby	13 - Smeatham
stage (survey)	**early starter**	**developer**	**mature**	**developer**	**developer**
facilitators:					
external	bidding for specialist status, business and enterprise, has given staff common purpose improving LEA support for SLT	successful bid to link with an independent school is bringing focus and finance for development activity	successful bids for external initiatives bring in cpd funding and links which bring in ideas	some LEA support	LEA support for establishing a 'collegiate' of local secondary schools as a platform for professional development
site level	staff increasingly positive about working in the school SLT increasingly working as a team increasingly shared values and vision staff changes have helped improve relationships in some departments	departmental baserooms and grouped classrooms enable extensive professional dialogue working a continental day with short breaks helps with pupil behaviour	high level of mutual trust and respect between staff and commitment to teaching across much of the school thorough use of pupil learning data unified and energetic commitment of SLT wide use of ICT helps with sharing ideas	staff goodwill and competence general acceptance of importance of professional learning strategic leadership group increasingly working as a team	widespread acceptance of 'family ethos' across the staff willingness in the SMT to take risks hardworking and committed staff strong use of pupil learning data

Secondary phase	9 - Poplar	10 - Southedge	11 - Princeland	12 - Kingsby	13 - Smeatham
stage (survey)	**early starter**	**developer**	**mature**	**developer**	**developer**
inhibitors:					
external	poor quality external cpd experiences and expense of travel resulting in less support for attending such courses	isolated rural area limits potential for networking and means long distances to travel for some cpd central government withdrawal of earmarked cpd funds for inexperienced teachers threatens their opportunities LEA has a minimal advisory service so offers little support tight budget is inadequate for development work	LEA is short of funds so budget is tight headteacher's support for the LEA after its Ofsted inspection is taking him out of school a lot	lack of time for working on development long distances to travel for external cpd activities poor quality external cpd courses pressure from Ofsted to play safe and conform rather than experiment	

Secondary phase	9 - Poplar	10 - Southedge	11 - Princeland	12 - Kingsby	13 - Smeatham
stage (survey)	**early starter**	**developer**	**mature**	**developer**	**developer**
inhibitors:					
site level	small size puts pressure on senior staff to take multiple roles and limits collaboration between departments difficult issue with a staff member gender issues among several staff	small size for an 11-18 comprehensive school limits scope for professional dialogue as there are few large departments continental day offers little time for staff interaction during breaks	large and complex organisation and a few staff may not engage with the direction for development promoted by senior staff	large and complex organisation making it difficult to engage all staff frictions and lack of trust within several departments and between several and senior and other staff sports college status insufficiently linked in with other initiatives staff hold different expectations of pupils	split site inhibits face-to-face interaction across the staff difficulty recruiting and retaining staff central government changing funding sources and withdrawing funding inhibits development work

Special phase	14 - Sildon	15 - Mulberry	16 - Winspery
stage (survey)	**early starter**	**developer**	**mature**
facilitators:			
external		parents of pupils drawn from a wide area are very supportive headteacher networks with staff from equivalent schools across the country	beacon school status has brought extra funding for professional development
site level	very positive relationship between staff and pupils committed and hardworking staff high integration between teachers and teaching support staff headteacher and deputy strongly promote professional learning teacher secondments have brought in new thinking	strong, coherent leadership from headteacher dedicated staff and a high level of mutual trust and respect supportive governors excellent buildings, enclosed site and 24 hour residential nature of educational provision promote a sense of community strong use of regular in-service training and case conference days to promote collective professional learning	small school with strong teams of staff where everyone knows each other well flexibility of pre-statutory education allowing a 4 day teaching week shared educational values and vision high level of mutual trust and respect strong induction support for new staff move to temporary site has resulted in a positive spirit and mutual support in conditions of common adversity

stage (survey)	early starter	developer	mature
inhibitors:			
external	isolated because the school is unlike others in the area and attempts to promote networking have failed headteacher and other staff have had to support staff in a local special school which an Ofsted inspection judged to be 'in need of special measures', diverts attention from in-school development	working with 17 LEAs which are the source of fees, but they operate quite differently generating some administrative difficulties some lack of understanding from DFES	LEA review of provision for SEN generating staff anxiety over their jobs
site level	secondary school departmental structure but very small departments, mostly with one specialist teacher inhibits professional exchange	staff changes especially in senior positions (including both deputy heads)	move to temporary site with cramped accommodation puts stress on staff