LEARNING TO LEARN IN SCHOOLS PHASE 4
AND
LEARNING TO LEARN IN FURTHER EDUCATION

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Acknowledgements

The Learning to Learn in Schools Phase 4 and in FE Colleges Projects would not be possible without the commitment and hard work of our partners.

SCHOOLS

Cheshire
Cloughwood Community School
Ellesmere Port SSPA
Fallibroome High School
Hallwood Primary School
Hebden Green Community School
Packmoor Primary School
Tytherington High School
Verdin High School
Weaverham Forest Street Primary School
Winsford High Street Primary School

Enfield
Aylward High School
Carterhatch Primary School
Eastfield Primary School
Fleecefield Primary School
Hazelbury Infant School
Hazelbury Junior School
Houndsfield Primary School
Lavender Primary School
Oakthorpe Primary School

Cornwall
Archbishop Benson Primary School
Camborne Science and Technology College
Lanner Primary School
Liskeard School and Community College
Marlborough Primary School
Perranporth Primary School
Portreath Primary School
Richard Lander High School
St Meriadoc CE Nursery and Infant School
The Learning Space
Treloweth Primary School

Northumberland
Amble First School
Benet Biscop High School
Central First School
Duchess’ High School
Harbottle First School
Hexham East First School
Hexham Middle School
Hipsburn First School
The King Edward VI School
Wooler First School

FE COLLEGES

Lewisham College
Dean Britton, Geoff Davidson, Azumah Dennis, David Harrild, Jason Gottfried, Pele Mobaolorunduro, Jayne Morgan, Mo Pamplin, Dan Thomas and Mark Young

Northumberland College
Maureen Charlton, Julie Foster, Helen Handyside, Linda Huddleston-Brown, Debra Middlemiss, Michelle Tait, Lesley Toyne, Theresa Thornton and Kevin Warren
1. Introduction

Learning to Learn in Schools Phase 4 and Learning to Learn in Further Education are two research projects coordinated by the independent UK charity, the Campaign for Learning (CfL), and facilitated by a team of researchers from the Research Centre for Learning and Teaching at Newcastle University and colleagues from Durham and Glasgow Universities.

The project’s current working definition of Learning to Learn is:

Learning to Learn is an approach that focuses on what happens when we learn and how we can learn more effectively. Being involved in L2L means being part of a community of enquiry that aims for a better understanding of the learning process. An L2L approach provides all learners with opportunities and tools for reflective and strategic thinking that generate talk and collaboration. This helps individuals develop skills and dispositions for successful lifelong learning that can build their motivation and enable them to take effective action to fulfil their learning goals.

This definition has grown with the development of the project and has been modified and extended as our project comes into contact with other research in the field (explored further in Section 2.1). The definition is not static: it is under constant scrutiny by project participants and is highly dependent on the contexts into which it is placed.

The L2L in Schools project involves 41 primary and secondary schools in four Local Authorities (further detail can be found in Technical Appendix 9), representing a wide range of socio-economic contexts across England. This project started in May 2007 and builds on research completed in Phases 1 to 3 (Rodd 2001; 2003; Higgins et al. 2007) and throughout it has been characterised by a commitment to case study based research with a priority placed on the interpretations and definitions of Learning to Learn (L2L) which are practicable in school (Goodbourn et al. 2005, 2006; Goodbourn et al. 2009).

The Learning to Learn in Further Education (FE) project started in August 2008 and was set up as a sister project to the Schools Project. It aims to explore the transferability of the approaches and the generalisability of the findings to the post-compulsory sector. This project involves two Colleges with a group of approximately ten teacher-researchers working independently and in groups across different contexts (departments and subject areas) represented by the sector in each location. This project taps into the potential seen for Learning to Learn in the FE Sector which has been argued to provide opportunities for accommodating 14-19 reforms, engaging and building a sense of enjoyment in learning for disaffected young people and adults and developing professional learning and reflective capacity in the FE teaching profession (Amalathas 2010).

The structure of the projects over time can be seen in the diagram below (figure 1). This report summarises findings across the two current projects (Year Two of the L2L in Schools project and Cycle One of the L2L in FE project). We have hypothesised that L2L is not particular to primary or secondary

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1 Further information about the project can be found at: [www.campaignforlearning.org.uk](http://www.campaignforlearning.org.uk)
schooling, so a central feature of this report will be an exploration of the similarities and differences in outcomes of the two projects in representing what L2L looks like across the sectors.

![Diagram of Learning to Learn projects]

Both projects use the same methodology based around Stenhouse’s (1981) model of “systematic enquiry made public”. This is the methodology which was established in Phase 3 of the project as successful in providing useful data for both the research and practice communities (Higgins et al. 2007). Within these Phases the teachers have been encouraged to initiate changes that they feel are appropriate to their learners and contexts and that fit with what they believe is the ethos of Learning to Learn. They have completed the evaluation of this intervention with an emphasis on evidence that is meaningful to them and colleagues. Thus the locus of control in these latter two phases and in the L2L in FE project has been with the teachers rather than the researchers (Baumfield et al. 2008).

### 1.1. Aims of the projects

Across both the Learning to Learn in Schools and the Learning to Learn in Further Education projects there is a commonality of purpose. The two projects have joint aims, which are:

- To develop understanding of progression in Learning to Learn – knowledge, skills, dispositions and the development of learners’ autonomy
- To investigate issues in both scaling up and sustaining Learning to Learn as a development approach in schools/colleges (drawing in new schools to the existing network)

The L2L project provided the platform for pursuing a line of enquiry in school, whilst ensuring the collection of data in order to quantify outcomes. It focused the approaches used and made staff really consider what the needs of the pupils and the school were and ways in which we could tackle problems. The final document is a good starting point for further discussion in school about the successes or otherwise over the year and possible starting points for the next project. (Weaverham Primary School, Cheshire)
To further understand the role of enquiry in teachers’ and students’ learning

To develop the role of an Higher Education Institution as a co-learner in this process and supporting schools/colleges in networks

To look at the potential influence of the family and the community on the development of students as lifelong learners

To look at the relative importance of different Learning to Learn approaches in raising standards.

To investigate the potential of L2L approaches in raising achievement across the academic ability range, and in particular in inclusion and learner support.

To understand any differential impact on the learning of distinct groups of learners.

In addition we have kept the intended themes common, building on the research and findings from Phase 3 (Higgins et al. 2007) and Year One of Phase 4 (Wall et al. 2009). These themes have been central to the design of both projects and provide a reporting structure:

- **Learning relationships and interactions in the classroom**: through collaborative learning approaches and the development of more effective feedback in lessons, pedagogical tools for learning and enquiry and investigating its impact on attainment, attitudes and autonomy.

- **Tools for learning**: in supporting learning through enquiry and different Learning to Learn approaches, particularly to support reflection and action (e.g. Assessment for Learning techniques; Pupil Views Templates; Kagan’s cooperative learning strategies; circle time; video) of students, teachers and researchers.

- **Students as researchers of their own learning**: investigation of how using enquiry based approaches with students can support better awareness and understanding of their learning, support the prioritising and development of learning and teaching in education institutions and extend students’ critical thinking about knowledge, skills and dispositions to learning and their application to different situations and individuals.

- **The world beyond the school gate**: exploration of how better relationships with parents can be developed; how communication about children’s learning can be increased; potential benefits of home/school partnerships.

1.2. **The Learning to Learn in Schools Project Phase 4**

In Phase 4, four regions of England are involved. They are Enfield, Cheshire and Cornwall (all of which were involved in Phase 3) and Northumberland (which is new to the project in Phase 4). In Phase 3, regions applied to be part of the project and then the three successful areas were chosen to represent a range of geographical and socio-economic characteristics (for further information see Higgins et al. 2005). Northumberland was chosen for similar reasons at the start of Phase 4, in that it
is a large county with a wide range of schools and education contexts from extremely rural, complementing Cornwall, to the more urban (similar to Cheshire). It is also a region operating under the three tier system of first, middle and high schools, due to transfer to a two tier system during the project. However by choosing Northumberland the project also becomes truly nationwide with regions representing all four corners of England. This can be seen to be mapped out in figure 2.

![Figure 2: Map showing the four Local Authorities involved in Phase 4](image)

In Year Two of Phase 4 of the Learning to Learn in Schools project we received thirty case studies from the schools spread across four local authorities in urban, suburban and rural settings (see Technical Appendix 9 for detail on schools’ participation). We have often asserted that the diversity within the project means that the data produced in our case studies and cross-project analysis has resonance for the whole of England. In the section that follows, we are offering a degree of triangulation to our internal assessment of the representative nature of our sample using publically held data.

<table>
<thead>
<tr>
<th>LA</th>
<th>New in Phase 4</th>
<th>Carrying on from Phase 3</th>
<th>Old school, new teachers</th>
<th>New school, old teachers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Cornwall</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Enfield</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Northumberland</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

In each of the four participant regions (Cheshire, Cornwall, Enfield and Northumberland) there are between nine and twelve schools including both primary and secondary age phases (table 1). In addition, we have two special schools involved in Cheshire as well as research being completed at
local authority based provision in Cornwall. To provide an idea of the contexts across the four Local Authorities where we are implementing the L2L approach, we have explored the locations and backgrounds of the schools.

The first measure we have investigated is Socio-Economic Status (SES). This was calculated using the neighbourhood statistics website\(^2\) which provides data based on postcode (on measures of income deprivation; employment deprivation, health deprivation, education deprivation, barriers to housing and services, crime and living environment deprivation). For each factor a score out of 20 is given, with 1 being the least deprived and 20 the most. It is recognised that the postcode of the school only provides an extremely rough guide to the socio-economic background to the children attending it, but it was considered as the most pragmatic data collection method.

A summary of the characteristics of each area is included below:

- In Cheshire we have schools serving communities in the most deprived and least deprived 25%. It is noticeable that the more deprived areas are more likely to have increased levels of educational deprivation, while in more prosperous areas educational deprivation is likely to be much lower than the total score.

- In Cornwall overall levels of deprivation are all higher than average and this reflects the historical link with the Camborne, Pool and Redruth Success Zone, though for some communities, educational deprivation is below average.

- Enfield has a higher proportion of communities with high levels of deprivation, reflecting the highly mobile and multi-ethnic communities of the borough.

- Northumberland has relatively low levels of deprivation compared to the other authorities, though it is worthy of note that the relative isolation of some of these communities is not captured by these measures, with only the most isolated registering higher levels of educational deprivation.

The school is proud of its involvement with the CfL and takes the research projects it conducts very seriously. As a result of our CfL research projects in Phases 2 and 3, significant changes have taken place in the way that Year 7 students are inducted into the school. Similarly, the school’s one to one Mentoring Programme and its community/parent outreach programme are direct results of the CfL research projects. The school regards the CfL as an expert partner which enables us to make informed, appropriate changes to our practice.

As the figure above indicates, we have a range of experience in the project: L2L projects have touched some of the most deprived and least deprived communities in England. Our key hypotheses are somewhat supported:

- that the data generated from the L2L case studies could be generalised because the schools are a diverse and therefore broadly representative sample and
- that L2L is not something ‘just’ for successful schools or for schools that need high levels of support.

However further analysis is needed. In particular, this frame will hopefully allow us to explore whether the impacts of L2L appear to be different on these communities as the data will be linked to other quantitative measures such as attainment data analysis and SDQ scores for the final project report in 2011.

**1.3. The Learning to Learn in FE Project**

L2L is based on an awareness that the learner is central. It seems clear that being an active learner is better than being a passive learner, but to enable learners to be engaged they need to take responsibility. College targets tend to encourage teachers and learners to emphasise passive learning, but L2L challenges this. L2L can help learners take responsibility for their learning through helping teachers develop practice which encourages this. (Helen, Northumberland College)
Research support is provided by two universities (Glasgow and Newcastle) using the same model of face-to-face and electronic networks of support for research and enquiry that was set up for the Schools Project. The project is also steered by the same advisory board although representatives from a range of national policy organisations, professional bodies and educational institutions with interest and influence within the FE sector have been invited to join.

Figure 4: Map showing the two participating Colleges

Northumberland College

Northumberland College was the first college to become involved in L2L in FE. Through connections with local schools, some of the staff were already aware of L2L and were keen to be involved in the project. The college is the only general Further Education college in the county. It has a main campus at Ashington and additional sites at Kirkley Hall, Alnwick, Blyth and Berwick upon Tweed. There are also Construction Skills Centres in Prudhoe and Alnwick. The college offers outreach provision across the county using its learning bus and the outreach centre at Berwick, which is some 50 miles from the main Ashington campus.

Northumberland is a sparsely populated county of approximately 300,000 with both an ageing population and falling numbers of young people. 46% of the population live in 2.7% of the land area in the South East of the county, an area of relatively high social deprivation. The transport infrastructure is poor. Employees in the county have lower levels of qualifications than the national average.

Across its various sites, Northumberland College caters for approximately 13,000 students, about one-fifth of who are aged 16-18. There are good links with schools to facilitate a wide range of vocationally related courses for Year 10 and 11 students. Reflecting the ethnic composition of the county, less than 1% of the college learners are from minority ethnic backgrounds.
Lewisham College

Lewisham College has a reputation for innovation and was approached to become involved in L2L in 2008, becoming the second site for this project. This large FE college is located in south east London, and is split across two campuses, Lewisham Way Campus and Deptford Campus. These two campuses are approximately one mile apart.

Lewisham College has over 13,000 students who come largely from the immediate local area. These communities in Lewisham, Greenwich and Southwark, are among the most economically and socially deprived in London. Approximately 70% of students attend on a part time basis, and 12% report a learning difficulty or disability. Just under a fifth of students are aged 16-18 and over three-quarters are aged 19+, with the majority of these aged 25 or over. The remainder are under 16s attending college for work-related learning. The ethnic profile of the college reflects the local area: 43% of students are white, 36% black, and 8% Asian, according to figures released in 2008.

1.4. Research Process

The project draws on the successful model developed in Phase 3 with local INSET for teachers, national residential, email and internet support and national and regional conferences to disseminate and validate the research as it progresses (Wall and Hall 2005). Clusters of schools, with an average of two teacher-researchers per school, are based on existing L2L networks in the Schools Projects. In the FE Project clusters of teachers are working in each college coordinated by one lead individual. Across both projects the teachers are working individually or in small groups to complete
their professional enquiry into the aspect of L2L they believe is most relevant to them and effective learning in their context.

Teachers are often unrecognised innovators and, by the nature of their jobs, problem solvers, the tendency has been for the project brief to be interpreted and understood in a diverse number of ways. This introduces a level of unpredictability for the university researcher; however this transfer of the locus of control regarding the focus and direction of the research to the teachers is paramount in achieving the project aims (Higgins and Leat 2000). It is also, overtly linked to a model in which teachers adopt cultural tools (Boreham and Morgan 2004) linked to research and embed them within their practice of learning and teaching. Thus the developmental process of action research is much more than the acquisition of a research ‘skill set’, encompassing personal perspective transformation, cultural change within schools and the broadening of external networks of collaboration, communication and critical challenge.

Learning to Learn in Schools Phase 3 was successful in demonstrating that Learning to Learn approaches could support development in schools, the professional learning of teachers and the development of students’ understanding of their learning. However it also raised some important questions about the role of enquiry in learning and how schools can be supported in undertaking this through networks and the support of Higher Education Institutions (HEIs). There were some indications of differential impact of different Learning to Learn approaches which also needs to be investigated further. In addition, perhaps the most important question is how involvement in Learning to Learn over time, has an impact on students’ and teachers’ views of themselves as learners, and how this, in turn, affects their knowledge and skills for Learning to Learn.

Of particular interest in Phase 4 will be the development of the L2L model as it continues in those schools from Phase 3 that continue to work with us: the longitudinal impacts of the project on learners, teachers, schools and wider communities as well as the sustainability of the approaches. This will be complemented by the experiences of the new schools and the colleges that have joined the project since 2007: how well the project model transfers and the extent to which it is replicable and how experienced L2L schools can act as more experienced ‘expert’ support.

1.5. Analysis Frame

In the Year One report (Wall et al. 2009) we highlighted our intention to use a conceptual framework of the impact of Learning to Learn (Table 2). The framework is arranged in a way which implicitly privileges language and this was validated by the evidence from the Year One case studies and the cross-project data collection. It also encompasses knowledge, skills, understanding, dispositions and affect over four levels: learner, teacher, school and community.
Table 2: The analysis frame for Learning to Learn

<table>
<thead>
<tr>
<th>Language</th>
<th>Skills</th>
<th>Knowledge</th>
<th>Understanding</th>
<th>Dispositions</th>
<th>Other effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learner</td>
<td>Articulation Classrooms discourse Meta-language or 'language for learning'</td>
<td>Use of a range of learning skills e.g. mind mapping, mnemonics</td>
<td>Attainment (tests) Achievement (performance) Metacognitive knowledge</td>
<td>Metacognitive skilfulness, strategic and purposeful use of skills and knowledge Self assessment Evidence of transfer</td>
<td>Attitudes Mastery orientation 'Habits of mind' Retention Attendance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Enjoyment Satisfaction Self-concept Self-efficacy Self-esteem</td>
</tr>
<tr>
<td>Teacher</td>
<td>Classroom discourse Professional dialogues Staffroom discourse</td>
<td>Using 'pragmatic tools' A range of teaching approaches using student feedback</td>
<td>Marriage of content knowledge with pedagogical tools Research</td>
<td>Critical analysis Awareness of pedagogical alternatives Professional enquiry Evidence of transfer Creative solutions</td>
<td>Motivation Retention Professional engagement Willingness to experiment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Enjoyment Job satisfaction Professional self-concept</td>
</tr>
<tr>
<td>School/college</td>
<td>Explicit in documentation Common approaches articulated</td>
<td>Tool and techniques explicitly taught, courses offered Focus on cross subject pedagogy</td>
<td>Staff INSET, co-learning Outside support used</td>
<td>School policies SEF, development plans Support for experimentation Creative solutions</td>
<td>Time/ resource allocation External links Enquiry/inquiry orientation School ethos</td>
</tr>
<tr>
<td>Wider</td>
<td>Home/ school links Shared language for talking about learning</td>
<td>Courses and workshops Participation</td>
<td>Attendance at L2L events</td>
<td>Able to self-support and support learners Shared responsibility for learning</td>
<td>Attitudes Support Attendance at events</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Parental satisfaction</td>
</tr>
</tbody>
</table>

Our analysis across the case studies from Phases 3 and 4 and the L2L in FE project enables us to report where we have evidence at three of those levels: learners (table 3); teachers (table 4) and schools (table 5), not enough studies have focused on work with parents for us to compile a fourth table. The kinds of data encompass the complexity of learning and learning environments: we have data directly collected from learners in the form of posters, cartoons and mediated interviews, interviews with teachers and senior managers; we have data collected by teachers as part of their case studies using pragmatic tools like learning logs and Pupil Views Templates; we have attitude data collected from staff via questionnaires and from students via the SDQ; we have attainment data collected nationally and as part of teacher assessment. This framework enables us to say with a degree of clarity what our evidence base is like across the whole L2L project and enables our readers to critically engage with the warrant that we claim for our work.

Table 3: Evidence for impact on learners

<table>
<thead>
<tr>
<th>Language</th>
<th>Skills</th>
<th>Knowledge</th>
<th>Understanding</th>
<th>Dispositions</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Articulation</td>
<td>Use of a range of learning skills e.g. mind mapping, mnemonics</td>
<td>1. Attainment (tests)</td>
<td>1. Self assessment Evidence of transfer</td>
<td>1. Attitudes Mastery orientation</td>
<td>Enjoyment Satisfaction Self-concept Self-efficacy Self-esteem</td>
</tr>
<tr>
<td>2. Classroom discourse</td>
<td>2. Achievement (performance)</td>
<td>2. Metacognitive skilfulness, strategic and purposeful use of skills and knowledge</td>
<td>2. 'Habits of mind'</td>
<td>2. Retention Attendance</td>
<td></td>
</tr>
<tr>
<td>1. and 3. Data direct from learners</td>
<td>Case studies</td>
<td>1. Case studies</td>
<td>1. SDQ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Video</td>
<td>2. Case studies</td>
<td>2. Data direct from learners</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Pragmatic tools</td>
<td>3. Pragmatic tools</td>
<td>3. Public data</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Evidence for impact on teachers

<table>
<thead>
<tr>
<th>Language</th>
<th>Skills</th>
<th>Knowledge</th>
<th>Understanding</th>
<th>Dispositions</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Classroom discourse</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3. Retention Professional engagement</td>
<td></td>
</tr>
<tr>
<td>3. Staffroom discourse</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. and 3. Data direct from teachers</td>
<td>Case studies</td>
<td>Case studies</td>
<td>Case studies</td>
<td>1. Case studies</td>
<td>Teacher Interviews</td>
</tr>
<tr>
<td>2. Video</td>
<td>Teacher Interviews</td>
<td>Teacher Interviews</td>
<td>-</td>
<td>1. Teacher interviews</td>
<td>Data direct from teachers</td>
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</tbody>
</table>
Table 5: Evidence for impact on schools/colleges

<table>
<thead>
<tr>
<th>Language</th>
<th>Skills</th>
<th>Knowledge</th>
<th>Understanding</th>
<th>Dispositions</th>
<th>Other</th>
</tr>
</thead>
</table>
| Explicit in documentation | Tools and techniques explicitly taught, courses offered
Common approaches articulated | Staff INSET, co-learning Outside support used
Focus on cross subject pedagogy | 1. Support for experimentation
Creative solutions | Time/ resource allocation
External links
Enquiry/ inquiry orientation | School ethos |
| Case studies      | Case studies                                | Teacher interviews       | Teacher interviews       | Teacher interviews            | Case studies |
| School visits     | Teacher interviews                           | School visits             | Teacher interviews       | Teacher interviews            | Teacher interviews |
| Public data       | Teacher interviews                           | Public data              | Public data              | Public data                  | Public data |

Data from the case studies enables us to look at the range of approaches and skills that learners are using and also gives us evidence of self-assessment and the extent to which learners transfer skills to other contexts. Publicly held data on attainment, attendance and in FE on retention gives us a means to compare L2L cohorts with other learners in these important indicators. The Self Description Questionnaire (SDQ) has given us invaluable insight into L2L learners’ self concept and motivational processes which is individualised and contextualised by the interview, essay and visual data collected directly on our school visits, giving us rich insight into learners’ ability to articulate their understanding of learning and their habitual approaches to each new challenge. We have been able to explore the levels of metacognitive knowledge and skillfulness through the use of Pupil Views Templates. Video of real classroom interactions give us example of the richness of L2L talk and the interaction frames which are privileged in these settings.

Our understanding of teacher learning continues to be principally informed by case studies and telephone interviews: these data provide ‘in action’ and ‘reflection’ perspectives on teachers’ inquiries. Our contact with teachers at INSETs and Residentials and our regular email conversations also provide insight into career trajectories, the range of support and professional dialogues within and beyond the project and more widely, give us a sense of what the enquiry process gives to teachers and how it contributes to motivation and retention. This year, a questionnaire to other staff has given us some sense of the reach of L2L in to staffroom discourse. Video clips of how teachers interact with learners and how learners respond are providing a third dimension to the reports from case studies and interviews.

In terms of school-level change, we are weaving together impressions from teachers working in the schools in terms of case studies and interviews with our own perspectives. As visitors, we have been able to gauge the extent to which L2L practices are visible in the physical environment and in the conversations we have with senior managers. Moreover, we are alert to the public data: in particular the extent to which L2L language and ethos have ‘soaked in’ to the documentation, job, adverts and websites of our partner schools.

Treloweth Primary School, Cornwall
Cross project analysis

While we are looking at this analysis frame it is important to recognise that there is an additional dimension to this report: emerging differences and commonalities between the schools and FE Colleges. The cross-sector element of the L2L projects is still at an early stage but, so far, we have found similarities across teachers from the various sectors in their motivations for researching their own practice, in the over-arching interests they have in learning and in the concerns they have for their learners. Due to the structure of the project, there is variation between individual teachers in their teaching and research foci, but there do not appear to be many systematic differences between them which can be related to the education sector they work in.

Yet it is also clear that the FE sector is a very different context for learning and teaching. Even though our FE colleagues might share with the school teachers similar aspirations and overviews of education, the demands of college learning, catering for such a range of student needs, may have impacts on beliefs held by students and teachers about learning in general or in college specifically. We have identified variation within the FE project between teachers and students beliefs about learning and teaching, which can be considered in light of findings from the Schools project. This leads to discussion of the potential impact of sector characteristics on conceptions of learning.

A key level of analysis once all cycles of enquiry are complete is to definitively map out the shared and separate territories of learning in different sectors.

1.6. Structure of this report

This year we are excited to have persuasive data on the impact of Learning to Learn (reported in full in section 3). It is our task now to unpick and describe just what it is about L2L that produces these observed impacts. We have structured this report to provide detail of the impact along with the emerging definition of what L2L is (section 2) and what teachers are doing in practice to support its development (section 3).

This report has been written to focus on seven key themes which have become apparent while analysing the data and speaking to teachers across the two projects. These seven themes are represented in the diagram below and are the fundamental concepts which we believe underpin the definition of Learning to Learn and therefore the approaches which are having an impact. This diagram has been developed by the University team in negotiation with project participants.

The diagram uses two concentric circles to indicate the core aspects and the facilitatory features we believe to be essential in developing a Learning to Learn approach (the inner and outer circles respectively). The three aspects in the centre circle have an active relationship with each other and we believe that each has to be present for Learning to Learn to take place in a meaningful way. The section that follows contains our current working definitions of the various aspects of the model and within these definitions we have made use of italics to highlight aspects of thought or practice that differentiate Learning to Learn from other approaches.

- Metacognition: a privileging of reflective and strategic thinking about learning that supports content knowledge and skills development;
• **Enquiry**: a standpoint *which looks outwards and inwards*, questioning and contextualising perceived understandings of learning and teaching; and

• **Community**: a *focus on the role of a democratic network* where the learning from enquiry can be made public; knowledge and processes are criticised, validated or extended by all participants.

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**Figure 6: Diagram of seven emerging themes**

The relationships between these three processes are complex but they are supported and facilitated by the features listed on the outer ring. These features can be seen in L2L practice documented in the case studies and evidenced in data across the projects as supporting the development of L2L:

• **Pedagogy**: the process of *importing, customising and evaluating* new approaches to teaching. A focus on learning that includes the *teacher as learner*; emphasising democracy and privileging *authentic learning conversations*, facilitating motivation and engagement and improving the quality of experience and outcomes for all learners;

• **Tools**: *support and challenge pedagogy* through the enquiry process. They are approaches and techniques that *change the way in which learning is experienced and understood by students and teachers*. They offer opportunities for new ways to extend, assess, focus on or talk about learning and in the process they *provoke new questions*;
- **Learner action**: developing learners’ capacity to be self-aware, to understand their own learning process and then encouraging them to *use this understanding* by being both proactive and reactive in different situations. *Emphasising the role of the learner*: to be engaged, to have a say and to *be responsible* for their own and others’ learning; and

- **Professional learning**: making explicit and *giving importance to teacher’s knowledge* of what works in learning, *expecting rigour and validity from all educational research and policy*, *weaving together formal and informal* ways of knowing, making use of collaborative and individual experience to change classroom and school cultures.

We are convinced that these seven elements can be applied to all learners in the project whether they are adult or child, and affiliated with a school or college, the Campaign for Learning or the university team. Therefore throughout this report if we talk about learners we are using it in its widest sense and if we use ‘research team’, ‘Campaign for Learning’, ‘teachers’ and ‘students’/‘pupils’, then we are making a distinction between groups.
2. What is Learning to Learn?

2.1. A historical look at defining Learning to Learn

The Learning to Learn in Schools Project has spanned ten years and during that time pinning down a definition of Learning to Learn has proved to be a major preoccupation. The project started with the following:

...a process of discovery about learning. It involves a set of principles and skills which, if understood and used, help learners learn more effectively and so become learners for life. At its heart is the belief that learning is learnable. (Campaign for Learning)

This was generated in Phases 1 and 2, along with the 5R disposition framework, and was used throughout Phase 3 as a starting point and guideline. However over the relatively long time the project has been going the educational context has changed and the objectives the project team (CfL, teachers and university researchers) associate with this definition have also altered. It is fair to say that in 2001, at the start of the Schools project, learning to learn was generally believed to be something associated with specific approaches, tools and techniques (Higgins et al. 2005). Indeed it was also believed that L2L would be predominantly about student learning and as such would be relatively unproblematic to identify. During Phase 3 however the project position changed and we concluded learning to learn was much more about the development of effective learning habits and dispositions across learners (students and teachers, schools, families and communities). We also began to broaden our definition of the term ‘learner’. Where the term is used in this report, we refer not just to students or to teachers but to all participants in the learning community – often this includes a range of staff, managers, parents and carers and the University team.

Claxton’s four generations of ‘teaching learning’ (Claxton 2004) provided a helpful way of distinguishing some of the practices that were being clustered under the general banner of learning to learn in Phase 3 of the research (Higgins et al. 2007).
Table 6: Claxton’s (2004) four generations of teaching learning

| First generation | Raising attainment  
| Good teaching is effective delivery of content knowledge |
| Second generation | Developing study skills  
| Hints tips and techniques |
| Third generation | Emotional and social factors  
| Characteristic ways of learning  
| Concerned with the how of teaching |
| Fourth generation | Involvement of students in the process  
| Concerned with how students can be helped to help themselves  
| Teachers themselves involved in becoming better learners  
| Developmental and cumulative |

At the start the aim of the Campaign for Learning’s project was clearly designed to support and explore the achievement of the fourth stage. However the idea that the fourth generation was an end point has proved to be over simplified and undoubtedly some of the schools have moved up and down the generations depending on the forces operating on them and the needs of the learners they are working with. In addition the idea that teacher involvement only occurs in this final generation is refuted in our evidence and is something that we would consider to be integral in any approach from the start.

Since 2007 however the idea of L2L as an umbrella term has been developed and used in the project (Higgins et al. 2007). There was commonality in the pedagogic and theoretical traditions on which the teachers were building: metacognition, Thinking Skills, self-regulation, self-efficacy and self-esteem in relation to learning but in the main the concepts were very fluid, reacting to the pedagogic and policy environment in which the work was set. This meant teachers could develop their own ideas and innovations under this heading and that the locus of control for the project direction shifted into project classrooms around the country. The nature of the network however does act as a steer for these new ideas and developments: the teachers are learning from each other, the Campaign for Learning and the university team all the time. This has led us to believe that L2L not only encompasses student learning but also teacher learning. The process whereby teachers become learning role models and pedagogic enquirers has become fundamental to the L2L process. Teachers who ask questions about what works in the classroom support the ethos and sense of community which we now associate with the term Learning to Learn and are seeing reflected in the outputs from the students.
In developing these ideas we have been interested this year to explore further this shared professional learning which is underpinning the progression of the project and therefore our understandings and how they fit into a definition of learning to learn. The fact that we now have the FE colleges involved means that it is interesting to see the nature of constructs in the different contexts and how the professional enquiries and conversations within the network act on project thinking. Indeed it is also interesting to explore the extent to which conversations about student learning produce common understanding about learner dispositions, motivation, progression and outcomes across the two sectors. The learning that is associated with L2L ideas and what it looks like in and across contexts has become significant with the introduction of the sister project in the FE Sector. Within this project report as a result there is a central theme developing about what is learning developing ideas from Hadar’s (2009) work exploring ideal and school learning.

So in this report we have negotiated a further definition of learning to learn with the participant teachers:

*Learning to Learn is an approach that focuses on what happens when we learn and how we can learn more effectively. Being involved in L2L means being part of a community of enquiry that aims for a better understanding of the learning process. An L2L approach provides all learners with opportunities and tools for reflective and strategic thinking that generate talk and collaboration. This helps individuals develop skills and dispositions for successful lifelong learning that can build their motivation and enable them to take effective action to fulfil their learning goals.*

This definition emphasises the role and importance of professional learning through enquiry while also giving prominence to the social aspect of learning to learn which has been developed since 2007. An important aspect of learning to learn is generating space to talk, explain and discuss perspectives on learning; we have called this a community. Learners need to have access to a wide and diverse community in which they can be listened to and critically engaged with in order to better understand their learning and generate effective action.
The diagram introduced on page 17 aims to represent this definition. The core processes should be a focus on thinking about learning (metacognition), facilitated through enquiry and shared as part of a community or network. These are characteristics which we believe all learners need to be involved and therefore make learning to learn different from other similar learning focused approaches (see figure 7). These aspects will be focused on in turn in this chapter to describe the basis of what we believe Learning to Learn to be.

2.2. Focusing on metacognition

Meta-cognition is central to learning. It is an individual’s awareness, management and control of her or his own thinking and has a developed tradition in education for over 30 years. It terms of the L2L project it is crucial both to learning of the curriculum and the strategic and reflective thinking which can support this, as well as learning about the teaching of the curriculum from the perspective of the teacher in reflecting on and making the strategic choices to support students’ learning. This strategic and reflective dimension characterises meta-cognitive thinking (Moseley et al. 2005) as it relates to learning in schools and FE colleges. Work in this field draws on two areas of developmental psychology in terms of cognition more broadly and meta-cognition in particular as well as socio-cultural perspectives on ideas such as self-regulation (Whitebread et al. 2009).

In term of the cognitive dimension, it is sometimes separated into meta-cognitive knowledge and meta-cognitive skilfulness (following Veenman et al. 2005). In terms of:

- **Meta-cognitive knowledge**
  
  Showing an understanding that the learner can think about learning, and can talk about some of the processes which support their own learning (declarative knowledge)

- **Meta-cognitive skilfulness**
  
  This involves the procedural application and translation of thinking and learning skills across different contexts or for different purposes

  (for further definitions see also Veenman and Spaans (2005: 160)).

Meta-cognition is therefore crucial as a central and necessary aspect of Learning to Learn as individuals become consciously aware of what they are learning, how they learn and how they can improve and develop their own learning. It therefore relates directly to Claxton’s fourth generation of L2L (see Table 6 above) for both students and teachers and their awareness, their knowledge and their skilfulness in what they can do to improve learning at school or college in the contexts in which they are working.

Meta-cognition is associated with more successful learning (Prins et al. 2006) and with approaches which support the development of thinking and learning in classrooms (Higgins et al. 2005; Dignath et al. 2009). This operates at two broad levels as strategic and reflective monitoring of tasks can help learners take specific actions to improve their immediate performance, but also as they develop more strategic awareness of where to focus their attention in learning situations, learners become more strategic in their choices of courses of action in the longer term.
Earlier work in Phase 3 of L2L has demonstrated that a number of the techniques and approaches, such as Pupil Views Templates (Wall and Higgins, 2006; Wall et al. 2009) can help both with the research about meta-cognition as well as supporting or promoting it in classrooms (see also Baumfield et al. 2009). Even relatively young children can reflect and think strategically about their learning (Whitebread et al. 2009) when provided with appropriate opportunities and expectations. However it is also evident from both the L2L project and from wider research (e.g. Ritchart and Perkins 2008), that just because learners can think meta-cognitively does not mean that they will, or actually do in classroom situations. One of the characteristics of L2L settings is that such meta-cognitive talk is more likely to be an explicit part of the explicit language and discourse (Wall et al. 2009). A central aspect of L2L practices is therefore to develop understanding of the ways in which meta-cognitive thinking can be privileged or made more evident in classroom talk and discourse (Brandom et al. 2005; Richart et al. 2009) so as to guide engagement and action by learners.

Enquiry into these actions and processes, and the reasons and choices that learners articulate for their actions therefore creates a productive space between perspectives (Hamel 2003) where learners articulate their thinking. This enables differences in perspective and understanding to be identified and also helps learners to become aware of the way that their thinking influences their learning actions, so as to take more strategic control of those actions in the future. Professional enquiry has always been associated with reflection (Schön 1983), however the focus on meta-cognition and learners’ awareness of their own learning ensures that the development of the enquiry is more closely linked to learning outcomes in schools and colleges.

2.3. An enquiry based process

Enquiry is important at all levels of the project. It is a questioning process which we believe all participants in the project are involved in. This can be formal or informal, but it is there in some form or another in a desire to explore different aspects of learning to learn and what it means to each individual. There is also a common language about enquiry: an explicit understanding of the need for clear questions, methods of evaluation that are realistic and the need to communicate findings across the community. From the university research team to members of the Campaign for Learning to the teachers and students in schools we are all involved in investigating learning and how to make it more effective. This collaborative enquiry works to provide an underpinning ethos to the project that does not privilege knowledge as the domain of one group or another, but rather opens it up to opinion and exploration giving expertise to all who can rationalise and provide an evidence base to their answers.

In many ways our focus on enquiry has been prompted by an exploration of the ways in which teachers in the Learning to Learn project draw on a range of resources in their work, both external and internal (see Figure 8 below). Internally, they make use of their pedagogical content knowledge: their understanding of learning development and progression through a series of skills and processes, their values and beliefs about learning and teaching, their knowledge of subject content and the ‘big ideas’ in their discipline and they use their own modes of engaging with learning, shaped by their professional learning experiences and supported by the extent to which they can make autonomous decisions about how to proceed (Baumfield et al. 2008).
This process is supported within Learning to Learn by the cycles of enquiry and inquiry (table 7) which take place for each teacher within the span of each year: as part of the structure of Residential, INSETs and personal enquiry teachers engage critically with educational research and in their own contexts they conduct an inquiry that is driven by the immediate needs of their learners.

Table 7: Difference between enquiry and inquiry

<table>
<thead>
<tr>
<th>Enquiry: engaging with research</th>
<th>Inquiry: engaging in research</th>
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<tbody>
<tr>
<td>Enquiry means a request for information or look into something, implying a more general level of exploration.</td>
<td>Inquiry (in the UK) implies a more detailed investigation such as a legal or public inquiry.</td>
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</table>

As they do this, they gain mastery of enquiry and inquiry technologies (represented in figure 9 below as keys), which have impact on one or more of their internal areas of resource (our exploration of tools as technologies is detailed in section 4.2). As the model implies, the intent of the individual teacher has some impact on both the kinds of tools they employ and the nature of the feedback received.

St Meriadoc Infants School, Cornwall
The enquiry process is fundamentally shaped by each teachers’ identification of an immediate problem to be explored, one which has an intrinsic value based on the benefits to all of exploring it and about which enough can be said so that the problem can be formulated and worked on: Simons and colleagues’ ‘situated generalisation’ (2003). The intent of the enquiry, the rigour with which it is conducted and the communication of the findings interact dynamically and differently in each context (Baumfield et al. 2008). The autonomous development of a personal research question is therefore at the heart of Learning to Learn. As Elliott argues

“educational research, as opposed to simply research on education, will involve teachers in its construction and execution and not simply in applying its findings. Teachers engage in educational research and not simply with it” (Elliott 2001; 565, emphasis in original)

This is intended to give teachers a voice in what is becoming an increasingly one-sided conversation about research and teaching, in which an emphasis on ‘evidence-based’ teaching has, over time, been modified in UK discourse to ‘evidence-informed’ practice (Hargreaves 1997, 1999b; Elliott 2001). The quality of that information about ‘what works’ needs to be problematised: there are serious questions about the quality and the homogeneity of the studies from which the evidence produced by systematic review is drawn (Hall and Higgins 2004; 2005; Slavin 2004); the decoding of meta-analysis and the way in which the results can feed in to teachers’ practice is complex (Hattie 2004) and it is not clear how brokerage roles and communication networks should develop (Hemsley-Brown and Sharp 2003). The evidence from Learning to Learn suggests that teachers develop a more robust and critical stance through the process of their own research, as well as a vocabulary and confidence to access the wider literature.

Teachers can identify the areas of challenge and cognitive dissonance, where things stop working or produce unintended consequences. These problems are the grit in the oyster that motivates teachers to undertake enquiry and the pursuit of greater understanding becomes part of professional practice and identity. His description of these fertile areas of educational understanding: “They are the focus of speculation, not the object of mastery” (Stenhouse 1975; 85) connects with Knorr Cetina’s description of professional knowledge concerns as ‘epistemic tools’:

Figure 9: The relationship between enquiry and teacher’s professional understanding
“it is the unfolding ontology of these objects which accommodates so well the structure of wanting, and binds experts to knowledge things in creative and constructive practice” (Knorr Cetina 2001: 182).

It is here that professional enquiry reconnects with theory-generating aspects of academic research, where theory, technique and context dynamically interact in classrooms, producing new perspectives (Latta et al. 2007).

The discourse in the UK of ‘research-informed’ practice positions the teacher as an observer of the research process and a consumer of research products. The tensions within this model of using research which posits that research can have a direct linear effect on specific practices tied to desirable outcomes have been extensively explored elsewhere (Hammersley 2005) but our concern here is the way in which this model contributes to growing trends for teacher passivity. If teachers are to choose between innovations in the same way that shoppers choose detergent, based on the reputation of the producers and the attractiveness of the packaging, this distracts from the task of assessing what the conditions are in their classrooms, what the pressing needs of the learners (teachers included) might be. In contrast, the process of teacher inquiry as practised within Learning to Learn grounds the individual in context, in relevance to the learners and sustains the process through the increased motivation brought by rapid and responsive feedback. This is supported by the focus on two key values from the project: teacher autonomy and the responsibility to make public the work that is done. Teachers gain in confidence in articulating their embodied practical knowledge and in translating the contextual understandings of their own classrooms to a wider audience. Moreover, this participation in the wider learning community of the project fosters the critical engagement with ideas and approaches which underpins teachers’ future decision-making about innovation and change in their practice. We have observed a relational and developmental interplay between engaging in an inquiry in the classroom and engaging with the canon of research literature and guidance produced by academics and policy makers.

A research partnership between schools or colleges, a university team and a body like the Campaign for Learning is not new. What is different about Learning to Learn is that the design of the project was not fixed by the funders or the University team at the beginning of the process. It was and remains our belief that to engage teachers in the process it was vital to cede control of the inquiry question to them. They had pressing questions of their own which sat comfortably beneath the L2L umbrella and they were overwhelmingly more likely to stay engaged and interested if they were pursuing their own ideas. Stenhouse, recognising the reality and burden of teachers’ working lives counselled that “the research act must conform to the obligations of the professional context” (1983: 20). Indeed, we, the collective and individual members of the university team and the Campaign for Learning, had our own inquiry questions but we did not ask teachers to explore them for us, relying instead on the cross-project analysis to answer them. In this process, the nature of our enquiry questions shifted in a small but significant way from a more traditional vein of “how well
do teachers do the things we think they should be doing?” to “what is it that teachers think will work in their contexts and how can this be examined and communicated?”. Meanwhile, in classrooms and beyond them, a corresponding process was in operation for the teacher-enquirers: where the practitioner enquiry approach has supported teacher learning, many teachers have creatively seen an association that could be apparent for students. Thompson and Gunter (2006; 2007) draw parallels between teacher-research and pupil-research and at the start of Phase 4 teachers in the project were making similar associations (Wall et al. 2009). Student research is documented as having origins in teacher enquiry and models of action research (Fielding and Bragg 2003) and it has been noted that teachers are more likely to exhibit meaningful learning behaviour when undertaking joint enquiry alongside students (McGregor 2007). Indeed Harrington et al. (2006) point to the way that relationships can be changed by this type of collaborative enquiry. Project teachers have talked about how they needed to facilitate pupils’ learning independence and that teachers should be seen to be learning collaboratively with their students: this is not just asking for their viewpoints, but also acting with them to achieve effective learning goals (see section 4.3).

Pupil involvement has long been a principle element of the Learning to Learn project; the privileging of language and social aspects of learning are testament to this. The move to student researchers takes this idea of involvement in the learning process and applies it to the research process. Fielding (2001) has described three ways in which students active involvement has impacted on school structures and in the L2L project we have seen similar outcomes: the emergence of new organisational structures; radical collegiality; and transversal politics. Moss et al. (2007) have documented that approaches under the students as researchers heading can ‘enable students’ self knowledge’ (p.53) and support and develop new relationships within traditional power-orientated contexts, a finding backed up by (McGregor 2007). These concepts of developing student self awareness and changing relationship structures in the classroom all fit well with the promotion of language and social interaction as a basis for enquiry about learning. There is a neat duality in the theoretical and practical outcomes of L2L and students as researchers.

The L2L project has the aim of exploring how enquiry can support better understanding of learning, “…including students to change the terms and the outcomes of the conversations about educational policy and practice” (Cook-Sathers 2003: 12) and the promotion of students as researcher, as co-enquirers, does appear to take this forward in a manner that supports and promotes student involvement and engagement. As stated by Bland and Atweh “…utilising students involvement in action research that aims not only at generating knowledge about problems but aims towards seeking their solutions” (2007: 346).

Many of the learning communities in schools and colleges therefore include students as co-enquirers and as such, it is tempting for us to include students in the following section which looks at the project community. However, this section is driven by the data we have collected over the last two phases of the project and in that period, the community events (INSETS and Residentials) have been
with teachers and the mediated communication has been with teachers (Baumfield, et al, 2008b). We have met with students on our school visits and they have been active participants in many of the inquiries in their schools and colleges but they have not been part of the meetings and the iterative discussions which define the L2L community. Their role is at one remove, so for students in the learning community see instead section 3.1 (impact on students).

### 2.4. The importance of a community

The Stenhouse (1981) maxim that has tied the project approach together since 2003, ‘systematic enquiry made public’, implies some kind of community where ideas can be aired and shared. Therefore a community or network becomes important. Within the L2L Project, through Phases 1 to 4, the network provided by the project has always been central, however its emphasis has changed from being a group who all have an interest in L2L and who come together regularly to hear input on that same theme (which could be accused of being a cosy club) to a more critical community who are engaged with each others’ practice and enquiries and collaborating to generate new understandings. Input from outside is still important as part of the enquiry process (largely brokered by the university team), but the privileging of the inquiry process that each is going through is put on an equal footing to the ‘experts’. The importance placed on the learning from each practice context has increased along with the range of the contexts and perspectives included in the project (particularly with the inclusion of the FE Colleges), but the confidence of the teachers to talk about their own thinking and listen to inputs from across the age phases and regions has proportionately grown also. This has meant a community whose diversity is fundamentally different to anything else in operation.

The development and sustainability of a network or community this large and diverse hinges upon the central question of how the need for clarity of purpose and shared beliefs can be satisfied whilst ensuring that ownership of and motivation for the research activity within it remains with individual practitioners (McLaughlin and Black Hawkins 2004). Hargreaves (2003) encapsulates the problem in terms of a metaphor of bazaars versus cathedrals. Whilst a large stone building like a cathedral has the authority and robustness to accommodate change sustained over a long period, it doesn’t have the flexibility and responsiveness to changing circumstances offered by a tent. We believe the umbrella term of learning to learn and the focus on metacognition has provided a purpose with shared beliefs that is flexible and robust enough to endure across changing participants, contexts and regional difference.

Developing enquiry beyond the immediate context is a key role for the university who can facilitate the linking of engaging in research to engaging with research (Temperley and McGrane 2005; Hall 2009). Three stances towards engagement in research can be identified and these map onto existing models of educational processes (Stenhouse 1975) and learner autonomy (Ecclestone 2000; 2002) to form a matrix of ideas about teacher learning (Table 8).
The first stance is characterised by teachers ceding a greater degree of control to others in the research process, absorbing more passively messages about standards and norms for working rather than engaging critically. In the second stance the university plays a role as ‘knowledge brokers’ mediating between the codified academic discourses (McLaughlin et al. 2004). For the teacher-researchers, their developing sense of self as agents within their own inquiries gives them ‘permission’ to engage more actively with research methods. In the third stance, there is greater resilience to any imposition of ideas, a more robust response to difficulties encountered and creative questioning regarding the purposes and value of any activity.

Agreement regarding the importance of inquiry in learning and the relationship between interventions designed to promote student questioning and teachers’ own professional learning through inquiry was found in a systematic review of research evidence of the impact of teaching thinking skills on teachers (Baumfield and Butterworth 2005; Baumfield 2006). However, research also shows that not all teachers follow the same trajectory in the process and for many inquiry stops at the level of verification that something ‘works’ in their classroom and need not lead to the wider engagement expressed in the concept of enquiry (Fennema et al. 1996; Franke et al. 1998). Analysis of the development of collaborative teacher research in a secondary school in the UK identified developmental stages in the process of moving from inquiry into individual contexts and enquiry involving engagement with research (Baumfield and McGrane 2001; Temperley and McGrane 2005). Progression in this instance was associated with a change in the mode of questioning in which the teachers were engaged; signalled by a shift from how to why questions.

Learning to Learn could be characterised as a confederation of what Lieberman and Grolnick (1996) refer to as ‘progressive educators’, in that it is shared values rather than specific methodologies that members have in common. Being able to articulate and express this vision is a key factor in how educational partnerships evolve (Black-Hawkins 2004), yet this is problematic and difficult to achieve without imposing a one size fits all interpretation. Teachers’ research interests are often in flux, acting like a barometer of the changing priorities and pressures at work in schools at any one time (James and Worrall 2000). Consequently, the team was seeking a means by which the evolving definition of Learning to Learn could be captured, made explicit and reflected upon by all those involved. At the heart of this problem is the means by which practitioner enquiry, supported by the university, moves from being that of personal interest, to one that is acknowledged and owned by the community. We used McLaughlin and Black-Hawkins (2004) six models for school-university partnership as a frame to analyse how this occurs.

| Model 1 | School bound, individual teachers mentored by university ‘experts’. |
| Model 2 | School wide supported by a university facilitator. |
| Model 3 | University as expert bringer of research to the school |
| Model 4 | Across schools: individual teachers mentored by university experts. |
| Model 5 | Within and between schools supported by university facilitators. |
| Model 6 | All partners as experts and critical friends to one another. |
We would expect to see several of these patterns of working within the Learning to Learn network and this is indeed the case. Some practitioners focus on highly individualistic agendas (Model 1) whilst others, either through accident or design, share a common focus or are engaged in research that fall under an umbrella term such as assessment for learning (Model 4). In all cases, the ethos is that of teachers and university staff as partners, each using their knowledge and expertise to steer the other (Model 6). Our interests were in making the transition between the different models explicit, especially between Models 1 and 4, so that they can be facilitated and better understood.

The idea of using posters as visual cues (discussed in detail in Technical Appendix 1) was to summarise the case study and to provide a strong visual message about the ‘learning to learn’ pedagogy, the research methods used and the ways in which the teacher chose to communicate the results. As not all the teachers would be able to attend the residential, the poster had to work as a stand-alone communication method. The posters were produced by several members of the team and so reflect a variety of aesthetic decisions. The annual Residential in January 2009 and 2010 were therefore organised with the poster presentations of each year’s research at their heart.

Oh, I get it – we’re going to have a conference where we actually confer with one another... (Richard Gambier, Marlborough Primary School).

The feedback sheet was designed to give simple numerical data that could give us some idea of how eclectic the tastes of our teachers were: would secondary school teachers from urban schools be at all interested in the projects from rural infant schools or would the power of specific context prevail? In addition, it also served to encourage delegates to reflect critically on their own practice, thus ensuring that what may otherwise have been a simple ‘show and tell’ was extended to a deeper critical analysis of issues around teaching and learning (Little and Dorph 1998).

A first-level analysis of a simple count (see graphs below) suggested that while some posters were more popular than others, most made their mark on someone. The time spent in the project, the education sector or the region from which the teachers came did not seem to be significant factors in attracting votes. Simply inputting the data began to generate an impression that respondents from primary, secondary, further and higher education were equally likely to vote for the same poster but creating complex graphs did not capture the way in which these networks of interest were forming.
Figure 11: Total scores for posters at 2010 residential
In the second year, we increased the complexity by having participants from the Equal Acclaim for Teaching Excellence (EQUATE) project, an initiative funded by Newcastle University to bring collaborative enquiry based professional learning to lecturers, join the teachers from schools and FE for the Residential. In addition, colleagues from the University of Groningen in the Netherlands, Ernst Thoutenhoofd and Marieke van Roy brought a poster detailing their work on Learning to Learn. While we asked colleagues to vote for poster presentations, several votes were cast for the University team’s inputs and for our Keynote Speaker, Donald Christie: this arguably represents a shift in the teachers’ views, placing their own and their colleagues’ contributions alongside the ‘ivory tower’ input. As the table below suggests, schools, colleges and university posters were all equally capable of finding an audience and again, being present at the residential was not a key factor. The posters themselves appear to operate as boundary objects (Heldal 2010).

Each poster offers a potentially dissonant experience to the participant, within the supportive enquiry context of the Residential, where the warrant of every idea is up for challenge. This sets off new lines of inquiry, whether through pedagogy, tools, or research methods. The ideas from the original teacher are tested in the crucible of the new teacher’s context, customised and adapted. The tacit and explicit knowledge of the teacher is changed: new things are fore-grounded and these new understandings are conveyed, via the case study to a new poster which then operates as a boundary object for a new audience.

Figure 12: Diagram showing the role of posters in teachers’ inquiry process

We can link the teachers’ experiences to the spiral of knowledge creation (Nonaka 1994)

1. Socialisation- sharing experiences (informal conversations at the residential- word of mouth)

3 http://www.ncl.ac.uk/ecls/research/project/2993
2. Externalisation- articulating tacit knowledge (i.e. critical discussion of case study presentations)

3. Combination- recombining explicit knowledge to create new knowledge (Reflection at the residential- which presentations affected me the most?)

4. Internalisation- learning by doing- explicit new knowledge becomes tacit knowledge. (Bringing the new concept into their own research/teaching practice)

Networks to support innovative pedagogy are traditionally organised by bringing together teachers from subject disciplines or from specific phases of education. These networks are strengthened by the similarities of context and the common language that participants share. However, they may also be weakened by the inability of participants to access broader perspectives or to recognise the role of accustomed and unexamined practice in limiting their pedagogic options. The Higher Education Institutions (HEIs) that broker these networks may also find that they are replicating their inputs across a range of audiences and that retaining innovative teachers in these networks may be problematic (Black-Hawkins 2004; McLaughlin and Black-Hawkins 2004). Cordingley et al. (2003) point to the value of studying learning across boundaries when researching how educational networks operate and evolve. Central to our understanding of how definitions and agendas for Learning to Learn emerge and evolve is the extent to which learning takes place across professional as well as organisational boundaries (Hall 2009). Of particular importance to us is gaining an understanding as to the nature of boundary spanning relationships within the network- as Little (2005) puts it, knowing ‘What’s in the arrow’ that links nodes together. Specifically, we are interested in the propensity of Learning to Learn agendas to cut across primary, secondary and further education contexts, as well as the ability of teachers to recognise the research implications as well as the pedagogic potential presented in the case studies of colleagues. At the heart of this problem is the means by which practitioner enquiry, supported by the university, moves from being that of personal interest, to one that is acknowledged and owned by the community.

Understanding better the practice of questioning in school/university research collaborations will help to ensure that such collaborations can be extended, flexible and mutually challenging; and so make an important contribution to promoting participation and democracy within the education community and beyond. We have created a ‘knowledge transfer map’ indicating what is transferred (for example, practices or methodologies) and by whom (phase of education, subject specialism or professional identity) (see Technical Appendix 1). We have evidence from these that our network facilitates short cuts to potentially high value ideas that lie outside a practitioner’s school, locality, or phase of schooling (Carmichael et al. 2006). The advantage of visualising the network in this way is that it can elicit the implicit transfer of knowledge that occurs in these exchanges and therefore makes this learning more widely and easily understood (Eppler 2006). Two kinds of visual representations have emerged – messy and complex maps based on categories that have been very powerful for theory building work and cleaner and more ‘translatable’ pictorial representations of the reach of individual posters, using concepts drawn from social network analysis (Hakkarainen et al. 2004) as a frame for their interpretation. Our participants
embrace the complexity and challenge of a diffuse network and we ask, can this be an alternative model to traditional networks?

**2.5. Concluding thoughts**

How do metacognition, enquiry and networks come together? Looking historically at the L2L phases and projects there appear to be ways in which the network is facilitated to become more effective by the process of enquiry. This process of enquiry brings the members of the network to an awareness of the importance of metacognition more quickly than might otherwise have occurred. Simultaneously the privileging of metacognition, that is to say articulated cognition, requires a network to hear this articulation and an enquiry process to move it forward and give it purpose. Our current working hypothesis is that the interaction of these three elements is supported by a culture of critical listening in the project.

Critical listening comprises various elements (see Figure 13). It is underpinned by the support from the environment, be it network, staffroom or classroom. This is an environment which promotes the skills to engage and then respects and rewards active debate from all participants, regardless of status. This feeds backwards and forwards through experiences of critical listening to enable participants to build up the ability to identify dissonance: for example the gaps between idealised and actual practice or effort expended and grade received. Dissonance is the grit in the oyster, (Mezirow 1981) that enables us both to identify the issue and to begin to work towards change. The process of critical listening fosters the development of an active, purposeful stance towards learning and learners use this empowerment to examine the warrant for the range of solutions on offer.

Critical listening calls into question existing hierarchies and structures: in other words, we do not privilege knowledge from ‘the academy’ or from ‘the chalk-face’. We are less concerned about the fidelity of implementation of a particular strategy than about the clarity of the intent in implementing it in the first place. The unofficial motto: *It’s not the ‘what’ you do it’s the ‘why’ that you do it* – foregrounds our belief that strategic, reflective and metacognitive thought is what we not only need to recognise in teachers but also to privilege in discussion of teachers’ work. The professional enquiry process enables us to examine our evidence base and validate it through the network. This is also not about imposing an L2L consensus: teachers are free to hold minority opinions, to challenge any cosy consensus that develops and to marshal arguments and evidence to articulate that view.

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As a school, we see ourselves as a Learning Community, encouraging adults and children alike to continue their educational development from whatever starting point. I knew that being involved in the professional enquiry element of the project would be a personal challenge and felt I needed to practise what I preached and test my own qualities of Resilience, Responsibility and Reflectiveness. (Fleecefield Primary School, Enfield)
There remain questions that we continue to explore in the project and which will be addressed in the next report:

- What are the conventions for an effective community of enquiry?
  - across diverse groups of teachers?
  - across teacher-student groups?
  - What action is warranted by critical listening?
- Does a university need to be involved?
3. Exploring the Impact of L2L

Within Phase 4 it was decided not to just rely on the data collected by the teachers in the case studies, as was predominantly the case in Phase 3, as this has issues relating to reliability and validity particularly when making generalisations across the project. A move completely away from the case study model was also not seen as appropriate due to the desire to keep the locus of control with the teachers and an authenticity of relationship between the schools and the university which we felt was essential in Phase 3 practice. Therefore a decision was made to use a complementary model of data collection combining an analysis of data across case studies (as in Phase 3) with data from collection tools that occupied space outside the case studies and therefore gathered data across the project.

It can be seen that within the project there is a move between cross case study analysis (teachers’ intent) to cross project data analysis (our intent, albeit negotiated with the teachers) and back. There is no intention that one type of data should be privileged more or less than the other, it was felt that both were necessary to gather the best picture of the impact of Learning to Learn in Phase 4 and Further Education. The table below gives some indication as to the types of data included in each of these strands and the degree to which they complement one another should be apparent.

| Table 10: Table showing types of data at two levels of analysis |
|---|---|---|
| **Data collected** | **Cross Project** | **Cross case studies** |
| Student | Student interviews and fortune lines (March 2010) | Student perspectives |
| | What is learning (FE students) | School/ college level use of SDQ |
| | What is learning (school students) | |
| | Pupil Views Templates (inductive analysis) | |
| | Pupil Views Templates (deductive analysis) | |
| | Self Description Questionnaire (SDQ) | |
| Teacher | FE teachers perspectives on the 5Rs | Teacher perspectives |
| | School teacher interviews (summer 2009) | L2L focus |
| | FE teacher interviews (March 2009) | The role of Learning to Learn |
| | Other Staff Questionnaire | Learning through research |
| School level | School/College contexts | Ofsted report analysis Perspectives on |
| | Published attainment data (March 2010) | Reported attainment data |
| Wider | Networking analysis | Parent/carers perspectives |
The data listed above can then be cross matched with the analysis framework exemplified in section 1.5. These two elements of analysis are drawn together across this report to explore the impact of Learning to Learn: the impact on students, on teachers and on schools and colleges.

3.1. Impact on students

As will be clear from this report, L2L appears to have a multi-faceted impact beyond the individual student. Yet it is often changes which teachers perceive in learners in their classroom that keeps them committed to the project. Therefore, this section will consider the effects of L2L in Schools Phase 4 and L2L in FE on learner conceptions of learning, together with their experiences, sense of self efficacy and success in learning.

Understandings about learning

Learner perspectives on the learning they experience in schools and colleges continue to be central to the L2L project. This is reflected in the ideas of the teachers, enacted in their case studies, and the approaches of the research team. We are interested in how L2L may be affecting learners’ conceptions of learning. It would be expected that any impact of L2L on how learning and teaching proceeds in L2L schools and colleges would be reflected in learner understandings of the nature and processes of learning. This year, student ideas about learning have been revealed through a writing task completed by students in some schools, mediated student interviews across the schools and FE projects, and observations from the case studies. Although a wide variety of sometimes disparate ideas have been expressed, it is possible to discern two themes to the evidence.

Complex ideas about learning

Responses to a task, based on the work of Hadar (2009), which asked L2L school students to write about the nature of learning (see Technical Appendix 3), demonstrated the relative complexity of learners’ conceptions of learning within school:

Learning is when you pick a subject and you explore it and learn so many facts you never learned in your life, for example you’re studying Ancient Greece or anything else and you explore it and learn so many facts about it you never knew.

And more generally:

I think learning is part of life. Whatever we learn it’s always useful in the future.

Learners reflected on the particular activities they do at school but also tried to generalise their ideas across situations and to show how they applied to their own learning. Understandings about personal experiences of the process of learning, which are suggested
by some of the responses to this task, can be related to the fortune lines produced by school students during mediated interviews (see Technical Appendix 4).

Figure 14: A ‘peaks and troughs’ fortune line

These representations of the previous year of L2L learning tended to be non-linear, although the majority were generally positive (see figure 14). This suggests a fairly sophisticated understanding of learning being at times difficult, even when the eventual outcome is successful. It is possible to see links here to student comments found in a number of the case studies, which explicitly consider the challenges of learning and the structures which facilitate good learning. For example, secondary school students at Fallibroome expressed the need for structuring of Wild Tasks, while Helen in Northumberland College grappled with how to provide adequate structure for student-centred teaching in essential skills.

Evidence from the case studies (see Technical Appendices 10 and 11) also suggests that many L2L learners are developing their abilities to reflect on their own learning, becoming more sophisticated in their descriptions and attempted explanations. For example, here are reflections on the year from two primary schools:

As the year progressed so the children were able to write more freely in their logs and reflections began to show more depth.” (Marlborough Primary School)

Later in the year, the language the children used had completely changed. For example:

Nov – good, love, hard, fun, easy
July – understand, concentrate, helpful, fun, good, new things, for when you are older.

(Wooler First School)

A similar progression was very clear in the case study of Lesley at Northumberland College where, later in the year, students were considerably more able to take part in collaborative mathematics tasks and to articulate their understandings.

Other evidence from the FE case studies, however, points to the challenge of enabling students to develop understandings of their own learning to facilitate autonomy and independence.
In particular, the detailed research of Pele and colleagues at Lewisham College revealed that students possessed shallow knowledge about desirable study skills but did not seem able to apply them in their own learning, perhaps because of a rather narrow conception of the nature of learning.

This suggestion of rather less complex understandings of learning among the FE students, and the resulting difficulty of enabling a L2L approach, is elaborated by comments from the FE teachers and, most directly, by the responses of the students to the mediated interview regarding conceptions of learning (see Appendix 3). Although the students we interviewed held a variety of views, reflecting their diverse ages, courses and previous learning, there was a tendency to place high importance on surface aspects of learning, such as practising, remembering and, in particular, listening. We concluded that this understanding, together with their reluctance to distinguish general and college learning, suggested overly simple views of learning were held by many of the FE students. This contrasts with the conceptions of the younger learners in school and may partly reflect the earlier stage of the L2L in FE project. However, it might also be indicative of the challenges, and potential rewards, associated with narrowing the gap between FE students and other learners in their experience of education.

**Universality of learning**

Despite these reservations about the conceptions of learning held by many of the FE students, it is notable that they tended to see learning in college and beyond as inextricably linked. Sometimes this could be explained by the vocational nature of their courses, which both made explicit and narrowed their understanding of the relationship of college learning to other learning. Other comments, however, suggested a more nuanced view of basic principles of what students understood as good learning being applied to diverse situations, within and beyond the college setting. Many students described a progression through stages of learning, or discussed cycles of actions to embed learning, without limiting these explanations to specific situations:

> We put practising second because if you don’t practice you won’t remember. (Student, Northumberland College)

> It’s near the top because if you don’t constantly practice something, you will never learn or remember it. But then again, if you haven’t learnt something you can’t practice it...how do you practice something you don’t know- you have to learn something first. (Student, Lewisham College).

A similar understanding of learning as universal was also evident in the responses of the school students to the ‘What is Learning?’ written task. Although these pieces of writing also made distinctions between different types of learning, other comments about learning
were not tied to particular situations. Some explicitly addressed the idea of learning transcending their school experience. For example:

*Learning doesn’t have to be at school, you can learn anytime anywhere.*

*You can learn even if you’re an adult.*

Thus the idea of learning as a general, central part of life would seem to be part of the conceptions of many of the L2L learners from across both schools and colleges. This suggests that explicit reflections on learning, which are central to the L2L approach, should be productive with even the broad range of learners now involved with the L2L schools and FE projects.

**Metacognition**

Pupil View Templates have been used extensively by teachers during Phases 3 and 4 of the Learning to Learn in Schools project to explore learner perspectives on the process of learning. This year we completed an analysis of the 348 templates completed during Years One and Two of Phase 4 (see Technical Appendix 5). This used a deductive coding scheme, based on the work of Moseley et al. (2005) and Veenman and Spans (2005), to look for evidence of metacognitive knowledge and skillfulness in the students’ understandings of their learning. Examples of the coding applied to responses from one Y1/2 class regarding circle time are shown in Table 11.

**Table 11: Exemplifying the different coding groups**

<table>
<thead>
<tr>
<th>Code</th>
<th>Example quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information gathering</td>
<td>In circle time we share our thoughts and smiles</td>
</tr>
<tr>
<td>Building understanding</td>
<td>I like Circle Time because you tell other children about you.</td>
</tr>
<tr>
<td>Productive thinking</td>
<td>I didn’t feel nervous because I got to know the other children and new friends.</td>
</tr>
<tr>
<td>Strategic and Reflective</td>
<td>Metacognitive Knowledge</td>
</tr>
<tr>
<td>Reflective Thinking</td>
<td>Circle Time is a bit scary because sometimes you have to speak in front of everyone.</td>
</tr>
<tr>
<td>Reflective Thinking</td>
<td>Metacognitive Skilfulness</td>
</tr>
<tr>
<td></td>
<td>If people are stuck on a work, asking the person or a friend to help you.</td>
</tr>
</tbody>
</table>

Frequency analysis of this data considered the impact of student age and gender, as well as the impact of school factors including the socio-economic status of school location and the length of involvement in L2L. The impact of student age and Key Stage were then further explored through a between subjects 3 (Key Stage) x 2 (gender) two-way ANOVA.
Consideration of the school level variables suggested a school effect, with differing profiles of cognitive skills and metacognitive thinking found across the eleven schools which provided completed templates. This did not appear to be related to school ses. The association found between length of time in the project and an increased proportion of productive thinking, metacognitive knowledge and metacognitive skilfulness did not appear to depend on the L2L experience of individual teachers. Thus there are findings of differing student perceptions, and more evidence of metacognition, in some L2L schools than in others, which may be related to the length of time the school has been involved in the project. Clearly this has implications for our understanding of how L2L proceeds within schools and strongly suggests that the final analysis of impact on students needs to consider effects on learning, particularly on school-level measures, in light of evidence we are collecting of the extent of L2L culture within project schools.

Considering now effects of student variables on templates, relationships of gender and age to metacognition are not straightforward. There was no simple relationship between gender and metacognition, although it is possible to discern some tendency for girls to show more evidence of building understanding and metacognitive knowledge. Looking at the influence of student age, we found some developmental progression but with an important and surprising effect due to Key Stage.

Figure 15: Means for the dependent variable Information Gathering broken down by Key Stage and Gender

In contrast to this finding for student comments relating to the lower level skill of information gathering, the relationship of Key Stage to the frequency of comments otherwise categorised was of higher frequencies in KS2 than in KS1, as might be expected,
but then drops in KS3. This means that comments which show evidence of developing understanding or metacognition were significantly more prevalent in KS2 relative to KS1 but significantly less in KS3 relative to KS2. To illustrate this, Figure 15 shows the results of analysis on the variable “Positive Thinking”, which results from collapsing the ratings for the four positive thinking skills, Building understanding, Productive thinking, Metacognitive knowledge and Metacognitive skilfulness.

As found in Phase 3, students involved in L2L seem to be developing metacognition, in particular metacognitive skilfulness, at a younger age than might be expected (Wall 2008), but these higher order ways of thinking are more frequent in the templates of older primary school children than in those of younger learners. In line with this understanding, the ANOVA revealed main effects due to Key Stage for each category of cognitive and metacognitive skill. The differences in thinking across the Key Stages were far from straightforward, however, with the relationship of KS3 to KS1 and KS2 being particularly interesting. Contradicting our hypothesis that information gathering, being a lower level cognitive skill, would be used less frequently by older students, the number of student comments categorised as relating to information gathering increased across the Key Stages. That the substantive part of this difference is seen between KS2 and KS3 is clear when the relationship is graphed (Figure 15).

![Average ratings across four dependent variables](image)

**Figure 16: Means for the dependent variable “Positive Thinking” broken down by Key Stage and Gender**

These results imply that KS3 learning, even in L2L schools, is heavily dependent on the low level, more passive cognitive skills required for information gathering rather than on the more active reflective and strategic thinking facilitated by L2L approaches. In our continuing need to understand the nature of the influence of situational and structural factors on student learning through L2L this seems an important finding.

**Self concept**

Phase 4 of Learning to Learn in schools and Learning to Learn in FE use the Self Description Questionnaire (SDQ) developed by Prof Herb Marsh and his colleagues to measure elements of self concept which are relevant to learning in schools and colleges (see Technical Appendix 7). This research method was chosen because of the association reliably found between people’s sense of self efficacy and their performance, although as Marsh describes
(Marsh 2006: 25-30) there is considerable disagreement about the causal relationship between self concept and performance: on the one hand an enhanced self concept seems to produce more success, but performance also appears to impact upon self concept. What is clear, however, is that self concept and performance are linked in a virtuous cycle of improvement.

Marsh’s most recent reciprocal model, derived from the SDQ, in fact asserts that academic self concept and academic achievement develop together, reinforcing each other:

‘increases in academic self concept lead to increases in subsequent academic achievement and other desirable educational outcomes’ (Marsh 2006: 36)

However he cautions that the impact of achievement on self concept means that the gains of any innovations which attempt only to raise learners’ self concept will be short-lived.

Responses across the L2L students in 2008-09

Over the early part of the academic year (2008-09), a number of schools used the SDQ with their students. We collected and analysed data from 567 pupils, both boys and girls, who had not been previously involved in L2L. This includes, this year, a sizable number of secondary age students, among them a group of Y11 students studying at FE college.

The data show that the learners have broadly positive self concepts, though they tend to be more positive about some aspects of themselves than others. Mean responses for the various year groups show self concept decreasing as age increases for all of the subscales of the SDQ apart from ratings of relationship with parents (PA). This is to be expected given that the self concepts of children and adolescents generally decline with age. Correlation coefficients between the various scales of the SDQ were all positive, as would be expected, with most of the correlation coefficients lying between 0.3 and 0.6. The correlation of reading and peer relations is the lowest correlation this year, suggesting that learners perceive these as quite different aspects of people, without much overlap. Contrary to expectations based on wider use of the SDQ, however, and our findings in L2L last year, the correlation between mathematics and reading self concept is bigger than might be expected (0.501). Therefore, there would appear to be less tendency among these learners to identify as either numbers or words people, perhaps suggesting that they hold a less fragmented understanding of learning than is typical.

There are gender related patterns to the learners’ responses, with the primary-aged boys tending to rate themselves more positively in terms of physical appearance and abilities, peer relations and general self, but girls of this age seeing themselves as more successful readers. Strikingly, across the full sample, which includes a considerable number of secondary aged learners, the boys’ responses tended to significantly higher on all the subscales, apart from reading. This is evidence of self concept declining faster in girls than in...
Taking part in the Learning to Learn project has emphasised the need for children and teachers to seek an understanding of where the children want to learn in order to maximise learning potential in our school. In a school like Hazelbury with a diverse and challenging population of students it is essential that children are empowered to take control of their own learning and to understand this process. (Hazelbury Infant School, Enfield)

boys as they experience secondary education, despite the nationally noted tendency for girls to achieve more highly at GCSE and our finding of somewhat more evidence of metacognition among girls. This perhaps suggests differing approaches for narrowing the gap between boys’ and girls’ experiences of education, with more emphasis on learning strategies for the boys but more emphasis on self concept for the girls.

Change over the school year

Some schools administered the SDQ to the same students towards the beginning and towards the end of the school year, allowing quite precise ‘before’ and ‘after’ comparisons to be made, which were reported in case studies. In many schools, however, there was only one use of the SDQ, sometimes towards the beginning, sometimes at the end of the year. Some of these students were L2L learners, either at the beginning or towards the end of their experience of L2L, some were from comparison classes in the same school and some were students who had experienced L2L throughout the previous year. From this very mixed data, it is possible to compile a baseline 2009 dataset (described above) and a dataset of responses from children who had had a distinct L2L approach over at least two terms (and up to a maximum of nearly two years). These 246 students were similar to the baseline group in terms of gender balance and the range of year groups so it is possible to compare their mean responses with those of the baseline group. This comparison is shown in Figure 16.

Figure 17: Mean responses from the learners at the beginning and end of the year

Our understanding is that measures of self concept all tend to show declines as students get older. For example, Marsh states,

‘During pre-adolescence and early adolescence self concept declines systematically with age’ (Marsh 2006: 80)

It is gratifying therefore that SDQ responses across the L2L projects tend to be slightly higher at the end of the year. This does not hold for all the subscales, but it is notable, given the
The general tendency of self-concept measures to show a decline. The reading self-concept (RE) has a change in response over the year that is statistically significant (p<0.05). This increase in mean response from 3.912 (standard deviation=0.951) to 4.071 (standard deviation=0.852) is not a huge change (representing an effect size of 0.17), but we are more struck by the change in direction of this and some of the other subscales which buck the expected trend. It provides evidence of a consistent tendency for L2L learners to rate themselves as more confident and capable in reading than they and their peers did at the beginning of the school year before the L2L input.

Some of the L2L teachers have explicitly targeted reading and other literacy skills, while others have developed approaches which emphasise verbal communication of ideas about learning, including familiarity with the necessary vocabulary. It seems likely that the central importance given to talk and reflection would impact particularly on reading self-concept. Thus there are good reasons to suppose that this increase in reading self-concept may be linked to the L2L style of teaching and learning with which these learners have been involved throughout the year.

Increases in reading self-concept, as well as some other elements of self-concept, were found across the different year groups. The only exception to this pattern was for the Y6 children where reading self-concept was on average lower at the end of the year. This decline, however, is part of a general sharp decrease in self-confidence in the subscales relating to school learning for this year group (see Figure 17), which the experience of teachers would suggest is linked to the end of KS2 SATs.

Figure 18: Mean responses from the Year 6 learners at the beginning and end of the year

**Attainment**

Within the case studies, impacts on various indicators of achievement and attainment continue to be reported and discussed by teachers; however, it has not been as commonly reported this year as previous years (Technical Appendix 15). In addition, we conduct an analysis across the project of school level data to add to the explanatory value of any results reported by individual schools. This uses a method, developed through L2L Phase 3, of predicting school GCSE and SATs results, based on results before their involvement with L2L,
and comparing these predictions with actual results achieved during the years of the project (see Technical Appendix 8 for details).

In 2009 in just under half of the L2L secondary schools, the percentages of pupil achieving five or more GCSEs at grades A* to C were significantly higher than predicted. This pattern was repeated in the matched secondary schools, suggesting a year when GCSE results generally increased. It is notable, however, that three of the five L2L schools with GCSE results significantly above their predictions have had a long term involvement with L2L. Of the four schools which have been involved with the project since at least 2003, all but one produced GCSE results significantly above what we had predicted. The experience of other learning innovations strongly suggest that change takes time (Adey and Shayer 1994) and this continues to be corroborated by teachers involved in L2L. It is reasonable that only in schools with a long-term commitment to the project will impacts on achievement finally be seen in the results of public examinations.

This explanation of the data does not extend to the L2L primary schools, however, where there is no parallel suggestion of the schools with more experience of the project tending to exceed predictions regarding the percentage of their Year 6 students achieving level 4 or above in the KS2 SATs in English, mathematics and science. Interestingly, however, in both 2008 and 2009, slightly higher proportions of the L2L schools compared to the matched schools achieved some SATs results significantly higher than predicted. Together these two observations suggest that the influence of L2L on GCSE performance within secondary education and on SATs performance in primary schools may be quite different.

This difference could relate differing operation and style of secondary compared to primary schools, but also to the nature of the tests taken. Specifically, the validity of SATs has been questioned by educationalists (Tymms 2004), who have particular concerns over whether the increases in level 4 success in recent years relate to genuine improvements in the learning of primary school students. Related doubts that primary teachers involved in our project feel about these high stakes tests may be influencing their decisions to report less on attainment in their case studies this year.

Across the secondary and primary schools’ attainment data, the central conclusion that it seems possible to draw is that involvement in L2L in schools does not have a negative impact on public test results and may, in some cases, be associated with improvements.

### 3.2. Impact on teachers

Originally Learning to Learn was felt to be all about student outcomes; however as time has progressed impact on teachers has become equally important. The predominant finding is that unless teachers can see themselves as learners who are aware of and feel positive about their own metacognitive processes and are motivated to learn more about their practice, pedagogy and effective learning, then the impact on student outcomes will be
lessened. We are now seeing evidence of parallel processes happening at all levels of the project, what we thought was a network process is happening in classrooms and what we thought was a classroom issue is happening at project level, and this makes the impact we have documented on teachers as learners really exciting.

Affect and motivation

For some teachers within schools, the immediate impact of involvement in Learning to Learn has been one of increased motivation. There is a feeling, expressed in the comments below, that participation has been a means by which teaching practice has been refreshed and new possibilities opened up:

"It’s been really enjoyable; it’s given a different dimension to my teaching. (Duchess’ High)"

"I have thoroughly enjoyed the opportunities that Learning to Learn has offered me. It has allowed me to research aspects of my career that I feel passionate about and has helped me map out a better understanding of myself not only as a teacher but also as a researcher. (Carterhatch Primary)"

Some teachers, on the other hand, benefitted from an affirmation of long held beliefs about teaching and learning, the research process giving status to ideas that may, hitherto, have only existed as assumptions or hunches:

"The research has confirmed my belief in the importance of children taking responsibility for their learning. (Marlborough Primary)"

In particular, it seems it is the ‘permission’ to reflect upon and innovate on practice that has had the most profound effect. Teachers within the project seem to garner a renewed sense of agency as professionals from their enquiries and an increased confidence in their ability to innovate and pioneer new approaches:

"Learning is full of reflections starting with “I wonder”. Research allows us to evaluate considered risks. (Hipsburn First)"

"Although I have always been eager to ‘try out new things’, I was not always aware of the reasons why I should try them or the impact new ideas had on teaching and learning. (Perranporth Primary)"

This sense of teaching as an exploration into learning is shared by colleagues within the FE project:

"And so I see myself as a pioneer in sort of a different way and that’s good the way in which it’s a mix and match experiment. In my teaching I do find that interesting. (Dean, Lewisham College)"
FE teachers have also commented upon the liberating aspect of participation in L2L and mirror the views of their school based counterparts that the project gives warrant to their professional judgement within the framework of a prescribed curriculum.

So this is a lesson for us all to have the confidence to go along with the learners so they can help develop themselves and become much more autonomous. (Mark Young, Lewisham College)

I think that there is a space within the team to talk about Learning to Learn and work that has been done and be actively encouraging teachers to be experimenting with what they are doing based on what we know from research. (Azumah, Lewisham College)

In common with schools, there are positive repercussions in terms of the motivation of staff and the pleasure they take from their work when changes they have instigated translate to tangible benefits for the learners in their care.

In previous years when we have done it, it has been paper based and there are the usual grunts and groans but this time I noticed when I was coming back in they were coming in and saying ‘Have you been on Blackboard? Which test did you do?’. It was lovely to hear because I thought ‘They are actually doing it!’ (Michelle, Northumberland College)

Knowledge about teaching

The reflection that is triggered by engagement in research has caused some teachers within the project to examine the beliefs and assumptions upon which their practice is based.

I think that it has impacted on my teaching. As I said I do like drive things from the front and it made me let go. Like today’s lesson, I did my explanation but then it was right guys you are going to do the learning, you have all sorts of resources here to find out’. (Liskeard School and Community College)

Transforming entrenched views is recognised as one of the most difficult challenges for professional development of any kind, as it requires deep seated values to be suspended whilst new possibilities are considered. In this respect, it is the opportunity to focus on the impact that new approaches have on learning that may provide the key. Without the evidence that the process of data collection and analysis provides, such moves could potentially remain mired in an unresolved and internalised conflict of potentialities.
Learning is personal and begins from within. Even for staff who understand how they learn best, transferring this to their practice and making this impact in the classroom is hard. (Lanner Primary)

One area of pedagogy where this process has been particularly noticeable is in school teachers’ growing awareness of the importance of talk as a tool with which to mediate learning. For some, the experience of carrying out a case study has exposed part formed and loosely defined notions about discourse that have subsequently been brought more tightly into focus.

However, I have learnt that this talk needs to be a dialogue. It was only as I tried to support the children in being able to respond with breadth and depth to my instruction to reflect on the learning, that I realised my own ideas about reflection were hazy. What exactly was I expecting? (Fleecefield Primary)

....carrying out an observation using the Learning to Learn form has shown me I was missing the talk about work that was taking place in my classroom. (Hexham East First)

A major impact of this learning process, for example, has been a greater understanding on the part of teachers, as to the mechanics by which learners can be encouraged, through dialogue, to accept more responsibility for their learning. Thus, rather than simply listening to the views of children, teachers have begun to actively incorporate their comments into subsequent teaching in a process of co-inquiry with the learners.

Across all year groups, teachers commented that the use of structured talk time and routines also impacted on pupil-pupil and pupil-teacher interactions and relationships. It helped to build a strong classroom ethos of discovery and learning together. (Treloweth Primary)

By continually wanting to know more and actively finding it out I feel I become more knowledgeable about the role of a teacher and a learner. I also find that engaging in action research shows the children, at first hand, that learning never stop, and that in itself is a good message to send to the pupils in your care. (Packmoor Primary)

And I think that because the project we’ve certainly been more aware of tuning it and listening to what the children would like and how they would like it ... Asking the children what they would like on their marking ladder, what they thought was important for self assessment. And it took a lot of work to get to that point. (Wooler First)

There are signs that impact on teaching extends beyond the life of the case study itself and that the knowledge and processes involved becomes embedded in subsequent practice. Rather than a one off, successful case studies can potentially form the platform for cycles of enquiry, both formal and informal, that extend impact in terms of breadth and depth.
The final document is a good starting point for further discussion in school about the successes or otherwise over the year and possible starting points for the next project. (Weaverham Primary)

My role as a form tutor has certainly been informed by the research process, and even this year, when Learning Logs did not feature in our weekly form time routine, I still found ways to integrate L2L-style activities and therefore keep their skills intact. (Tytherington High)

As a result I can now see how important talking about learning is and I will be spending more time, next year with my new class, talking about what is learning and how to be a good learner at the beginning of the term so this can be constantly fed in to the work throughout the year. (Lavender Primary)

A developing notion of a genuine discourse with learners is also emerging from the research carried out in the two colleges. The comments below suggest that considerable insight into the role dialogue plays in mediating learning for students has been garnered- this notwithstanding the fact that these teachers already work in an environment that explicitly and publically expounds the importance of the ‘learner voice’. It seems that, in the colleges, L2L has provided an opportunity for staff to unpick the principles underpinning key concepts such as personalised learning, and construct a meaningful framework via which such principles can be translated into practice.

I've had ideas of targets, the ideas that I've got of where students can go was one thing. And I suppose even though it's been a process of negotiation, I've tended to propose those targets to students and that's .....and I guess that hasn't worked for that reason (Jason, Lewisham College)

My ILPs are certainly more user friendly in that they can take them and know what it is all about whereas before, those plans were for our [the teachers'] benefit. (Helen, Northumberland College)

Again, there are signs that some practitioner’s view of what it means to be a teacher in the wider sense has been challenged by involvement in learning to learn. The comments below suggest a change in perspective from research used to inform teaching, to one centred around research as an integral part of the students’ experience.

The main change in my thinking since the residential has been to try to reconcile the two ideas of collecting data and running activities which are of benefit to the students. (Mo, Lewisham College)
Understanding learning

A key impact in some schools, in terms of understanding learning, has been a greater awareness of the potential for children to control and manage their own learning.

Yes I think that it makes you more aware that they have their own ideas and you don’t have to fill them up, they are not empty vessels, which has sometimes been thought in the past, especially by the powers that be. (Hipsburn First)

For some, on the other hand, their experience has been quite the reverse in that conversations with learners revealed a lack of agency that had, hitherto, gone largely undetected by teachers.

The frightening thing was that for the majority of students across the whole school, learning is something that is passive; that they have had done to the; that they are not actually involved in. (Liskeard School and Community College)

In both instances, involvement in L2L has provided an insight for teachers into how their practice might be better tuned to actual rather than perceived needs and wants.

I think by actually interviewing these children, by giving them questions, by getting the data, it really focuses you on the impact, I think. (Archbishop Benson Primary)

I think that process made it very interesting, and also made it very relevant to the children and to us. We learned a lot, I’ve certainly learned a lot from the children’s suggestions and how they felt about self-assessment using the tool. (Wooler First)

Comments from FE teachers also indicate a feeling that the formalised engagement with learners experienced during the research process has revealed disparities between what staff had assumed to be the case and the realities of students’ experiences of learning. For example, the comment below describes how the assumed importance of measurability as a target setting criterion was, to an extent, unseated by the expressed views of learners.

I found that nobody saw their targets as that they necessarily had to be measureable. That didn’t seem to be an important part of them for anyone. (Jason, Lewisham College)

Research by a colleague within the same college also revealed disparities in the identities different types of learners bring with them, a finding that has significance given the comparatively wide range of students that characterises student intake in FE. In this case, L2L has afforded the chance to explore subgroups within a population and examine how provision might be better tailored to cater for each.

Indeed, and I seem to have noticed there was definitely a difference between some of the younger learners and some of the older learners, due to their experience and their prior experience in education and what they’d known and seen before. So their views tended to differ. (Dean, Lewisham College)
Table 12: How the 5Rs were related differently to teachers and learners

<table>
<thead>
<tr>
<th>How the 5Rs relate to learners</th>
<th>Shared concepts</th>
<th>How the 5Rs relate to teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resourcefulness</td>
<td>More responsive than analytical, present moment creative thinking</td>
<td>An ethical requirement that teachers’ practice reflects the concerns of learners</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Willingness to try and think for themselves rather than rely on teacher guidance</td>
<td>Self-organisation, maturity, ethics</td>
</tr>
<tr>
<td>Readiness</td>
<td>Confidence in ability and the motivation learn</td>
<td>An emotional state looking forward</td>
</tr>
<tr>
<td>Resilience</td>
<td>Can maintain motivation in the face of setbacks</td>
<td>Individual and personal quality</td>
</tr>
<tr>
<td>Reflectiveness</td>
<td>Seeing learning as a series of connected, not isolated experiences</td>
<td>Looking back, developing sense of ‘self as learner</td>
</tr>
</tbody>
</table>

These comments reflect the findings from the baseline interviews relating to how FE teachers relate the 5Rs differently to themselves and to the learners (see Table 12 and Technical Appendix 2). The first, relating to targets, again suggests a notion of student ‘responsibility’ as one centred on a willingness to take on the task of judging relevance and importance in terms of what counts in learning. The second, on the other hand, expresses a more teacher centred notion of responsibility, this time conceptualised as an ethical requirement to take into account and respond to the differing needs of individual students. Through making such perspectives more explicit to students, it may be possible to close the expectation gap, particularly around learner responsibility, that still seems to persist.

For some practitioners, insights into tried and tested approaches proved equally valuable in informing approaches intended to serve a personalisation agenda. In the example given below, the teacher is able to identify the process by which an established method has achieved its effect, thus making it potentially more easily understood and adopted by colleagues in the same team.

*The visual element allowed them to quickly assess the level of their achievement before attending to the marks and written comments. In this sense, the stickers were successful in drawing the attention of learners to the written comments and gave them status as pointers for future action. (Kevin, Northumberland College)*

**Collegiality**

There is some evidence that the Learning to Learn project has extended its scope within some schools.

*My involvement in the project has awakened interest in colleagues. They have been keen to engage in conversation about my project. They have also been trialling new things themselves. One colleague has been testing different methods of home learning and reflecting on the quantity and quality of work returned. (Perranporth)*

Disappointingly, for reasons discussed in the following section, evidence of this type of impact has been more limited than we would have hoped. The comments below, however, suggest that a growing sense of collegiality across the project has been a significant outcome for several teachers.
I think it is interesting because when you are at school in between INSET and things like that it is just you motivating yourself to focus on your research. When you go to things it then spurs things on another level. (St Meriadoc Infants)

The first time round was one of the best experiences ever in my teaching career and still is. The things that made me think I am not alone here, it was a tremendous experience and it seems to have grown to include people who aren’t so eccentric in their thinking and is still going strong... (Wooler First)

Alongside this has been the emergence of distinct interest groups within the L2L community, each with their own agenda and mutual areas of interest. Building on these connections through future INSETs and residential will, we hope, further consolidate the shared sense of L2L identity that has evolved to date.

When we went to the residential it would have been really nice to have been able to have networked a little bit more, to maybe group with people who were doing similar projects. We could have discussed what we were doing and bounced ideas off each other. (Amble First)

That these interest groups are not necessarily coalescing on institutional grounds is confirmed by the quote below from a teacher at Northumberland College. A strength of L2L, it would seem, is the ability of research into learning to bring to the surface commonalities and potential synergies across phases that would, otherwise, have remained unexplored.

I think that going to the residential and seeing all the approaches that teachers were using in schools was really excellent because it opened our minds up to lots of other ideas. (Theresa, Northumberland College)

Unlike the schools project, there seems to be more evidence of increased collegiality within both colleges as a result of producing case studies for Learning to Learn. At Northumberland College there is a growing sense of a collective purpose amongst the participating teachers that is having an impact on the way that they support the development of each other’s practice. The comments below suggest that the resulting benefits are centred around a feeling of ‘safety in numbers’ when it comes to innovation coupled with a recognition of the need for mutually understood language for discussing practice that cuts across different schools and subject areas.

There wasn’t much liaison going on between people. Getting to know Kevin better helped because we did the Step Up to level three maths with him and just seeing how he acted in the classroom has given me confidence to do things more the way that I would like to do them rather than thinking ‘Is this going to be frowned upon?’ As a curriculum area we are sharing much more. (Helen, Northumberland College)
This has spread to the whole team so, hopefully, the whole team should get better results. (Michelle, Northumberland College)

It would be excellent if we had that common language across the college, so that your support staff, the teachers and the learners can all have the same dialogue. (Theresa, Northumberland College)

The emergence of an intra-organisational discourse about the nature of teaching and learning has also occurred at Lewisham College. For example, a study into the impact of internal inspection has opened up a debate around what ‘quality’ is and how it can usefully be measured. As a result, a process possibly perceived as serving institutional goals, can be further promoted as a means by which the learning of both staff and students is enhanced.

The interviews held with teachers highlighted the different experiences and attitude towards observation and the activities that promote improvement. For some, the absence of a subject specialist observer devalued the process, whereas others argued, from their own experiences of mentoring, that it was not necessary to make judgements about learning. Some argued for the grading element to be removed because it dominated the process. (Jayne, Lewisham College)

This research has extended our focus on internal inspection beyond an instrument for quality assurance towards a tool for learning. (Jayne, Lewisham College)

Similarly, research carried out as a team within the Skills for Life department was successful in engendering a shared view as to the factors impacting on learners’ persistence in completing course, a move that is reported to have improved retention in this part of the college.

My central hypothesis: developing awareness within the team of learner resilience and developing some practical activities to engender this would have a positive wash back impact upon learner retention. (Azuma, Lewisham College)

A comment from one practitioner hints at a possible constraint on dissemination of research findings within colleges and schools. It may be that a lack of confidence in findings that are not yet proven or fully formed could lead teachers to hide their light under a bush until such a time as a finished product can be presented to colleagues not currently involved in L2L.

Well, I mean at the moment I’m not sure I have anything to disseminate. It’s revolutionised my understanding of target setting, but I don’t know that I’ve got a package as such that I can hand people and say, this is how things need to be. (Jason, Lewisham College)

Impact on staff outside the project

The chart below (figure 19) shows that the majority of school based practitioners canvassed who are not currently involved in L2L consider it to be of potential benefit to their practice and to their learners. This begs a question, therefore, as to why recruitment to the project has not been as wide as we might have hoped given that, in general terms, it is viewed in such a positive light. The answer may lie in two case studies that describe projects extending across entire schools.
In the case of Lanner Primary (Cornwall), an attempt to establish a whole school L2L ethos encountered difficulties centred on the different perceptions staff had of the project as it unfolded.

*The project highlights the importance of the perceptions of people from different perspectives and demonstrates how peoples’ expectations can impact on their perceptions of the success of the project.* (Lanner Primary)

In particular, it was found that clarity in terms of the intent and purpose of the project was essential if staff were to remain motivated to participate and engage in the development of the approach in school.

*A tension began to be expressed here about their perception of conflicting demands being placed upon staff, between the curriculum and challenge based work. From a senior management perspective the latter could replace the former, but this message was somehow never quite received or believed by the staff!* (Lanner Primary)

In this case, the final results proved disappointing in terms of staff completion of the challenge plans and adoption of the proposed methods in their classroom practice. However this was seemingly contradicted by the perceptions of pupils, who were more positive about the experience.

*It was surprising to find a more encouraging set of replies from the pupil questionnaires in terms of this projects desired outcomes in terms of the kind of experience they got in class* (Lanner Primary)

The researchers concluded that a system of co-coaching would have acted to mediate the projects aims more efficiently and could have helped to make apparent the impact on pupil learning that was occurring as a result.

*The co-coaching element of the research did not take place at all. This could be due to the school staff circumstances, the rigors of a summer term, or (more likely) down to a lack of confidence about their own planning and delivery and teachers seeing the research elements of the project as additional extras. The application of co-coaching could hugely enhance a research project like this.* (Lanner Primary)

In contrast, Treloweth Primary School used peer coaching to support their whole school initiative to develop speaking and listening in science lessons.
The partner teacher was asked to observe as part of the peer coaching and she recorded the children’s discussions. The TA recorded levels of engagement again to provide more information about the attention of the children. This comparison took place the following Science lesson during ‘Peer Observation’ time. (Treloweth)

In this instance, the effect of the pedagogical innovation on learning was highlighted and analysed through coaching conversations that, in and of themselves, gave the project warrant in terms of bringing its beneficial effects into focus. As a result, some teachers involved in the project became committed to the ends pursued through the initial research cycle beyond the life span of the case study itself.

Speaking and listening clearly has the potential to have a major impact across the curriculum and we need to find and develop ways to be equally creative with this in all areas if we are to provide our pupils with the skills they need to become effective life-long learners. (Year 6 teacher, Treloweth Primary)

L2L has had an impact on my practice as a result of the networking opportunities. I see L2L teachers as being more confident, more willing to try new ideas, more able to ask for help and more willing to take risks. Meeting colleagues through L2L, as well as on other occasions, has allowed me to share ideas and resources, building my confidence as a teacher. In particular, L2L provided the opportunity to know college colleagues from other disciplines, who I may not otherwise have got to know. This has developed my knowledge of other areas, increasing my confidence and expertise with key skills students from a wider range of courses and areas. (Helen, Northumberland College)

### 3.3. Impact on Schools and Colleges

Learning to Learn has had a demonstrable impact on schools and colleges in three main ways:

- They have become more resilient learning organisations, as demonstrated by their interactions with Ofsted
- Staff learning has undergone a cultural change as learning organisations, as demonstrated in case studies and
- Being in Learning to Learn has opened schools and colleges up to a wider range of ideas and perspectives, as demonstrated by the network analysis from the Residential.

### Resilience and Ofsted

In last year’s report we reflected on the impact of change and assessment on schools, highlighting the stress that schools as learning communities feel (Brimblecombe et al. 1995; Day and Smethem 2009). However, analysis of the case studies and our ongoing conversations with teachers began to suggest that in Learning to Learn something was subtly different. Inspections themselves still elicited nerves and tension but they did not, on the whole, shape the normal practice of our teachers, who display a degree of resilience in the face of feedback. This mastery orientation is shown in the way in which inspection reports tended to be a resource for identifying formative jumping off points for new enquiry projects or reflected upon as a welcome but not necessary validation of successful interventions. (The analysis is in Technical Appendix 13 and is summarised in Figure 20 below)
Cultural change

In most cases, only one or two teachers from each school are actively involved in the project and a small team (relative to the size of the organisation) from each college. We have attempted to gauge the impact of L2L on staff who do not attend INSETs and Residentials by administering a questionnaire (see Technical Appendix 6c) and the findings from schools appear to show two key things: that recognition of L2L is spreading and that other staff in schools do on the whole believe that there is a positive impact on learners, teachers and school culture. Learning to Learn is not a ‘niche’ activity, therefore, but involvement of some staff can have an impact across a staff team. In some cases, the whole school ethos is impacted by Learning to Learn, leaving a trace in key documents, the arrangement and adornment of buildings and the discourse in the school (as reported in the Year One, Phase 4 report, Wall et al 2009).

![Graph showing impact of L2L on learners, teachers, and whole school](image)

**Figure 21: Staff not involved in L2L assess L2L impact**

This shift in learning culture is most evident in case studies which have looked at professional learning. For example, at Oakthorpe Primary School where the focus has been
on developing the questioning skills of Teaching Assistants (TAs), there have been a series of linked outcomes:

**TAs feel more confident and have a structure for working with children in groups.** In addition, they are now able to work with a group of children, monitoring and supporting every child.

**TAs encouraged children to talk to their partner and discuss problems.** Children were also encouraged to answer in full sentences, using the correct Mathematical vocabulary.

**TAs now feel more able to feedback to teachers about children’s progress and class teachers have commented on this.**

**TAs now feel more secure and confident with a sense of direction; they know now that what they are doing is right.** TAs are also confident that they would be able to pass on their new skills to others, for example, visitors to class. Class teachers commented that TAs are now more pro-active and willing to make suggestions, even taking part in planning sessions. (Oakthorpe Primary)

The case study led by Theresa Thornton at Northumberland College had a similar focus on the development of self-awareness in the pedagogue as the foundation for better learning experiences for students:

*[We aimed] to facilitate a learning journey which allowed support staff from the Learners with Difficulties and Disabilities (LDD) Department to reflect on previous learning experiences, leading to discussions regarding what they identified as their personal successes and failures. Learning styles, emotions, feelings and environments were examined in the hope of building awareness of personal learning. This led to understanding how to become resourceful in their learning, drawing information from diverse sources to support their learning preferences and creating learning resilience. During the research and discussions new understanding and readiness was achieved. (Theresa, Northumberland College)*

Jayne Morgan at Lewisham College has taken the internal inspection process - something that could be seen as either mundane or overly managerial - and has made it a Learning to Learn experience:

*This research has extended our focus on internal inspection beyond an instrument for quality assurance towards a tool for learning. The interviews held with teachers highlighted the different experiences and attitude towards observation and the activities that promote improvement.

Where improvement was evident, teachers attributed this to good quality, constructive feedback and their personal drive to meeting improvement targets. Some teachers placed great value on self reflection and gaining feedback from learners, as well as consulting colleagues. Other teachers felt strongly that their practice had developed from observing and mentoring new teachers. In explaining teaching techniques to others, they firstly had to critically evaluate their own approaches.

The Learning to Learn foci of ‘responsibility’, ‘resourcefulness’, ‘resilience’ and ‘reflectiveness’ emerged strongly through the qualitative research with teachers. Interviews confirmed that those teachers that are reflective and receptive to critical evaluative feedback from observers, peers and learners are focused on continuously learning about and improving their practice. In addition, teachers that are resourceful, independently seek out best practice from teachers around them as well as staff development opportunities and resources. Teachers that were confident in their practice were more receptive to constructive criticism and willing to try out new ideas. These teachers felt more able to take risks in the classroom, thus demonstrating ‘resilience’. (Jayne, Lewisham College)*

At Lanner Primary School the project in Year 2 was to look at how the whole staff learned together by devolving the organisation of CPD to the staff team. The process of identifying
needs, discussing approaches and seeing the whole year as a collaborative learning journey has added to the school’s resilience in the face of considerable challenge:

_Involvement in this L2L research enabled school staff to keep at the forefront of learning developments and stimulated staff to continue to develop their own thoughts and practice about learning. Devising an individualised training programme organically through shared planning was an exciting and thought provoking experience. Our challenge was to create new personal links and bonds between staff that were sufficiently resilient to sustain people through the rigour of the project, school year and beyond._ (Lanner Primary)

**A wider network**

In Phase 3 of Learning to Learn in Schools we grappled with the problem of how to organise and facilitate the learning network in the project. Local networks, based on pre-existing relationships or shared contexts tended to be strong and to be well-managed by dedicated and charismatic co-ordinators (Hargreaves 2004). However, we were aware that at Residential conferences, we tended to have three clusters, who were prepared to work together cordially but who were not forming strong learning partnerships. We tried to impose structural groupings based on use of the 5Rs or overarching thematic links, or by the L2L approaches that were being used. We structured activities around these groups and we tried informal matchmaking: “You must talk to so and so, he’s using formative assessment in a really interesting way…” with a very limited level of success. What began slowly to dawn upon us is that, contrary to the spirit of individual inquiry in L2L, we were abrogating an important part of the process: we were deciding what teachers would find important or interesting about each other, rather than letting them decide that for themselves. Meanwhile, a part of a parallel process, more and more of the Residential time was being given over to the teachers to talk about their work together, rather than inviting experts and gurus to tell the teachers something, we were privileging their own data. The organisation of the Residential became much simpler therefore: teachers were randomly assigned to view others present, presentation groups were randomly generated without attempts to match or theme. All posters were on display throughout the two days, so individual learning and networking could continue. As we have described in detail in Technical Appendix 1, we tracked the influence of individual posters depicting case study research on all the participants at the Residential. By using Nvivo software we have been able do diagrammatically represent both the impact of each particular piece of research (figure 22) and the patterns of interest shown by each individual participant (figure 23).
What the dataset of diagrams reveals is that the influence of inquiries is much broader than the immediate and obvious: primary schools in rural areas have important things to pass on to primary colleagues in urban areas, to secondary colleagues and to teachers in further and higher education. Individual participants in the Residential find inspiration from a wide variety of sources and while the impact of seeing a presentation is significant, it is not overwhelming. More than half of participants voted for a poster that they had not seen presented but had either browsed themselves, or had heard about from colleagues. The degree of ‘match’ between the teacher (phase, L2L approach, geographical and social
context) and the kinds of things voted for was extremely unpredictable. We cannot guess what will interest and excite teachers and the evidence increasingly compels us to trust them and not to try to impose patterns from the outside. (Initial data combing from the 2010 Residential confirms these findings. Detailed analysis will appear in next year’s report)

Our network has become vibrant: learning conversations continuing via phone and email, school visits and joint learning projects have all blossomed in the last year. These wonderful, organic developments could not have been engineered, nor would many of them have been possible in a traditional network, since the partnership across ages, phases, sectors and regions does not exist elsewhere. Networks traditionally are about matching: it is supposed to make ‘delivery’ easier, somewhat like ability grouping (Hallam et al. 2002). If however, what you are learning about is complex, shifting and subject to enquiry, there is a powerful argument that suggests that the more diverse the group, the better.

3.4. Concluding thoughts on impact

The data relating to impact collected this year is varied, suggesting a complex picture that can only be interpreted in the context of other information about the development of the Learning to Learn projects. Firstly it must be remembered that a wide and diverse range of learners are being considered, aged from 3 to adult, in different roles in each institution and different sectors of the education system, with very different experiences of education. Our interviews with students and teachers have made clear this diversity and pointed to some of the challenges of developing L2L. However, data collected through interview and other methods also reveal consistencies in reactions to the L2L approaches to learning.

There is evidence of L2L approaches changing understandings of learning, facilitating the development of metacognition and improving academic self concepts. It seems clear that such individual changes should produce changes in attainment. Yet our attempts to detect any improvements in aggregated attainment measured at school level through published examination results have been inconclusive. Evidence from the Pupil View Templates and the SDQ point to problems with the nature of assessment both in secondary schools and at the end of KS2, but it still seems reasonable to look for changes associated with L2L in published attainment figures.

The key would seem to be to focus our approach and look for changes in examination results related to school-level factors affecting the development and likely influence of L2L approaches, particularly with the examined cohort of students. The findings which in some cases link the time involved with the project to changes in student thinking and attainment are suggestive and need to be investigated further. The tools we are using to assess self concept and metacognition, qualities of students which are associated with successful learning.
should help us in understanding the mediating factors that appear to lie between changes in classroom talk about learning and changes in public examination performance.

The project has always been committed to the idea that teacher learning is best supported by collaborative structures (Cordingley et al. 2003) and key to this is teacher enquiry into effective learning. One of the great successes of the past year has been the impact of the redesigned residential in which the learning from individual teachers’ inquiries has been privileged over ‘expertise’ from outside the project. This has meant increased confidence and ownership of the outputs by teachers as part of the project network and the organic development of learning relationships across geographical and sector boundaries. The introduction of the FE Project and a new cohort of teachers to the L2L network has had a number of impacts along with increasing and diversifying current data sets. The potentially divergent experiences and understandings of Learning to Learn that these teachers represent was greeted slightly nervously at first by some school teachers, but the evidence presented here would suggest that this dissonance has been a good thing and moved the project thinking forward. The FE teachers have been unanimously positive about their inclusion in a network that includes schools and say this is a rarity. The analysis showing the professional learning that can occur as a result of this type of inclusive network has major implications regarding the makeup and range of professional communities in the future.

An area of thinking that has been particularly advantaged by the wider group is around the use of the 5R disposition framework. In previous reports we have discussed Carr and Claxton’s (2002) assertions that dispositions may be task based and have shown broad agreement to these ideas. However with the FE teachers’ definitions of the Rs and their work to incorporate them into their own L2L innovations we have some indication they may have different associations and emphasis in different sectors and therefore with relation to different types of student learning. Indeed they may look different when considering what teacher and student learning looks like and the symbiotic relationship between the disposition profiles of two interacting individuals would seem to be important.

A particular prominence has been given to individuals’ interpretations of learning revealing a theme which underpins many aspects of the project. Work around what learning means to teachers and students has been codified with other studies and begins to show a bigger overlap between understandings of school and ideal learning than is seen elsewhere (Hadar 2009); although differences are also apparent between perspectives of students in different sectors and subjects. This finding links with analysis showing many learners have complex understandings of progression in learning. Students who have experienced L2L innovations are more aware of their learning trajectory and see themselves as key in making decisions along the way, something Yair (2009) felt happened rarely for the positive.

The individual development and awareness that contributes to self-actualisation (Marton et al. 1993) has been shown to be closely linked to what teachers called learning confidence. It is also associated with learning dispositions and to Coffield’s (2002) idea of critical intelligence. As this year has
progressed, it is an idea that we have actively connected to metacognitive skilfulness (Flavell 1977). This stretches across all learning represented in the project, student and teachers, and is becoming widely considered as an important indicator of successful lifelong learning. Indeed there does seem to be initial evidence that length of time in the project has a positive impact on metacognitive development. This is why we have put metacognition as one of the key pieces of the L2L jigsaw.

The way in which teachers scaffold student development of metacognitive knowledge and skilfulness and provide tools, language and scenarios to privilege and expand this understanding does appear to be significant in teachers own views and in the students’ reflections. Crucial to this is teachers own metacognitive skilfulness in articulating the dispositions and skills needed across contexts and moving beyond concrete examples to see potential: if teachers can do this, can see where things join up, then it is crucial that this is exemplified in conversations they have with students and each other.
4. What are the features of a Learning to Learn practice?

This chapter explores the theory and practice behind how Learning to Learning is being implemented in the classroom in schools and colleges across the project. We have discussed the three important facets we believe underpin L2L: a cyclical process of enquiry focused on privileging metacognitive approaches and thinking about learning shared across a community of fellow enquirers. We have also provided evidence of how we believe L2L is impacting on students, teachers and organisations and how parallel processes can be observed at all levels of the project. We now want to explore the common practice and the common thinking behind that practice. We have organised this around the four aspects on the outer circle of the diagram on page 17.

4.1. Talk for learning (Pedagogy)

There is continuing evidence from the project case studies to support our notion that the IRE pattern of teacher-learner interaction (Mehan 1978) is not, in itself, a limiter on the quality of discourse in the classroom. Key to this seems to be the extent to which the stages in dialogue (initiation, response, evaluation) interact, with comments building cumulatively as a conversation progresses. Recitation IRE exchanges, where the teacher starts off with a question for which there is a required ‘right answer’ have been described as following a script towards a pre-prepared answer (Tharp and Gallimore 1988). Talk structured along these lines places control of relevance and learners’ decisions firmly in the hands of the teacher and leads to competitive bidding on the part of students striving to produce the required response. Dialogic IRE discourse, on the other hand, is geared to recruiting the views of learners and is characterised by ‘authentic questions’ that have no pre-specified answer (Nystrand et al. 2002). In this sense, there is no ‘script’ for classroom exchanges. Instead of the talk chasing a given ‘truth’, it is used, instead, to shape and form a response that reflects the considered opinion of the class as a collective. In order to achieve this, teachers engineer ‘uptake’ of learner responses, by using the part formed contributions they receive as the basis for new questions that probe understanding more deeply. This is very much the philosophy behind Oakthorpe’s work in developing the questioning skills of TAs in maths lessons. In this case Bloom’s taxonomy was used as a framework for the development of questions that guide their interaction with children, allowing the teaching assistants to move from lower/higher order prompts as they see fit. Over time, the ‘crib sheets’ on which the prompts were recorded became redundant and the conversations, as a result, became more fluent. Using a ‘bounce back’ technique to encourage children to rethink and develop tentative comments was successful in garnering comments that became more detailed, longer and more reflective. Alongside this, the TAs developed an increased ability to wait for responses, rather than jump in to move the conversation forward, with the result that pupils took more responsibility for monitoring the quality of their answers.

It was clear for the findings that both groups that the existing induction process was not was equipping both level 2 and level 3 learners with the skills set required to progress onto the main body of the course. Induction needed to be longer and more “art” centred and to include more active learning. Stronger emphasis needs to be placed on transparency of information regarding assessment planning and scheduling in order to reduce student anxiety and to allow learners from both cohorts to take more responsibility for the management of their own assessment. (Tanya and Mark, Lewisham College)

Under this model of discourse talk is not used as a mirror through which a learner’s level of understanding can be observed and monitored but, instead, is a tool by which thinking and understanding can be shaped and developed. Roth (2009) describes a developmental process by which a person’s initial thoughts start out as ill defined and vague, and are then are brought into focus by dialogue, in much the same way as a chisel is used to turn stone into a sculpture. Unlike recitation patterns of
teacher–learner discourse, the aim is not to test the level of thought but to steer it to more complex and sophisticated levels. However, implicit in this is the need for a ‘guiding force’ that prevents open ended questioning turning into a chaotic ‘pseudo enquiry’ (Alexander 2005). In an analysis of studies into dialogic interaction, Reznitskaya et al. (2009) describe an example of whole class discussions with children, centred around dilemmas in shared narratives (Anderson et al. 1998). In this instance, training students in ‘collaborative reasoning’ resulted in more consecutive responses by students in whole class discussions (45% as opposed to 6% during recitation style lessons), but the arguments produced were observed to be weak in that warrants, premises and conclusions were rarely provided. The original study concluded that, when the comments are viewed in context (i.e. in the light of the story or of previous discussions) the arguments could be considered as ‘informative as they needed to be’. However, an alternative explanation could be that, in the early stages at least, free and open discussion can lead to a rudderless experience unless the comments are linked together by a teacher in a way that is explicit and clear. The experience of staff at St. Meriadoc’s school in using philosophical discussion to extend children’s vocabulary in mathematics is a case in point. As with the above study, a story was used as the focus for the ensuing dialogue. However, unlike the study described above, the initiating questions came from the children, not the teacher, and thus had more potential to provoke a reasoned response. In this instance, authority over the course of the discussion was not distributed equally between learners and practitioner, but was in the hands of a teacher who was able to ‘keep the children on track’ and ‘clarify’ where necessary. Most significantly, this teacher was able to interject with supplementary questions, based on what had been said so far, in order to stimulate further discussion. Sadly, in this instance the research process and the methods used were insufficient to provide evidence of a measurable increase in students’ understanding and application of mathematical language. However it does serve to illustrate Alexander’s (2001) point that productive dialogue can be distinguished from a mere conversation by the strategic use of questioning in the pursuit of an enquiry.

The importance for talk of genuine pupil led enquiry is echoed by Skidmore (2006):

‘What matters most is not simply the frequency of particular exchange structures in classroom discourse but how far students are treated as active epistemic agents, i.e. participants in the production of their own knowledge.’ P.505

In practice, this would translate to a teaching sequence whereby a pre planned theme would be introduced as a context for the ensuing discussion. To some extent, therefore, ‘relevance’ and some loose parameters for discourse have been imposed, but once the students’ investigation has started, as with the St. Meriadoc example, the teacher waits in the eaves prepared to fulfil a responsive or consultative role as and when required. In this context the evaluations offered by the teacher don’t relate simply to the quality of a given answer but provide a commentary on usefulness of reasoning being applied in pursuit of a solution. The key to productive teacher-student dialogue would therefore seem to lie in the ability of a teacher to create a context within which manageable discord can flourish. Using challenge, suggestions and justifications, a practitioner is able, in this way to use exchanges to co-construct new knowledge that relates to the students’ preferred direction for learning, but also prompts them towards new ideas that may not be part of their habitual repertoire.

Working with my form on Learning Logs was an insight into their learning methods and I found that I learnt a lot as well. That continued even afterwards, as I actually kept incorporating ideas I’d got from the Logs into my teaching. You can see the positive attitude in that year group – they are a bright, motivated year who are actually keen to learn. I don’t know if that’s down to the Learning Logs, or a strong form tutor team, or a mixture of both, but it’s really made a difference to them and to us as teachers. (Teacher at Tytherington High School, Cheshire)
This type of approach is evident in the following transcript from a video of a Year 3 history lesson taken at Hipsburn First School.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Can you tell me about this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupil 1</td>
<td>That’s what the baths look like</td>
</tr>
<tr>
<td>Teacher</td>
<td>And why do they go there?</td>
</tr>
<tr>
<td>Pupil 1</td>
<td>To... um... to... um...</td>
</tr>
<tr>
<td>Teacher</td>
<td>Obviously to wash...</td>
</tr>
<tr>
<td>Pupil 1</td>
<td>Yes</td>
</tr>
<tr>
<td>Teacher</td>
<td>Did they go for any other reason?</td>
</tr>
<tr>
<td>Pupil 1</td>
<td>Um probably if they wanted to meet people</td>
</tr>
<tr>
<td>Pupil 2</td>
<td>To meet other people romantically</td>
</tr>
<tr>
<td>Teacher</td>
<td>Romantically!</td>
</tr>
<tr>
<td>Pupil 2</td>
<td>Yes, because it said, it said so [missing text] when people want to get married.</td>
</tr>
<tr>
<td>Teacher</td>
<td>So like a date?</td>
</tr>
<tr>
<td>Pupil 2</td>
<td>Yes</td>
</tr>
</tbody>
</table>

In terms of the overarching theme for the exchange, these have been preset by the teacher and focus on Roman baths and their function within a community. The exchange starts with an ‘authentic’ question in that pupil 1 is free to concentrate on any part of the picture he so chooses. His initial response is superficial and doesn’t relate to the planned focus for the lesson so the teacher asks a follow up question that steers pupil 1 towards a more ‘fruitful’ line of reasoning. At this juncture, it seems that the exchange is following that of a recitation script in that it appears from the next few turns that the teacher is waiting for a specific answer. If this is so, the teacher’s preferred line of reasoning is abruptly derailed by pupil 2’s suggestion ‘To meet other people romantically’. At this juncture, the conversation becomes dialogic in that the teacher’s echo- ‘Romantically!’- shows uptake of an idea that isn’t necessarily relevant and requires an elaboration on the part of pupil 2 to justify its conclusion. Pupil 2 uses a previously seen text as a warrant and the teacher clarifies the point being made, possibly for the benefit of pupil 1. An EPPI review (Bennett et al. 2004) of small group discussions in science teaching of students aged 11-18 concluded that internal conflict within groups, where a diversity of understanding are represented, result in a significant improvement of learners’ understanding of the evidence being discussed. From this perspective, the dissonance induced by pupil 2’s comments, far from derailing the conversation, was instrumental in the learning of pupil 1 and possibly the teacher as well.

It is on this basis that Gijlers et al. (2009) reason that collaborative decision making and inquiry naturally go hand in hand in the production of discourse that serves to enhance learning and understanding. They reason that working in this way on a joint project naturally requires partners to explain and justify their plans so that others within the group can understand and incorporate differing views into collective action. This can be seen in the exchange below, between three pupils at Hipsburn First School who are investigating Hadrian’s wall. The question of pupil 2 (Why?) causes dissonance in that it introduces a concept (it’s steep) that has yet to be clarified. The suggestion this elicits

![Theresa, Northumberland College](image)
from pupil 3, possibly retrieved from a previous encounter, is then taken up by pupil 2 in the form of an explanation that builds on the earlier comment and elaborates on the strategic nature of the wall’s shape.

Pupil 1: Joseph, do you know about Hadrian’s Wall?
Pupil 2: It’s flat on top and there is Hadrian’s Wall [demonstrating with hands on top] and then it’s steep... why?
Pupil 3: I don’t know
Pupil 2: OK, then because um...
Pupil 3: Maybe I do know...
Pupil 2: Why?
Pupil 3: Yes I do know, its steep so that then other people couldn’t get up it
Pupil 2: Yes it made it harder to attack [gives P3 round of applause]

Listening to the contributions of others therefore is not sufficient in itself. It is acting on the contributions of others and the corresponding adjustment of viewpoint that is theorised to result in new learning. Christie et al. (2009) suggest that training of learners is required in order that they have the skills and attributes not simply to work individually within a group (collocation) but to work as part of a group towards a shared aim (collaboration). Their wide ranging study, spanning 24 Scottish Schools and focussed on the teaching of two science units, again points to the importance of a guiding stance as opposed to a directorial stance by teachers at the initiation of a learning sequence. This, coupled with explicit training in group work led to improvements in the frequency with which children exchanged propositions, explanations and instructions with peers during the course of the group activities. Likewise, the case study from Duchess’ High School, investigating the effect of collaborative learning on post 16 students, included a training component whereby cards were used to scaffold the ground rules for talk and familiarise students with the protocols for collaborative dialogue. Initially, a lack of relevant skills meant that often ideas contributed by students were not examined critically or challenged. The pervading ethos was that contributions should be treated equally and accepted without question, an observation also made by Mercer et al. (1999) who describe ‘cumulative’ talk, whereby participants share and build knowledge in an uncritical way as a default mode for children’s discourse in groups. Quotes from Duchess pupils suggest that this has its roots in their inability to manage and express discordant views and that without the necessary tools, the research tasks probably would have ended in dissatisfaction with the process and a lack of engagement.

‘Hard to criticise people you know, prompts helped’ (Student, Duchess’ High school)

Interestingly, the Duchess case study corroborated the findings of Gijlers et al. (2009) in that producing concept maps of the ideas being discussed seemed to improve the degree to which commonalities could be established between the disparate views expressed within a group. In the latter study, the authors concluded that producing a visual representation of understanding in and of itself encouraged ‘integration orientated consensus building’, resulting in an increased incidence of elaboration, clarification and explanation in the ensuing conversation. This seems to have been a factor in the findings of colleagues at King Edward VI School, whose investigation focused on group
work in KS3 and KS4 geography lessons. Of a four lesson sequence, two lessons required the groups to collaborate in the production of a visual representation of the shared understanding of the group: one required that they assemble cards in a sequence in order to solve a mystery, and; the final lesson asked groups to produce a poster illustrating everything that they had learnt. As a result it was felt that

Both the teachers and learners involved in this project developed a deeper understanding of their own approach and response to group work within the geography classroom. (King Edward VI High School)

Likewise a study into collaborative learning at Marlborough employed a role play technique (Mantle of the Expert), whereby Year 6 children formed animation companies complete with elected MDs, to focus talk on the joint production of multi-modal presentations to the rest of the class. Despite the potential challenges posed in terms of behaviour management, conflict within some groups appears to have had a beneficial effect in terms of the quality of the final product, whilst graphic nature of the work seems to have provided a common vision within which disputes could be resolved.

Ironically the two groups which had struggled to work together made the best films – short, simple and sticking closely to the brief. (Marlborough Primary)

What is also significant about the above case studies is that group discourse was used as a vehicle to rehearse ideas and concepts prior to their being shared with a wider community. A paper by Mercer et al. (2009) describes a similar process, whereby small groups exchange and evaluate hypotheses elicited through a ‘Talking Points’ activity. The ‘talking points’ are statements, sometimes erroneous, that provoke discussion by pointing children towards concepts that they can discuss together. The example they give (p.364) focuses on the response of Year 5 children to the statement:

‘The moon changes shape because it is in the shadow of the earth’ (Marlborough Primary)

The subsequent lesson unfolded in three parts. Firstly the children worked in small groups to rehearse their understandings and submit them for examination by other members of the group.

At this stage, partly formed or misconceived suggestions could be aired (No, that’s not true because there’s clouds that cover the moon) and a collective understanding quickly arrived at that would be difficult to achieve in a whole class discussion. In addition, initiating discourse in such a way can act to reduce the anxiety of those afraid to voice untried hypotheses in public, as was the case in the St. Meriadoc study. Here it was found from analysis of pupil views templates that the children preferred to ask a person for help or consult a resource before committing themselves to an answer in a whole class forum such as a philosophical discussion.

In the second part of the lesson, the teacher engaged in what could be termed whole class dialogic talk in that pupils were encouraged to state points of view and to provide warrants and justifications for this. These responses provoked further questions as differences between the conclusions arrived at by the groups were explored but, importantly, the teacher at this stage made no critical assessment of the quality of the contributions. In this way ‘external conflict’, whereby a group with conflicting views acts to alter the level understanding within another group (Bennett et al. 2004), was harnessed to good effect. Finally the teacher provided an explanation of the topic that was
'vital' in the children’s understanding of how the solar system works and changed the nature of talk from being dialogic and exploratory to something more redolent of a recitation script. Mercer et al (2009) conclude from this that

In describing and evaluating the talk in this lesson, then, we can see that it is the quality of the dialogue as a whole that matters, and important is the way it is temporally organised as a means for establishing and maintaining a collective consciousness. (p.367)

What they conclude, therefore, is that there is no gold standard that can be applied wholesale to classroom discourse. Instead, at least where talk is concerned, it seems that the overall logic of the lesson sequence is worth considerably more than the sum of its constituent parts.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dialogic talk within groups</td>
</tr>
<tr>
<td>2</td>
<td>Interactive/dialogic talk</td>
</tr>
<tr>
<td>3</td>
<td>Interactive/authoritative talk</td>
</tr>
</tbody>
</table>

Table 13, above, summarises Mercer et al.’s 3 phase lesson sequence. In essence, phase 1 and 2 of the lesson act to prime learners and makes them more receptive to a ‘correct’ explanation than they would had it been given cold. A similar sequence was used to scaffold talk within a Year 3 class at Treloweth school. Again using visual materials as a stimulus, the children first tested out their initial thoughts in a ‘safe’ environment, whereby members were assured that they would be listened to by the group, however tenuous or tangential their initial contributions might seem. As a result, a girl who was often withdrawn in whole class discussions was able to engage and articulate complex thoughts and ideas in a way that would not have been possible in a more public arena. What was noticeable in this case was that, alongside a more sophisticated understanding of the content of their discourse, pupils also seemed to gain a greater awareness of language as a tool with which ideas can be shaped and formed.

The ability to extend each other’s ideas was a skill which was evidently being practised and used to hone understanding and the teacher regularly observed pupils using this technique and with increasing dexterity. (Treloweth Primary)

Over and above the building of confidence and affect, phase 1 talk seems also to play a powerful role in allowing children to experiment with different tactics as discourse takes its course and, in so doing, build up a repertoire of metacognitive knowledge and skill specific to dialogue. As Mercer et al. (2009) suggest, this is less about internalising a set of mechanistic rules and more about developing ‘awareness of the potential educational power of talk so that they develop a meta-awareness of the use of talk for learning’ (p.354). A similar effect was observed in the study at Northumberland FE college which investigated the effect of practical collaborative group tasks on learners’ numeracy skills. The researcher observed that, after nine months, a sense of ‘self’ had started to emerge and this is reflected in quotes from the learning logs of the students themselves.

Very good for recapping what we have done. Very good for thinking. (student, Northumberland College)

Good because it helped to remind about subjects I’ve done but were at the back of my mind. (student, Northumberland College)
As with the Treloweth case study, discourse within groups seems to facilitate the linking together of learning experiences into meaningful sequences that allow learners to connect new knowledge with prior learning. However, unlike the Treloweth example, the FE study found that, despite gains made in terms of their ability to use talk collaboratively, the students still seemed wedded to and heavily reliant on the teacher for guidance and direction.

*What was evident is that our relationship, i.e. teacher-pupil interaction, has moved slightly on the continuum of IRE. They are now opening up and feel slightly more confident about expressing their views without fear of repercussions.* (Northumberland College)

Skidmore (2006) suggests that the survival of recitation, despite years of attempts to move to more progressive patterns of discourse, is due to the fact that transmission provokes only a narrow range of emotion in students (p512). Recitation is safe, therefore, in that it is neutral in intent but, as shown above, it lacks funding unless it is accompanied by talk that caters for discord and conflict. In the Northumberland College case, although phase 1 talk had clearly helped in scaffolding greater learner engagement at phase 2, the learners still prioritised the recitation aspect of phase 3, whereby the learners knew an unequivocal answer would eventually be delivered.

The answer to this dilemma, however, is not simply to create structures and rules within which ‘safe’ group discourse can operate, as it is unlikely that iniquities of status can be neutralised in this way (Swann 2007). This can be seen in the Fallibroome study into the participation of less and more able students in ‘Wild tasks’. Despite the fact that there were clear protocols around how the groups were to function, based on Kagan principles, the less able students often reported being left out or given the least popular jobs to do.

*’Didn’t work well because they basically left me out and just let me look for a picture and every time I suggested something, they would just sit there smiling’* (Fallibroome High School)

From Skidmore’s perspective, the solution may lie in a cultural shift whereby pupils genuinely become active epistemic agents, acting to research the way that discourse occurs rather than simply operating within predetermined and habitual structures. So, for example, at Camborne Science and Community College the involvement of students in the design of a questionnaire and the subsequent analysis of results enabled them to gain an understanding of the processes that govern how they interact with each other and with teachers.

*At first I found it odd talking to the teacher about school, learning and other teachers. I feel good being able to help design the help that we are being given in year 11 (Camborne Science and Community College)*

Similarly, the children carrying out research into the 5Rs at Carterhatch were keen to present their findings to teachers as they were of the view that their suggestions had value for practice and would
have benefit for children across the school. In both these cases, engaging students in research into their own learning has the potential to raise awareness not just of what types of discourse practices are of benefit but also why and how they work. The process therefore promotes the joint construction of ‘ground rules’ for talk that have meaning within the learners’ own cultural context, as opposed to structure derived from more traditional forms of research that are imposed systematically.

If the role of talk is to manoeuvre a shift in the cultural norms within schools and colleges, a central consideration must be the expectations, not only of students, but also of teachers in terms of what they believe the purpose and form of ‘quality talk’ to be. In their study Fisher and Larkin (2008) found that teachers prioritised the behavioural aspects of talk (being quiet, talking about ‘the right things, and manners) and made little mention of the need to train children in how to talk. They point out that such beliefs are often more powerful than pedagogy in shaping learning dialogue and that ‘Programmes designed to improve discourse will founder while motives and understandings remain confused’ (p.14). Given this, the role of practitioner enquiry as a means by which teachers can explore and, in some instances, revise their underpinning values, has a key part to play in the development of talk for learning within the project. An example of this can be seen in a study from Lewisham College that explored different perspectives on what makes a learner resilient. The findings suggested that teachers and learners held very different beliefs and that this had implications for the college in terms of how pedagogy could be designed to increase student retention. For example, teachers seemed to place less importance on learners’ personal circumstances than the students did, whilst the majority of learners found metacognitive aspects of learning more important than the staff. The study concluded that encouraging such talk between teachers and students yielded insights that would have ramifications for student engagement and course completion rates. This effect is also evident in a recent collaborative action research project which aimed to improve the way writing was taught within a school network (Harrington et al. 2006). In the first phase of the study, the teachers canvassed the opinions of learners and found that, despite positive comments relating to the formative feedback provided by teachers, 80% said that they knew they had achieved a learning objective when ‘TA’ (Target Achieved) appeared at the bottom of their work. Following this, new strategies were devised to engage pupils more in the self assessment of their work, including whole class discussions through which pupils could choose outcomes that they perceived to be relevant to their particular needs. This was later developed into a model of peer evaluation whereby partners could discuss and evaluate each others work using the skills learned through the teacher led sessions. In terms of its effect on the teachers the study concludes that action research, conducted across a school network allowed teachers

The chance to step outside this thinking and do two things: to reflect on their practice and to initiate actions that enhance their practice and consequently the learning of their pupils’ (p.82)

This makes an interesting comparison with the quotes, below, that relates to the outcome of a whole school collaborative project by teachers at Lanner school.

It’s a change to talk cooperatively (Lanner Primary)

Gained different perspectives from other staff (Lanner Primary)
In light of this, the Learning to Learn network itself has a significant part to play in the development of talk in that it is an arena in which critical exchanges, based on empirical evidence, can and do result in teachers reassessing their beliefs and core assumptions about learning. Earlier in the report, the importance of cross phase professional learning was mentioned in that face to face contact with colleagues from different parts of the education sector can broker new and potentially paradigm shifting professional learning. As with discourse with and between learners, McLaughlin and Black-Hawkins (2004) underlines the importance of discord as an important element in teachers’ professional learning through dialogue.

There is a process of critical debate in either a partnership or a community, which is also supportive. This was one of the key issues in the Sten housian conception of research as critical enquiry.‘ (p.4)

A further similarity between teachers’ dialogue within a network and that occurring between learners lies in the importance of uptake and the propensity of participants to build on the contributions of others. Hargreaves (1999) describes transfer of knowledge between teachers as more than simply a matter of telling or providing information. Instead, he asserts that transfer is only possible when practitioners work on information and ‘tinker’ with it so that it becomes part of their teaching repertoire. Therefore, just as classroom discourse relies on the willingness of students to incorporate the comments of others into their own contributions, so networks require teachers to build on and adapt the findings of their colleagues. Finally, there is an argument that, as with talk between learners, dialogue within a network should be in pursuit of a genuine enquiry whereby teachers are active agents in the production of knowledge. Day and Hadfield (2004) point to the dangers of ‘top down’ agendas from government being used as a driver for recitation scripts in the exchanges between teachers. They suggest that, as with talk in the classroom, such a move results in talk that has little to do with learning, with participants instead being treated as conduits through which a ‘correct answer’ can be channelled. Hence the model of discourse at the heart of empirical study within the classroom also informs the process by which the Learning to Learn network as a whole evolves and develops as a learning community.

Future directions for research

Our findings corroborate views expressed elsewhere in the literature that structures, protocols and ground rules are not sufficient in themselves to guarantee quality discourse in the classroom (Mercer et al. 2009; Swann 2007; Fisher and Larkin 2008). Instead, we intend to focus on the dynamic of classroom discourse at a micro level with the intention of building a greater understanding of how different patterns of talk may be related to cognitive change and development. The work of Baumfield and Mroz (2002), focused on action research into how and when children use questions in the classroom, is much in this spirit and they describe the potential benefits for practice as follows.
An additional advantage of the teacher carrying out an overview screening of the questions asked by the pupils as a whole could be that a system of monitoring could take place. Thus teachers could be aware of the questioning ability of different individuals and determine to what extent they were benefiting from the modelling of desirable question types. (P.138)

An awareness of the features of talk used by children and the thinking that these talk patterns express would give teachers a frame of reference within which to engineer talk structures both within groups and also whole class structures. A possible way forward in this endeavour is suggested by Lofthouse et al. (2009) in their work studying patterns of discourse between pairs of teachers engaged in peer coaching. They suggest that there are observable dimensions that characterise these exchanges and that there are identifiable combinations that lead to productive interaction and the generation of ‘new ideas’ about pedagogy. Central among these is the function of ‘dissonance’ whereby talk is used by the coach is a disturbance tool, for example, to expose an incidence where a teachers beliefs run counter to what they actually did in a lesson. Also crucial for productive talk is the use of challenge to encourage coachees to elaborate and explain practices that are not fully considered or thought through, thus opening up the prospect of suggestions that may lead to new learning. Both these dimensions have resonance with the concept of ‘manageable discord’ discussed above and provide potential signposts for teachers in their observation and research of dialogue within their classrooms. Not only does this provide a means by which teachers can come to understand and respond to the minutiae of talk for learning in the classroom, it also offers a shared and mutually understood structure within which ideas and knowledge generated by Learning to Learn teachers can be adapted and adopted by their colleagues within the network.

4.2. Tools for learning

What do we mean when we talk about tools in Learning to Learn? We do not mean toolkits. We don’t mean that there are certain pedagogies that are ‘for’ specific purposes or that are so inherently ‘good’ that they can be used unthinkingly in classrooms. Tools as we use the term are those that are used by craftsmen, they are used with intent, to produce certain effects but because craftsmen are also artists and are working with unpredictable materials, tools have the potential to produce unintended, unexpected beauty.

It is important to make a distinction between what are commonly referred to as ‘toolkits’ and the tools, or in Deweian terms ‘technologies’ that are in use in professional practice. A toolkit prescribes the specific tool to the specific task and sets out the parameters of operation. There are implicit tendencies towards the homogenisation of practice in the pursuit of higher standards. In contrast, the emphasis on ‘tools as technologies’ privileges the process of using the tool, the individual teacher’s engagement with the tool, the task and the context. This is not opposed to standards: a rich understanding of how good results have been produced is more likely to support continuous improvement than a rigid adherence to a prescribed procedure. The tool as technology in the hands of the reflective teacher allows for a range of interactions:
A tool is also a mode of language, for it says something to those who understand it, about the operations of use and their consequences... in the present cultural setting, these objects are so intimately bound up with intentions, occupations and purposes that they have an eloquent voice (Dewey 1938: 46)

The intent of the teacher and the fitness for purpose of the pedagogy interact. This interaction produces more than a simple increase in learning ‘efficiency’: there is the potential for deeper changes to take place.

The link between a pedagogy for metacognition and tools for enquiry has emerged through our systematic reviews of research into impact of thinking skills approaches on teachers and students (Baumfield 2006; Higgins et al. 2005, 2007). Tools, as technologies have been designed to make a particular activity different: faster, slower, richer, more focused, more efficient, more sustained. Tools change or re-shape the semiotic frame for an activity (Bosch and Chevallard 1999; Wall and Higgins 2006), carrying with them the rules for how they are used. In this sense, one can argue that tools are part of the implicit learning of a professional culture, since they frame practice and thus practice develops as new tools and technologies facilitate or enforce change (Hickman 1990). When using a new tool in the context of pedagogical practice, the teacher has the opportunity to engage in a re-framed experience that will have aspects of familiarity – since the tool is grounded in the territory of learning – and of novelty – since that is the expressed purpose of the tool. This combination of security and novelty creates the conditions for the teacher to become engaged in a feedback loop which can lead to new understanding through the experience of positive dissonance (Baumfield 2006). This is the tool’s catalytic quality: it can change the composition of other agents in the environment or organisation without necessarily itself being changed. Although tools can be characterised as determining the frame within which the teacher works, the individual agency of the teacher comes from deciding which aspects of the feedback to prioritise and whether and how to act on this information. Indeed, our experience in Learning to Learn suggests to us that, for some teacher researchers, tools can generate the kinds of dissonance and questioning, the multi-layered, ever-expanding exploration of meaning in a particular learning interaction which lead to a transcendence of ‘tool as artefact’. In these cases, the tool becomes an epistemic object (Knorr Cetina 2001), enticing the researcher into further enquiry.

**Tool origins and design**

Within the project we have developed our own metacognitive tools and we have adopted and adapted tools from other researchers and projects all of which are available to the teachers in their resource packs and their use and customisation is supported through our email contact. These tools enable feedback to be used productively both in the here-and-now of the classroom interaction and reflectively within the enquiry cycle. The classroom interactions engendered and supported by the use of tools not only make learning more explicit and accessible to the learner but also enable teachers to move beyond surface detail as the process of teaching is opened up to critical enquiry.

St Meriadoc Infants, Cornwall
Indeed, we argue that the pragmatic ‘dual use’ of these tools gives them a catalytic quality, creating the conditions in which new thinking can develop.

The crucial process element of catalytic tools is the rate and precise nature of the feedback produced. The feedback from catalytic tools is immediate, context-specific and highly relevant to the teacher and learners’ immediate needs: be they reflective, diagnostic, focused on knowledge, skills or affective elements of learning. The Pupil Views Template (PVT), for example, works ‘in the moment’ as a teaching and learning tool but, used as a research tool, differences between individuals and groups, changes over time, discourse and evidence of metacognitive behaviours can all be explored.

Teachers in Learning to Learn make use of catalytic tools differently: primarily to support pedagogy or as both pedagogical and research tool. For some teachers the tool is used, critically, with the format and implementation of the tool itself subject to the same scrutiny as the students’ performance or the research data.

The use of tools and the role of intent

The kinds of tools that have been used in Learning to Learn are diverse but as we began to look at the ways in which the tools had been used a pattern began to emerge (Wall et al. 2009) which was linked not to the ‘label’ attached to the tool in terms of its original design but to the intent of the teacher.

There were some tools which had a purpose primarily directed towards learning: either in terms of scaffolding (Vygotsky 1987; Wood et al. 1978) and supporting learning or in terms of providing feedback for learners and teachers about what was going on, what progress had been made or what current understanding was. There were others which were deployed to have an impact on how learners interacted with each other and with teachers and tools which were intended to produce a shift in thinking about learning, opening up new perspectives and possibilities.

<table>
<thead>
<tr>
<th>Use</th>
<th>Tool type</th>
<th>Intent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools aimed at teaching</td>
<td>Scaffold</td>
<td>Supporting learning moment to moment, getting the learner into the Zone of Proximal Development (ZPD)</td>
</tr>
<tr>
<td>Tools aimed at interaction</td>
<td>Measure</td>
<td>Providing feedback on process, progress, understanding or affect for the teacher and/or the student</td>
</tr>
<tr>
<td></td>
<td>Lens</td>
<td>Generating new perspectives, focusing in on detail or outwards to gain breadth</td>
</tr>
<tr>
<td></td>
<td>Frame</td>
<td>Changing structures for talk or for interaction, making new kinds of talk or action permissible</td>
</tr>
</tbody>
</table>

By making the perspective change from what it is that a tool has been design to do to what it is that the teacher intends it to do, we can see the interaction of key elements of Learning to Learn:
• pedagogy and teacher professional knowledge;
• the role of the inquiry question; and
• the teacher’s reflection and self-awareness.

As the case studies revealed, a range of tools (examples summarised in table below, full details of how the tools are used can be found in each case study) have been used to develop and extend students’ existing skills, by for example encouraging learners to internalise a list of resources that could be accessed before asking an adult for help, thus strengthening their independence and self-concept (Cloughwood Special School). A simple game of ‘Beat the Teacher’ produced quick, fun feedback on the degree of mastery that students in Key Stage 1 had on a range of learning objectives in numeracy and literacy (Packmoor Primary School). The lens can reveal more widely than at first expected: focusing on the children’s reflective skills led the teacher to realise that her own ideas about reflection needed more clarity in order for the children to progress (Fleecefield Primary). A new way of picking working partners (Hipsburn Primary School) was more than just an organisational shift: supported by class discussion and reflection, the random assignments led the children to explore what a learning partner can do and opened up a range of possibilities previously obscured by the desire to work with their best friend!

<table>
<thead>
<tr>
<th>Tool type</th>
<th>Intent</th>
<th>Examples from Learning to Learn</th>
</tr>
</thead>
</table>
| Scaffold  | Supporting learning moment to moment | • Learning Mats (King Edward VI High School,)
• Study Skills (Lewisham College)
• Five before Me (Cloughwood Special School) |
| Measure   | Providing feedback on process, progress, understanding or affect | • Marking Ladders (Wooler First School)
• Beat the teacher (Packmoor Primary School)
• Investigating barriers (Carterhatch Primary) |
| Lens      | Generating new perspectives, focusing in on detail or outwards to gain perspective | • Philosophy for Children (St Meriadoc Infant and Nursery School)
• Reflection on learning (Fleecefield Primary)
• Mind mapping (Duchess’ High School) |
| Frame     | Changing structures for talk or for interaction | • Circle Time (Weaverham Forest Street Primary)
• Mantle of the Expert (Marlborough Primary)
• Lollipop Partners (Hipsburn First School) |

The catalytic nature of the tools also needs to be acknowledged: there are not hard boundaries between these categories: often the initial intent may have been to scaffold and measurement was a welcome but unintended consequence. Investigating barriers to learning, recording them and reporting them was the primary intent at Carterhatch: however, by enlisting the Year 4 students as researchers, the interaction frame was shifted and the students took ownership of the questions and the responsibility to communicate the findings to the teachers in a staff meeting.

More analysis of the use of tools will continue in the next year of the project but the shift to focusing on intent and the multiple potential uses of each tool are the key innovative concepts which continue to shape our understanding of Learning to Learn.
4.3. **Learner action**

This year of the Schools and FE Project has evidenced an important attribute of Learning to Learn: while L2L has been reported as a social activity tightly tied to social constructivist ideologies (Vygotsky 1978) since Phase 3 (Higgins et al. 2007) we have not really elaborated on its purpose. The talk which is apparent in the project and classrooms is important and we are beginning to get a better understanding of what that interaction looks like and the key characteristics of L2L talk as opposed to ‘other’ types of dialogue (as discussed in section 4.1); however what has also become apparent is the commitment to action in the project. It is not enough just to talk about it, but collaboration needs to lead somewhere and have an intention. As James et al. (2007) state, it needs to be purposeful; however we also believe that these goals need to be authentic and, most importantly, co-constructed. This links with the associations we have made between L2L and enquiry; the latter implies a process of exploration, a co-construction of understanding, and is something we have long been committed to at project level when the teachers are working with the University and the Campaign for Learning, but now this same process is beginning to emerge in the teachers practice with the students.

This has meant that this section is entitled learner action. It will include not only a discussion of practice which looks for opinion on the teaching and learning process (as documented in past reports) as indeed this is still at the forefront of practice around pupil voice. But it will also explore the dialogue which leads to action from teachers and students and the types of pedagogy, knowledge and skills which support these ideas in practice. A lot of the evidence reported here will focus on student learning, however many of the parallel processes are involved in the professional learning of teachers and the latter will be discussed in the next chapter (Section 4.4).

**Developing a community of enquirers**

The Learning to Learn community is not limited to teachers or indeed adults, since the beginning of the project it has been extended to include students of all ages with increasing regularity and authenticity. As with the process of enquiry, parallel conversations to those taking place with teachers are occurring in each of the contexts with pupils. Our project community has extended to include all learners. Student voice has been central throughout, but the term has been found to be lacking and under-selling the activities which are described as underpinning L2L. Voice as a concept can be seen to be imperfectly realised because either students are shouting into the void (Wyness 2006) or the complexities of multiple voices are reduced to a homogenous majority view (Reay 2006). The nature of a two way conversation where the individuals are listened and responded to seems to be a much better fit with the ethos of the project.

Perhaps more than any other provider within the education sector, there is an expectation in FE that learner needs and desires will not only be heard, but will also be acted upon at an institutional level. The current inspection framework (Ofsted 2009a) stipulates that this process should be systemised...
and should exist as a strategy itemising how and to what level students can influence the planning, management and provision of learning. However, adult learners returning to education can lack confidence in their abilities whilst some entrants coming directly from school are known to find the transition to college norms of study problematic (Salisbury and Jephcote 2008; Lumby 2007). Within the project this appears to be impacting on the perspectives student provide and this is recognised by the teachers in the project:

...the general conclusions we have reached are that students manage to complete their studies at level two, and progress to level three, without properly developing the study skills which would make their time at college easier, more stress-free and ultimately more successful. However, the students also show an awareness of the importance of these skills, recognising the advantages to being organised and planning their time and resources. Therefore we must conclude that the extensive work done by the tutors in the school of Health, Care and Early Years, and by the Learning Facilitators, in these areas, is having a positive effect on students’ learning and achievement. Perhaps the area that will need more attention in the future is that of enhancing students’ personal responsibility and organisation, to ensure that ownership of these kinds of study skills is fully taken on by the students. (Pele, Geoff, Maurice and Dean, Lewisham College)

The impetus for the democratisation of FE has its roots in a drive for social justice as well as the perceived need to improve the responsiveness of providers in the face of a rapidly changing, and now rapidly shrinking labour market. Consequently, the learning culture in a college is recognised as a complex amalgam of the identities held by learners and teachers alike and, thus, is a complex and situated entity (Hodkinson et al. 2005). In this regard, personalisation through strengthening the learner voice is both laudable and understandable and, indeed, is in tune with the expressed views of the practitioners:

The L2L enhancement and experience I was hoping for was an understanding of why does the group using ICT get higher grades than the paper based group. I feel that this was because the students could put more effort into their assignments as they also worked on them at home as well as college and increased their ICT skills at the same time. This was evident when they handed their final assignments in for grading and there was a great deal more work attached to the ICT group than the paper based group. (Michelle, Northumberland College)

There is however the potential for iniquity in this redistribution of power. Jephcote et al. (2008) term learning interactions within colleges as ‘negotiated regimes of learning’ over which the opinions and aspirations of learners hold considerable sway. The downside of this, they point out, is that students bring learner identities to college settings that are often impoverished and primitive when compared to those in the schools:

During the activity one learner noticed a mistake in the activity and rather than point this out, he sat for some time without doing anything. When we discussed it he was somewhat embarrassed at pointing it out, this would support the learners’ experience of absolute knowledge of the teacher ...

(Lesley, Northumberland College)

Balanced against this are the muted concerns of a profession who are denied a corpus of pedagogic theory during training (Harkins 2005, p.172), express generalised ideas about how learning occurs (Ecclestone 2009) and work in high stakes accountability structures governed by
success rates and retention of students. As a consequence, Jephcote et al. (2008) claim that the pedagogical strategies of teachers are in danger of being subverted so that, rather than scaffolding the development of learning for life, they are pressured instead to compensate for the absence of such abilities in order to achieve results. The development of consultation approaches is more likely were ‘adults [teachers] are more willing to critique prescribed policy and dominant pedagogic practices’ (Noyes 2005: 537). The comments of the staff and the responses from the students in both colleges included in this study support this view and suggest that, despite aspirations to the contrary, management, staff and learners co-construct a culture whereby the practising of skills and remembering of information, rather than understanding and knowledge predominate. Although involvement in the L2L project has seen college teachers start to challenge this:

Learners’ understanding of targets seems like a necessity in terms of development of any kind but certainly in learning to learn. Targets require that you take responsibility for your progress and that you reflect to see how far you have travelled, what you have achieved and understand what would be the best way to move on. However this is based on a particular view of education. Using two popular metaphors for learning, a journey and a light switch, it is clear that targets would make sense within the metaphor of a journey but not necessarily that of the light switch.

(Jason, Lewisham College)

Our findings corroborate the view that the sort of creativity deemed by government to be essential in a 21st century globalised workforce needs not only to be scaffolded for learners in FE but, more importantly, the process of scaffolding itself needs to become a focus for organisational learning in its own right. Salisbury et al. (2009) ask whether a limited framework within which staff can understand and interpret their practice is necessarily a bad thing. Without a discourse amongst practitioners and learners concerning the status of learning in FE, it is difficult to see how the twin constraints of instrumentalism and performativity can be countered.

Even in the schools project where challenges are different the fact remains that asking children and young people about their perspective, beliefs and what should be done about it is relatively easy, but actually acting on what is said can be a challenge. The implications of these interactions, the repercussions of listening to the pupil voice, remain largely unclear and under acknowledged in the wider field (McIntyre et al. 2005). As Flutter (2006: 191) recommends, ‘...effective student participation requires more than short term, one-off or tokenistic strategies’. Truly asking for opinions and listening to the responses can open up ‘a can of worms’ for teachers, researchers and policy makers. It is not to say that the views of pupils should be acted on regardless of sense or implications, but rather conversations need to be set up in such a way that the boundaries and constraints are clearly negotiated and articulated to pupils. The authenticity and transparency of the pupil voice agenda is murky to say the least. The concept of a community of enquirers is therefore important at all levels, as are the conventions through which the conversations in the community are negotiated.
Authentic talk for action

Comments from the project showed a highly developed and rationalised perspective in relation to the process of learning and also a pragmatic outlook on learning and schooling as a whole. For example, even in the negative statement, there is a sense that this student sees the bigger picture and therefore can reconcile him or herself in doing something unpopular for a while:

*It’s not the best thing in the world but just do it. It’s only a minute or two...* (Student, Hexham Middle)

In the comments there was a very strong awareness of pupils’ own learning and how this needs to fit into the realities of the classroom: L2L pupils appear to have a developing pragmatic understanding of the teaching and learning process in ‘real-life’ classrooms, placing their own learning alongside their peers:

*Learning is an experience that is unique to every person.* (Student, Lavender Primary)

They seem to understand that sometimes a method will suit their own learning disposition, at that time and in that lesson, but at other times it will not, but may suit others; however that does not mean that they will not learn from it. They even talked about the consequences of making the wrong decision and how this influenced their choices in a pragmatic way:

*Yes, I suppose so, but I like having the choice and if I mess around I’ll have to sit where Mrs Ross tells me.* (Student, Marlborough Primary)

This realistic or pragmatic standpoint was common to many of the pupils: if Learning to Learn is truly about making the learning process explicit and the learning process under discussion is a complex entity then a pragmatic view surely needs to be central to the way pupils (and teachers) think and talk. Each pupil needs to be aware that they are one of 30 children and therefore their learning needs and wants are always going to have to be balanced against the others and each teacher needs to give pupils their perspective on the teaching and learning process and the practical considerations they are dealing with. There does not seem to be any danger, if these conversations are fundamental of a L2L approach, of one-sided talk (Wyness 2006) in this kind of scenario.

If pupil voice is about authentic consultation and learning to learn is about strategic and reflective thinking about a multifaceted process then there needs to be some kind of parameters to the conversation. Pupils need to have clarity about the pragmatics of the context which they are talking about. This fits with Dewey’s ideas about democracy and education, where the ideals of democracy are held, but the bounding nature of the learning environment and the constraints and rules which we need to operate under for common good are also transparent and recognised by all participants, otherwise it would be chaos (Dewey, 1958). It is in fact when the imbalances of power are acknowledged that interactions are more truly democratic; false statements of equality lead to inauthentic relationships (Todd and Higgins 1998). We believe for authentic talk to occur and for a conversation about learning to include all participants then limitations need to be acknowledged and
goals set accordingly. Students and teachers need to be supported in transparent conversations with clearly articulated rationales for resulting actions to be worthwhile and effective:

*This study has underlined the importance of listening to the students in order to address the real problems, not the problems as perceived by the teacher. The teacher perceived the problem to be class management of a large mixed ability mixed subject essential skills group and attempted to solve the problem by giving the students more control over their learning. The actual problem was the size and diversity of the class and may be solved by changing the course from an unstructured roll-on, roll-off style to a series of intensive, highly structured courses specifically targeting one subject and broad level (entry or level 1 or level 2). (Helen, Northumberland College)*

**Development of vocabulary**

Across the case studies students have been shown to talk confidently about the learning process showing the extent to which pupils understand the underpinning philosophies of Learning to Learn as outlined in the Phase 3 report (Higgins *et al.* 2007). There is substantial evidence that the conversations happening in schools are to some extent relaying the understanding generated in the wider network although it tends to be contextualised. Themes around the prioritisation of collaboration, transfer of knowledge, inclusivity, democracy and learner autonomy are all evidenced in the comments from pupils. In particular thinking about learning (metacognition) continues to be privileged and central to the conversations (Wall 2008); however the significance of the skilfulness aspect is becoming central to the project talk and is translating down to the conversations in classrooms:

*Amongst the many interesting aspects of the process has been the growth in confidence and levels of metacognition of the student steering group. This has led to the unexpectedly prominent involvement of the student group in designing, criticising and analysing the questionnaire results and in some very frank discussions about the state of teaching in learning in certain subject areas. Clearly, this engagement has benefited the students involved in the research group, who are now able to stand aside and observe the processes of teaching and learning as they are applied to themselves in school. In turn, these discussions have enabled the teacher leading the project to gain valuable and otherwise unavailable insights into the students’ daily experiences in school. (Camborne Science and Community College)*

Students were articulate in demonstrating an increasingly complex and sophisticated understanding of learning which brought several aspects of their experience together. This increasing complexity was represented in the language used but also the associations they made. Pupils tended to talk about the language of learning while making links with the affective aspects of their experience; they talked about tools in relation to their independence and their learning relationships with others and were keen to expand ideas and talk about how learning extended into all areas of life and the community within which they learn. The pupils expressed how learning and therefore, Learning to Learn, was perceived to be linked to many different facets of their lives, of personal characteristics and skills and abilities, which all come together to impact and influence learning. This meant any discussion about learning regardless of who it may
be with needed to incorporate this complex frame and the discussion of ideas relating to learning can lead to a wide range of different features. This is arguably a real challenge to the traditional model of pupil voice.

It is a complicated dialogue that we are building a picture of. First must be the language for students to be able to verbalise their thinking about this abstract topic (MacBeath et al. 2001). The 5R dispositions framework (Higgins et al. 2007) was shown to be a useful and successful vehicle for introducing metacognitive and dispositional language to all learners: this was widely conceived to be an important starting point to a L2L approach. Indeed, metacognitive knowledge and skilfulness (Flavell 1977) has been previously shown to be more likely in the perceptions of students in the L2L project when compared to peers who are not involved (Wall and Higgins 2007). For younger learners, the use of animals to represent the concepts has been a successful strategy, with some interesting regional variations, for making the vocabulary accessible. Older and more experienced pupils’ understandings of the vocabulary of learning was not limited to understanding the 5Rs but reflected a wider procedural autonomy (Ecclestone 2002) which encompasses understanding of target-setting and broader assessment agendas or of the complexity of learning as self-awareness develops,

*Generally feel OK about being given targets. However if you have worked really hard on it and the teacher says you need to put in more effort, this can upset you. If they had said you obviously worked hard in this but next time you could ……then that would be OK. (Student, Fallibroome High School)*

Themes around language and social aspects of learning have been confirmed, both with regard to pupil and teacher talk. It has become apparent that there needs to be a critical engagement with the development of learning language; it needs to be a dynamic and transferable aspect which can change with the shifting nature of any context, the approaches being used and the people involved. Effective use of learning based language appears to be co-constructed and reasoned, with input from all participants. It also needs to constantly be reflected on and developed using an enquiry-based focus that targets its usage, applicability and need.

Consistent with themes across the project, pupils recognised that talking about ideas, communicating them to others, was important in the development process: development of a language for learning as well as for learning about yourself as a learner. Independence and choices were a big theme within the quotes and Arnot and Reay (2007) suggest this is characteristics of effective consultation. There was real value placed on the need to try things out and learn from mistakes. Assessment, target setting and Assessment for Learning type approaches were also seen as good ways to think about progression and therefore support the move away from a dependency on teachers input:

*You get more independent, so you can check your work so that you don’t have to ask a teacher. (Student, Oakthorpe Primary)*

Following the input I gave over the course of the year children became collaborative and informed learners, able to discuss their learning with a new found metacognitive quality. Having been exposed to the process of learning they were competent in verbalising what they had learnt and how they had learnt it. They could talk about how they could apply their learning in other ways or in other subjects to support future learning. The quality of paired and group interaction increased tremendously and a wide ranging repertoire of leaning strategies were applied and refined as part of their daily encounters and engagements. The Pupils Views Templates show how their metacognitive ability grew and demonstrates that pupils understood the processes of learning and assessing, standing them in good stead for a future of lifelong learning. (Packmoor Primary School, Staffordshire)
There was also acknowledgement of the ways in which learning could be influenced by other aspects of an individual’s personality and therefore there was a perception that Learning to Learn needed to include talk about behaviour, dispositions and skills. This showed an awareness of the complexities of learning and the way in which any language or talk on the topic had to be inclusive of many different aspects of schooling and pupils’ lives to be truly effective. Arguably as an outcome of this inclusive viewpoint of learning, pupils indicated how talk about learning had initiated a process of discovery about themselves as learners, the idea of ‘getting to know yourself as a learner first’, for example,

...get to know herself better and understand what really good learning looks like. (Student, Archbishop Benson Primary)

Knowledge for action

Language is of course tied up with explicitness of process and the vocabulary that is needed to articulate these largely abstract ideas. The associated notion of action however often started with understanding progression in learning: knowing what to do next was fundamental. This of course fits with ideas around Assessment for Learning (Black and William 1998a; 1998b) which are prevalent in current classroom practice (James et al. 2006) and central to many teachers’ beliefs about a Learning to Learn approach (Higgins et al. 2007). The students’ involvement in this has been well documented as good practice. The positive impact of making progression routes clear to students and giving some autonomy to students over deciding how to get there is not disputed, we feel that in the learning to learn project we have evidence of teachers moving on from how, to open up conversations around what individuals could do about it and why. This then leads to action that can fill short term and long term goals for lifelong learning.

Conversations in L2L classrooms and the dispositions which students were encouraged to have, supported students in taking a critical stance in thinking about different methods and tools for the process of learning. This permission to think about which one had best fit was motivating for many students and impacted on their attitudes to learning:

The children in lead classes are now more confident when talking about different learning strategies and appreciate the benefits of using a variety of learning processes. All children in lead classes are now reflecting on their own learning and are able to express more clearly the strategies that they feel help them to learn best. (Winsford High Street Primary)

It was often the case that in L2L classrooms the locus of control was subtly moved away from the teachers, a change in ethos that Messenger (2002) documented as essential in true student engagement, and the decisions about most appropriate methods became arguably something that the students as an individual had responsibility for:

Choose which one is best fitted for you and then you can do your best in the work that is set (Student, Liskeard School and Community College)
In a parallel approach to that going on in the project, some schools encouraged students to complete enquiries exploring which were the most effective tools and why, using the results in the co-construction of a class understanding of ‘what works’:

*We had already been wondering which tools for learning would be most effective and decided that involving the children in researching their ideas on useful classroom learning tools could take the effectiveness of learning mentors a step further. We also hoped that all children would be empowered, regardless of age (mixed year groups) or academic achievement. We believe that partners can offer mutual support with the right tools, regardless of their own academic achievement.* (Hipsburn First)

This perceived relinquishing of control and hand-over of power to the students was shown to impact on self-esteem as well as developing a new skill set for the students in thinking about learning fitting with ideas related to metacognitive skilfulness.

This level and type of student involvement fits in Fielding’s (2001) typology under the heading of students as researchers, however we do not feel that the approaches used in the project fit as neatly under this heading as described last year (Wall et al. 2007). There are real issues as to how ‘students as researchers’ approaches are conceptualised in some contexts: the extent to which power is handed over (Thompson and Gunter 2006) and the way students are given a voice in the process (Bland and Atweh 2007). Neither of these issues appeared to be apparent in this project, rather we have seen evidence of co-enquiry between the students and teachers where they are learning, enquiring and researching together to find out the answers. The processes are more in line with what Fielding (2004) called collaborative dialogic research. Where collaboration forms the foundation of student involvement and action results then this does seem to provide a different dynamic and ethos to the classroom.

In addition to solving the next steps of learning, students were evidenced talking about how they could be strategic and reflective (metacognitive) in thinking (Moseley et al. 2005) about how they could ensure learning in all situations was effective:

*It was easier to work with different people and not your friends because you didn’t get so cross with them – you had to be more polite or they would tell.* (Student, Marlborough Primary)

Metacognitive knowledge and metacognitive skilfulness (see section 2.2 for definitions) have become increasingly important in the project. This reflective and strategic awareness of learning are an important element of the learning to learn action implied in this section. It is not enough to know what the next step is but rather students need to be able to make critical judgements about why that choice was appropriate, they need to be able to explain what worked last time and why it is appropriate for the next move forward. Additionally in the learning to learn class this is talked about and the rationale shared and explored as part of a community where everyone had a stake in the outcomes.
Pedagogies for action

It is recognised in some schools that this embracing of a co-enquiry standpoint for all learners could be perceived as high risk for both teachers and students (Nyroos et al. 2004), but in L2L schools and colleges where it is happening it has been seen as the next logical step in opening up the discourse about learning and teaching. There did appear to be genuine collaboration around ideas related to the right to learn effectively and discussion around the elements which comprise progression. The pupils perceived they had a right to explore learning and to be supported in thinking critically about learning development, process and progression while inside and outside of school. For example in one school there was evidence that pupils felt prepared to stand up for themselves if learning was not being explained to them fully or if they were not being challenged about their thinking process in a way that was supportive of these reflective and strategic behaviours:

*If we have a supply and we are not asked why we are learning something or if we are not told the success criteria we will say something.* (Student, Archbishop Benson Primary)

Alongside this ethically based perspective of learning, there was evidence that the pupils in L2L classes were broadening their perspectives of what learning could and should include within the structures of the education system itself:

*Shouldn’t be just for SATs but for all year.* (Student, Treloweth Primary)

This looks to be a relatively new area in the research project related to ethics linked to new understandings of responsibility (Dovemark 2004). The idea that pupils have the right to engage critically with learning and to be party to the teachers’ underlying reasoning about the type of pedagogy and learning they are involved in. If this is the case then there also needs to be a common social consciousness. Teachers and pupils need to be able to critically engage with learning and its application to themselves and others. Real life classrooms mean that approaches may not best fit with all individuals’ learning dispositions and styles at any one time. An inclusive ethos about learning and this concept of a social consciousness means that underlying any pedagogy there needs to be a transparent understanding of how learning is applied and received. Autonomy, transparency, adaptability and choice therefore become important in the development of pedagogy and classroom interactions: teachers can support pupils’ engagement in different ways and pupils need to be able, within the constraints a real life classroom provides, to be creative in their engagement with the choices made.

A further aspect to progression that is important are the goals that learners set: what type they are and how they are decided on. Carol Dweck’s work is useful here, and her distinction between performance goals, described as focused on ‘winning positive judgements... and avoiding negative ones...’ (Dweck 2000: 15), and mastery or learning goals, portrayed as a resilience to keep on trying and do the hard work necessary to learn new things and understand better, provides a good basis for our thinking about action. Dweck suggests that a predominance of goals fitting with the former can lead to a learned helplessness which has been shown to have negative impacts on learners. There is certainly evidence in the project of teachers and students working hard to develop a standpoint of goal mastery:
I like the bear because when I am doing my work I look at the bear and think I’m not gonna give up because sometimes I think I will give up and then I look at the bear and think ‘no’ I won’t give up. (Student, Wooler First)

In addition, work has shown that where these traits are thought to be stable and linked to models of intelligence then they can be used, even by young children, to categorise people ‘rather than understanding the relevant social and motivational process’ (Hayman and Dweck 1998: 401). In that L2L is described in these projects as a social thing with strong ethical underpinnings then the way that these orientations can impact on learners’ views of themselves and each other are important. Evidence in the project shows that this is a highly developed aspect of the conversation, with a lot of time and consideration extended to developing this kind of thinking, for example,

I think everyone is a good learner. Good learners will listen to the teacher and improve the incorrection; will help others in different kind of ways. There are different kinds of things to be a great learner. (Student, Fleecefield Primary)

Students talked about team work and working with others, exemplifying how they needed to think about who they were working with and how this would support their own and their partner’s/groups’ learning:

I think that ‘lollypop partners’ is a great idea, most of the time, most people work better when they’re not working with their friends. And you get to know your class mates a bit more (Student, Hipsburn First)

It should be noted that for some children this greater social awareness was not just reserved for peers, but some pupils could also see the potential to support the teachers,

I think Learning to Learn means to help the teachers know how to teach us better and to help them as well. Circle Time made a huge difference to my behaviour, how I feel about myself and it helped me control my anger. (Student, Weaverham Primary)

These ideas of social consciousness fit the growing sense that responsibility is the key disposition: not simply responsibility for one’s own learning but a relational understanding of one’s own needs and the needs of others, a procedural understanding of how school is ‘done’ and why this is necessary if sometimes boring or irritating. L2L learners balance their desire to be stimulated and challenged by their teachers with a realism about how often learning can be ‘fun’ or personally
tailored to their preferences. In this respect, their voices may turn out to be the most reasonable in the personalisation agenda debate:

*I feel much more involved in school than I did before. It feels as if we are all in this together, rather than, like, teachers just doing teaching at us.* (Student, Camborne Science and Community College)

Marshall et al. (2007) have shown how in the TLRP project teachers who captured the spirit of AfL were more likely to see learning (their own and the students) as associated with a learning goal orientation, whereas those who taught to the letter of AfL were most likely to be performance goal orientated (Dweck 2000). This has important implications for the way that we apply our thinking to both teachers and students as learners together and the goals they collaboratively construct and how they are acted upon.

**Enquiry to support and verify action**

In the Year One report of Phase 4 (Wall et al. 2009) we drew on ideas presented in Fielding (2001; 2004) and elaborated on previous work by the team on participation in design issues in schools (Higgins et al. 2005b; Woolner et al. in press) to produce a typology which could be considered in exploring the scope of students as researchers in project schools. In particular we focused on the process of research and students involvement with the different aspects of completing an enquiry under the Learning to Learn model (Baumfield et al. 2008). We are convinced that the increase in the number of case studies involving students as researchers in the process of enquiry is pertinent in the role this process plays in L2L. In this way it built on Fielding and Bragg’s (2003) typology by privileging the research process and splitting up this process into different elements where students could be involved.

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<tr>
<th>Teacher has control</th>
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<th>Students have substantive input</th>
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Table 16: A typology of participation in research (Wall et al. 2009)

Through this year’s research however with the growing understanding of the importance of enquiry and learner action, we would propose that there is an additional dimension to this (see Table 17). This acknowledges the importance of student action not only in the research process but also in the learning process.
Table 17: A typology of student involvement in enquiry

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<td>Next steps</td>
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<td>Making it public in community</td>
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<td>Making it public external to community</td>
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4.4. Professional learning

The link between student learning and teacher learning, well established in the literature (for example, MacGilchrist and Myers 1997; Day 1999), was identified during earlier phases of the Learning to Learn project and has been discussed in several reports (Higgins et al. 2007). We find the following question useful in articulating this standpoint,

*How can children learn if there are not models of inquiry, reflection, risk taking, empathy and moral courage to be emulated?* (MacBeath et al. 2009: 229)

A key motivating factor for teacher involvement in the Learning to Learn project has always been to improve student learning and we continue to see this identified in the project aims of individual research projects:

- the development of key personal learning skills (Fallibroome High School)
- improving the children’s ability to discuss and evaluate learning’ (Fleecefield Primary)
- the development of skills and understanding that will empower life-long learning (Hexham East First School, Winsford High Street CP School).

However, cumulative data from the teacher interviews and case studies produced over the last ten years, has also revealed that involvement in the Learning to Learn project results in, and perhaps necessitates, a personal learning journey, whereby, to understand and improve student learning, teachers need to involve themselves in becoming better learners (Claxton 2002; James 2007). The data is beginning to reveal that the teachers are developing their own learning dispositions, their own critical awareness and their own metacognitive knowledge and skilfulness and it is then through these learning experiences that teaching and thus student learning is transformed.

The project is therefore now focussing on developing an understanding of what ‘professional learning’ is, crucially from the perspective of the professionals themselves (Webster-Wright 2009) and taking into account the context of professional learning and its attendant workplace agendas, (*ibid.* p.13), as well as the impact of the teacher’s involvement in research.

Professional Learning in the context of Learning to Learn

*Professional learning really gives me the feeling that:*

- it is what I am doing every day, as every day I find out something more about learning even though I have been in the business over 30 years
- it is what happens every week with colleagues in staff workshops and even admin meetings
- it is about networking - conferences - locally
- it positively encourages me to want do my own research and find out more - evidence slowly diminishing pile of reading by the side of the bed!
it sometimes requires me to attend a course as a trigger in order to move my skills on
psychologically it feels more positive and keeps the shoulders held high
it feels much more controlled by me.

(Paula Ross, Marlborough Primary School)

Several taxonomies that identify conceptions of learning have been used throughout the phases of the project in order to analyse the learning as experienced by the teachers and students (Marton et al. 1993; Claxton 2002; Stenhouse 1975; Ecclestone 2000). Hall (2009) has proposed a matrix of ideas about teacher learning which maps the work of Stenhouse (1975) and Ecclestone (2000; 2002) to the ‘changing personal relationship which occurs through repeated cycles of enquiry in the L2L project’ (p.676). This matrix was previously given in Section 2.3.

Creating categories has limitations and may not be able to capture the ‘richness and messiness, complexity and diversity of knowledge’ (Webster-Wright 2009: 150) that is being experienced by the teachers in the project, but it provides us with a useful means with which to examine what professional learning means to the teachers involved. We also acknowledge that learning is also not linear, but continual and ‘cyclical’ (Timperley 2008: 15) with the teachers moving back and forth through the categories as they start new enquiries or adapt from previous years and as ‘new possibilities suggest themselves’ (ibid. p.28)

My ideas as to what was good learning was also challenged constantly throughout the year, causing me to evaluate my own practice and change it regularly accordingly.

(Lavender Primary School)

Procedural Autonomy: the knowledge and skills needed to operate as a teacher

As pointed out earlier in this report, the start of the learning to learn project was generally believed to be something primarily associated with specific approaches, tools and techniques (Higgins et al. 2005), but as the project has progressed, the conclusion has been drawn that learning to learn is much more about the development of effective learning habits and dispositions across all learners (students and teachers). However, key questions still arise for the teachers in the project with regard to how to teach so that these habits and dispositions are developed. What knowledge and skills do teachers need to learn that will ‘help students bridge the gap between current understandings and valued student outcomes’ (Timperley 2008: 28) Are some teaching techniques better than others, are some tools more effective than others?
Table 18: Examples of foci for enquiries

| New teaching techniques | • Collaborative group work (Duchess’ High School, King Edward VI School);  
|                         | • Circle time (Winsford High Street CP School);  
|                         | • Role play, mantle of the expert (Marlborough Primary School) |
| New tools               | • Pupil Views Templates (Fleecefield Primary School);  
|                         | • Learning logs (Marlborough Primary School, Northumberland College);  
|                         | • Concept maps (Duchess’ High School) |
| New types of curriculum delivery | • Wild tasks (Fallibroome High School);  
|                         | • Outdoor environments (Hazlebury Infant School, Perranporth Primary School, The Learning Space) |

The foci for the enquiries undertaken by the teachers demonstrate the range of ideas that are pursued to this end (summarised in table 18). The adoption of new teaching techniques and tools is one of the building blocks of professional learning, but it also involves understanding and knowing about learning itself. This means, not just developing your students’ dispositions, but your own, as well. Whilst the ultimate goal might be to understand how your students learn best, to help them ‘become more active and interested learners’ (Eastfield Primary) or to develop ‘skills so that they become lifelong learners’ (Hexham East First School), what the teachers involved in Learning to Learn are also discovering is that it is only through knowledge of your own learning that you can begin to teach your students about theirs:

*It was only as I tried to support the children in being able to respond with breadth and depth to my instruction to reflect on the learning, that I realised my own ideas about reflection were hazy. What exactly was I expecting? (Fleecefield Primary School)*

*I believe the more we focus and encourage our learners, teachers, staff in supporting roles and managers on understanding the diverse nature of learning the better we will become as learners and educators (Theresa, Northumberland College)*

*Learning to Learn teachers are passionate about learning, not about their subject area, they’re passionate as much about the learning as about their subject.......it’s not a nine to five thing, you sort of live it, don’t you? (Theresa, Northumberland College)*

In several projects undertaken in Phase 4/Year Two, the necessity to deepen this knowledge about learning in teachers themselves is highlighted by the fact that they focus on developing the knowledge of teaching staff and teaching staff’s learning dispositions – with these seen as a prerequisite to developing student learning. For example:

**Responsibility:** Staff sharing their own challenge experiences during training and collaborating in their planning with the aim on transferring more responsibility for learning to their pupils. (Lanner Primary School)

*Through raising learning awareness improve learning resourcefulness leading to learning resilience through building self confidence and understanding (Theresa, Northumberland College)*

**Personal Autonomy: developing a sense of self as agent in a community**

The range of enquiry projects undertaken by teachers involved in Learning to Learn demonstrates that although the overall aims are often driven by the broader agendas of the institutions e.g. developing independent learners, rising attainment in maths, encouraging
boys to write or developing study skills, individual teachers need to be in control over the process of achieving these aims - through decisions based on context and needs (teacher and student). Personal autonomy is an important factor in continual professional learning.

In Treloweth Community Primary School this autonomy has been achieved in the context of raising attainment in science across the whole school, through encouraging teachers ‘to experiment with a range of strategies of their choice in order to enhance the quality of talk in their Science lessons’. For example:

- **Year 1** - Teachers in Year 1 decided to investigate the impact of the ‘wow’ factor on learning by providing exciting resources to explore and events to observe.

- **Year 3** - Year 3 teachers focussed on the impact of talk rules and routines on the quality of talk and thinking. They also used real objects, pictures and observation of phenomena to stimulate talk, as well as Concept Cartoons and controversial statements to generate thinking.

- **Year 5** - Teachers in Year 5 looked at the impact that quality film clips might have on talk and learning in Science. They also tried a ‘layered’ approach to talk time, starting with individual internal reflection, building to talk pairs, then talk fours, eights and finally whole class discussion.

The outcomes of the learning taking place - both student and teacher - was encouraged through the collection of a wide range of data, and through the provision of a programme of support which included peer observation, teaching together with colleagues and non-contact time to discuss outcomes and ‘how they might influence future practice’.

*Using their notes and observations, teachers wrote up School Improvement Projects (ScIPs) through a local scheme which provided money for non-contact time. Findings from these mini-projects form a significant base of evidence for this year’s L2L research. In addition, a review session was held when staff had the chance to give oral feedback about their work and to discuss together their thoughts about the effectiveness of the work they had undertaken.*

*This session proved particularly enlightening. The reflections and evaluations of the work undertaken by teachers in their classrooms this year form a significant evidence base for the research hypothesis. (Treloweth Community Primary School)*

Although personal autonomy appears to be a crucial component of professional learning, it is clear that for this learning to be empowering and ultimately productive, it needs to be supported and scaffolded – whether through ‘communities of enquiry’ (Lave and Wenger
1991) made up of colleagues in the same institution or education authority, or in the case of Learning to Learn, by the University and the wider network created through the annual national residential.

Research has demonstrated that the benefits of being in a professional learning community include an increase in professional knowledge (Vascio et al. 2008); an increase in confidence (Cordingley 2005); a greater commitment to changing practice and a willingness to try new things (Cordingley 2005). The evidence in the case studies, the teacher interviews (Technical Appendix 6A) and the network evaluations from the residential (Technical Appendix 1) demonstrate that teachers in the learning to learn project are also seeing and articulating these benefits:

- **Benefits of school/college based professional learning communities:**

  Interesting to “develop ways of working”
  Interesting “discussion of educational theory”
  “Gained different perspectives from other staff”
  (Lanner Teacher feedback questionnaires)

  A learning community is one which thrives and moves forward creating the ability to cope with the challenges and issues which lie ahead. However it must become common practice across the whole organisation to become effective, so everyone can engage in conversations about learning. (Theresa, Northumberland College)

- **Benefits of a university - led professional learning community:**

  Sometimes it can feel a lonely thing within the school but the University is always there, you get your regular emails of what is going on and updates and things and even just getting a note of something that is going on gives you a link of bringing you back and knowing that there are people there if I need anything. (Teacher interview, primary)

  For me it offers me the opportunity to improve some learners and then with the support of Newcastle University they can keep me on the straight and narrow with research skills. Put questions in that I wouldn’t think of. (Northumberland College)

Benefits of the national residential:

  I asked sort of accidentally to go to the Cardiff conference (the residential) were I saw the Ladies from Lanner present their Learning Box they’d done...And the box is a really nice idea, and I thought it would fit quite nicely with being a form tutor. So that’s why I started it off and I’ve developed a little Learning Box which is basically just three questions and I did it with just my form. (Teacher interview - Secondary)

However for professional learning communities to be successful, and by this we mean that they support professional learning that focuses on improving the social and academic skills of students, they: must be context specific (Timperley 2008, Lieberman and Miller 2001); require teachers to think about their existing practice in new ways, and crucially they need to create an environment in which teachers believe they have the right to exert personal autonomy and to take risks. Teachers need to ‘trust that their honest efforts will be supported’ (Timperley 2008: 16).

If this is not made explicit, as in the case of Lanner Primary School, teachers find it difficult to take risks, particularly within an education system that ‘places numerous conflicting demands/success criteria on staff and pupils’ (Lanner Primary School):
A tension began to be expressed here about their perception of conflicting demands being placed upon staff, between the curriculum and challenge based work. From a senior management perspective the latter could replace the former, but this message was somehow never quite received or believed by the staff!

Critical Autonomy: reflection, metacognition and critical self-awareness

The relationship between reflective thinking and the educative process first introduced by Dewey (1933) was later developed in relation to professional practice by Schön (1983). It is specifically Schön’s ideas regarding reflection-on-action, ‘reflection after the event, perhaps out of the workplace situation’, which ‘is a deliberate, conscious and public activity principally designed to improve future action’ (Ghaye and Ghaye 1998: 5) that is central to professional learning. Webster-Wright (2009) has identified the value of critical reflection as ‘the possibility of transformative change for learners’ (p.21) adopting Mezirow’s (1990) term transformative learning.

As one of the five Rs, ‘reflection’ has been identified as an essential disposition necessary for learning (Higgins et al. 2007). Although a high level of reflection from the teachers has always been in evidence in the data from the project (Higgins et al. 2007; Wall et al. 2009) it has been interesting in the second cycle of Phase 4 to have a school and a college that are trying to promote learning to learn across their whole organisations and in which reflection plays a vital part. In Lanner the 5 Rs, including reflectiveness, underpinned their project which was intended to create ‘A whole school learning to learn ethos’. The reflection focused on ‘ongoing training to revisit aims, objectives and the analysis’ of the challenge days they were introducing into the curriculum. Reflection was built in to the research and involved iterative training where the outcomes of one session informed the content of the next session. Written feedback from the teachers in the school encouraged them to think about transformation in their own learning, their practice and their relationships with each other.

In Northumberland College, the aim of one project was to ‘facilitate reflection about learning with learning support staff’. The rationale for the project was the belief that ‘the more we understand about learning the more effective we will be in our teaching/supporting roles.’ The research process included a ten week study programme in which the support staff were asked to reflect on their own learning, including the use of reflective learning journals in which to note down ‘anything they learnt new in both formal and informal contexts.’ These were used as the basis for learning conversations about, for example, learning spaces, multiple intelligences and learning theories. One of the support staff commented:
It made me aware that reflection is a skill which needs practice but is so important in order to improve, or make sure something is embedded. (Theresa, Northumberland College)

As the teachers involved in the Learning to Learn project begin to reflect critically on their practice, and talk about their own learning and that of their students, we are also seeing evidence of teachers’ metacognitive development, their reflective and strategic thinking (Moseley et al. 2005). Teachers are showing a growing awareness of how their own metacognition shapes the potential for students’ metacognition in the classroom:

My ideas as to what was good learning was also challenged constantly throughout the year, causing me to evaluate my own practice and change it regularly accordingly. (Lavender Primary School)

It was only as I tried to support the children in being able to respond with breadth and depth to my instruction to reflect on the learning, that I realised my own ideas about reflection were hazy. What exactly was I expecting? (Fleecefield Primary School)

Engaging in and with research

Professional learning has become increasingly associated with the need for teachers to ‘engage in and with research’ (Elliott 2001: 565), as a means for teachers to understand and develop teaching practice which in turn will improve student outcomes. At the same time, in Higher Education Institutions, there has been a shift towards more collaborative research with schools and teachers, whereby teachers are involved in the ‘construction’ and ‘execution’ of research and not just in ‘applying its findings’ (ibid.: 565).

Teachers who take part in the Learning to Learn project demonstrate a commitment to undertaking cycles of enquiry. Whether they are typical of the teaching population as a whole cannot be answered, but as a learning community they demonstrate high levels of interest in learning:

Learning is full of reflections starting with “I wonder”, research allows us to evaluate considered risks. (Hipsburn First School)

As a teacher educator it is essential to be constantly engaged in research to lead by example, improve on practice and keep updated with the changes in education (Theresa, Northumberland College)

Lieberman (2009) has identified the benefits of teachers undertaking research as:

- Providing ‘a frame for examining teacher experience and shaping it into useable knowledge for improving the social and academic skills of...students. (p.1878)

It has been a privilege to become involved in the L2L project. On many levels, it has affected my teaching and the way in which I involve children in the process of learning. (Perranporth CP School)
The L2L project gave the platform for pursuing a line of enquiry in school, whilst ensuring the collection of data in order to quantify outcomes. It focused the approaches used and made staff really consider what the needs of the pupils and the school were and ways in which we could tackle problems. (Weaverham Primary School)

- Providing ‘rich possibilities for mutual learning’ (p.1878) between colleagues in learning communities

I was able to use many of the research methods and tools that were suggested during our conference. This meant that I felt confident using them as I had already practised them and had been able to speak to people who had already implemented them into their projects. (Carterhatch Junior School)

From the start of the planning process the professional dialogues held between Pippa, Steve and Sue were extremely stimulating and thought provoking. (Lanner Primary School)

Many of the teachers also acknowledge that they engage with published research as they progress with their enquiries:

I’ve come across things in my reading and I’ve thought ‘Oh I must just look at that and that will be useful, we’ll look at that method’. Things not necessarily directly related to what I’m working on, but things that get you thinking. (Treloweth Community Primary School)

The data from the project also demonstrates that undertaking research has a personal impact on the teachers – it provides tangible evidence that what they feel they have been doing successfully in the classroom is actually the case. As a result they are able to recognise their own competence and themselves as ‘experts’ (Hall 2009: 674).

What I found particularly interesting was the research methods because I thought something would work but I never had the evidence to prove it, it was kind of instinct. (Liskeard School and Community College)

Engaging in and with research therefore can be seen to develop both the professional learning of those involved and then as it is made public, the professional learning of those who read it. It is through this process ‘we might just have found the key to professional development that matters and that works, as well as a way to build the knowledge of best practice’ (Lieberman 2009: 1880).

**Professional Learning – Transforming Practice**

The matrix for teacher learning outlined at this start of this section has provided a useful means with which to examine the data from the learning to Learn project. However as we have already demonstrated, professional learning mirrors, to a certain extent, the enquiry process itself:

‘You find something, you try it, you review it, you analyse it, you change it, you have another go, the cycle.’ (Hipsburn First School)
Thus, new teaching techniques and tools are employed, student and teacher knowledge is created, experiences are reflected upon - they are discussed within communities (of colleagues, the university team, other teachers at the residential) and throughout this process thinking takes place which then informs future action.

In St Meriadoc Infant School in the first year of Phase 4, the teachers involved in L2L introduced regular philosophy lessons, using a story-telling approach, with the aim of improving children’s speaking and listening skills. After studying the data collected after three terms, the teachers found that there was a significant increase in the students’ receptive and spoken vocabulary as well as an improvement in questioning skills.

In the second year of the project, using the knowledge gained from the first year, and through extensive reading (for example: Alexander 2007; Rose 2006; Lipman 1998), the Year 2 teacher decided to extend the philosophy lessons to the mathematics curriculum in order to improve the receptive and spoken mathematical language of their students and to make them more enthusiastic about maths lessons.

At the end of the second enquiry cycle however, it was found that there was a ‘marked downturn in positive responses to philosophy lessons compared with last year -58% this year compared to 91% last year’. Possibilities for this result were considered. For example: ‘the ‘have a go’ climate of the philosophy was still very much in evidence but whereas in the past, there was no ‘right or wrong’ answer, this safety net was removed in some instances and children had to provide a ‘correct’ answer; i.e. one warm up exercise required children to say “…… is half of…..”. This of course, provides pressure for the child who is unsure of what is being asked.

Despite the findings the teacher undertaking the research found that:

> The project has been multifariously useful and informative and what I have learned from it, I shall use to develop my future teaching practice in mathematics (St Meriadoc Infant School)

We can see therefore that it is through experiences like this that learning progresses as ‘new possibilities suggest themselves’ (Timperley).

The evidence from the Learning to Learn teachers would suggest therefore that through a disciplined approach to professional learning (Keeson and Henderson 2010), teaching practice is transformed:

> Once again, just like last year, I have found my own teaching becoming better as a result of the Learning to Learn project. By being more open with the children about my own views, the children have equally done the same. They were not afraid to tell me if they found something hard or didn’t enjoy an activity because they knew by doing this it helped me make things better for them. (Lavender Primary School)
Practitioner led action research of this nature has the capacity to transform the sector. The central hypothesis – that developing awareness within the team of learner resilience and developing practical activities to engender it has a positive impact upon learner retention has, I think, been substantiated (Azumah, Lewisham College)

I believe the more we focus and encourage our learners, teachers, staff in supporting roles and managers on understanding the diverse nature of learning the better we will become as learners and educators. (Theresa, Northumberland College)

It has been a privilege to become involved in the L2L project. On many levels, it has affected my teaching and the way in which I involve children in the process of learning. (Perranporth CP School)

Additionally, teacher identity is changed. As teachers begin to see themselves as learners they become role models for their students which in turn results in a new student-teacher relationship – one based on mutual learning:

Initially, I had grand aims for my research which I now recognise as being far too ambitious. I just needed to talk with children to gain greater clarity. However, I have learnt that this talk needs to be a dialogue. (Fleecefield Primary School)

By this stage [the students] were starting to feel the routine of doing the [learning box] every week...... So I discussed it with them and said: what do you actually want to do? And they said they wanted to make it more interactive, so I redeveloped it again. (Tytherington High School)
5. Conclusions

This year’s research has had an implicit theme exploring learner narratives and perspectives of involvement in learning to learn. This has focused on student learning, but it has also encompassed teachers as learners and as learning role models. The findings have revealed a complexity of thinking around what is learning to learn and what learning to learn practice looks like across contexts, which although producing much commonality, has also highlighted some differences across age phases, regions and sectors particularly around the rationale given for using different approaches. By exploring this theme we wanted to explore the extent to which there is commonality in the aims of lifelong learning that all teachers, whether they are working with 3 year olds or 65 year olds, subscribe to and work towards; if not, why not.

To this end our understanding of the unifying concepts of learning to learn has moved forward significantly. We are now in a position to talk confidently about what it is that is different about Learning to Learn and how the impacts that are reported here have been achieved in such heterogeneous contexts and through such an apparent variety of approaches. The negotiated definition of Learning to Learn co-constructed with the teachers and the different facets which it comprises are a step forward in thinking about impact and also the transfer and sustainability of the ideas represented in the project. This definition will continue to be worked on but we are now at a stage where we can begin to articulate how we are different to other learning focused innovations and approaches, for example, Learning How to Learn (James et al. 2007), Building Learning Power (Claxton 2002) and the work of Smith et al. (2009). This will be tackled in collaboration with the project network over the final year of the project.

We can conclude that these structures and understandings of the Learning to Learn project have been successfully, although not always smoothly, implemented across a variety of socio-economic communities as well as across education sectors. There is evidence of the model of enquiry, metacognitive awareness and community engagement being effectively translated across classrooms, institutions, regions and now sectors. Within some schools’ project contexts the ideas have also been sustained over time, in some schools for upwards of eight years. The successful institutions who maintain their participation seem to be those that join up and are creative; seeing the links between agendas, tending to focus on the foregrounding of learning and providing a commonality of purpose.

We have evidence of positive impact on students’ attitudes, metacognitive awareness, academic self concept and attainment. This impact is particular obvious in case studies where teachers have used comparison classes or baseline measures; however this year we have also been able to report data at school and project level. Organisations that have had a sustained commitment to the project and learning to learn approaches are where quantitative change is most likely to occur; however, data at project level indicates a narrowing of the gap in relation to self concept towards reading and maths, in the attainment results of secondary schools and in differences between the genders in metacognitive awareness. We also have some evidence of a negative impact of standardised
attainment tests on students’ attitudes towards school and learning along with a suppression of metacognitive awareness.

Positive affects have also continued to be found on students’ motivation, understanding of learning, habits of mind and dispositions towards learning. These ‘soft’ outcomes of learning are increasingly being targeted through the enquiry process by teachers as the important aspects of what a learning to learn approach brings to a school and how it helps develop lifelong learning. Moreover, the complexity of the thinking demonstrated by students and their constructions of how the learning process should be operationalised and negotiated in the classroom is adding new dimensions to the field of pupil consultation.

This report has also documented impact on teachers, as learners, as professionals and as co-enquirers. Teachers, individually and collaboratively, are building practice knowledge, enhancing pedagogical repertoires and reframing relationships in learning environments. In a similar way to the students, we are seeing teachers enjoy taking a proactive role in their own learning and development; thinking again about their own professional learning and how different conversations, experiences and processes can fundamentally change their thinking. The move towards self-actualisation (Marton et al. 1993) which we have documented in the students learning is just as apparent, and maybe more valued, in the teachers’ learning trajectories.

The different foci chosen by the teachers under the heading of learning to learn look remarkably similar across contexts. There is variation between individual projects reflecting the input of the teachers, but fewer if any systematic differences according to broader context, such as region, education section or length of time in the project. The approaches and tools to support interactions in the classroom are fairly well grounded in project thinking across the project and they are certainly highly privileged by teachers. They are implemented with the common aims of developing a language for learning that can empower students towards lifelong learning and greater autonomy. This latter emphasis is particular prominent in the FE case studies and arguably could be ascribed to the age range and objectives of the sector.

It is interesting that despite the demands made of the FE Sector and the need to satisfy employers’ demands for generic and transferable skills; the case studies produced in this first cycle are not so different from the schools’. There is a slight higher level of focus on student autonomy but this is relatively small (Pumphrey and Slater 2002) and a suggestion there is a heightened sense of importance placed on the wider impact of L2L in the organisation. However, neither is so great to prevent us from believing there are great similarities in what learning to learn approaches more broadly may look like at classroom level across the FE and schools sectors. Having said this, the evidence of beliefs collected across the project suggest there are subtleties of rationale and process behind these objectives which need to be unpicked.

The detail provided by the case studies, of particular aspects of learning, areas of progression, individually and across groups, is yet again essential in bringing L2L to life. The themes of talk, tools,
learner action and professional learning are emerging as common across L2L classrooms. This past year’s discussions across the project have gone a long way to unpicking what is distinctive about these elements and how the practice associated with them manifests. Teachers have clear ideas of what Learning to Learn looks like in their context across all learners and they have provided examples of individuals and occasions where this level of learning is achieved, however most admit that this is something that is still rare even in schools who have had sustained engagement with the ideas and approaches used in the project. The competing challenges under which schools are working, particularly the performative culture, and the ‘space’ (Leat 2006) left for teachers to direct action towards Learning to Learn must be considered; although the negative impacts that Ofsted inspections have in some schools appear to have lessened.

Fundamentally L2L continues to be confirmed as a social process (Higgins et al. 2007) with high levels of negotiation around understandings generated at all levels. We continue to think of the concept of feedback loops (Hattie 2009) as being an important type of talk, with tighter feedback loops leading to more transparent and powerful learning. We see this in all interaction that occurs under the umbrella of Learning to Learn whether at network level, in the classroom or in between, and therefore untangling what this means and looks like becomes essential in moving forward. Through work in Phase 4 and with the introduction of the FE teachers we are beginning to feel that there is something important about the process in which social contexts for learning are facilitated, constructed and acted on that is useful in furthering understandings of L2L.

We have been fascinated to see the way in which roles and processes we thought were exclusive to different groups in the network (students as learners, teachers teaching and researchers researching) are moving fluidly between groups and happening in parallel across the community. Roles have been confidently reversed and processes transformed in moving from the domain of one actor to another. However, these changing dynamics and relationships have not been tokenistic; they have occurred with a complexity of understanding and complicity that is maybe not acknowledged elsewhere. The ethical and rights based appreciation of how a process such as enquiry can be transferred from the university team to students is highly developed and pragmatically constructed with an authenticity of purpose which places all learners as equal.

The importance of an ethical prerogative to learn (Wall et al. 2009) or moral obligation (Cliff 1998) is common across the case studies whatever level of learner is considered. This encompasses aspects such as better understanding of self as learner, the nature of interactions between individuals, the role and responsibilities of learners within a group and the process of moving forwards together is a repeating theme in the case studies. The ideas of Groundwater-Smith and Mockler (2007) are useful here in understanding the teachers’ professional learning through the enquiry process; however we also have evidence of students having this same commitment to themselves, to their peers and in some cases to supporting their teachers’ learning as part and parcel of the same process and objective.
6. References


7. Appendices

Appendix 1: FE College Interview schedule

Dear Colleagues,

This is the interview schedule that we’re planning to use for the first year interviews (overleaf). These interviews will be conducted over the phone, and should take no more than half an hour. The interviews will be recorded, transcribed and stored securely. The data from the interviews will be reported anonymously and individuals and colleges will not be identified. The ideas and information that we got from talking to the colleagues in schools were absolutely invaluable to our understanding, so we hope that you will be able to find the time to talk to us in the next few weeks and add in the FE perspective.

There will be an interview for each year of the project and we hope to interview each of you several times over the three and a half years of the project as it helps us to track the changes that happen, but it is not essential. Have a look at the questions and discuss them with your colleagues if you get a chance – don’t worry, there are no right or wrong answers!

There is a team of people in the Centre for Learning and Teaching who will be doing the interviews, but our research secretary Viv Moffett is managing the master list, so if you know that you need to rearrange your time, she is the person to contact on 0191 222 6943.

If you have any questions about the interviews, please contact Carl or Pam (0191 222 6943/5470, p.j.woolner@ncl.ac.uk).

Many Thanks,

Kate, Pam and Carl
Learning to Learn Phase 4
First year interview schedule

1. Your age
   
<table>
<thead>
<tr>
<th>30 and under</th>
<th>31-40</th>
<th>41-50</th>
<th>51 and over</th>
</tr>
</thead>
</table>

2. Your job title (please give details of your curriculum and/or pastoral responsibilities)

3. How long have you worked here?

4. How long have you been a teacher? (or other role in education)

5. Have you been involved in other enquiry or research projects during your career (such as BPRS, SBRC, post-graduate research or involvement with another university led project)? If so, what was your role in that?

6. How did you get involved in Learning to Learn Phase 4?

7. What do you hope to get from being involved? (interviewer prompt: long term)

8. What does ‘Learning to Learn’ mean to you?

Over the next year a common thread we will be exploring will be definitions of L2L, so we want to get a snapshot of people’s views at this stage of the project. This means that you don’t have to come up with the ‘definitive answer’ but you can tell us what your ideas are at the moment:

9. What do you think are the 3 key characteristics of an L2L college?

10. What do you think are the 3 key things that a L2L teacher does?

11. What do you think are the 3 key things that a L2L learner does?

*Please let us know if you think that there is something missing from this interview or ideas that you’d like to share. Thanks very much for taking the time to talk to us!*
Appendix 2: Learning to Learn in Schools Phase 4 Learner Interview

I’d like to ask you about being involved in the Learning to Learn Project here in your school. I’d like you to think back to the beginning when your teacher first started it and to think about how you felt about it and what you thought it might do for you and your learning. I’d like you to tell me about how you are feeling now about your learning. Then we’ll fill in the middle of this fortune line graph with things that have happened that are to do with Learning to Learn throughout the year and how you felt about them. What we’re trying to do is to work out the storyline of “[You] meets Learning to Learn”.

😊

😢

🙁

The beginning

Now
Appendix 3: Learning to Learn in Schools Phase 4 Questionnaire for Staff not involved in L2L

1. Your age

<table>
<thead>
<tr>
<th>Age</th>
<th>30 and under</th>
<th>31-40</th>
<th>41-50</th>
<th>51 and over</th>
</tr>
</thead>
</table>

2. Your job title (please give details of your curriculum and/or pastoral responsibilities)

3. How long have you worked in this school?

4. How long have you been a teacher? (or other role in education)

5. What do you know about the Learning to Learn in Schools project?

<table>
<thead>
<tr>
<th>Knowledge Level</th>
<th>A lot - I am involved in some way</th>
<th>I have seen the project in action</th>
<th>I’m aware of what the project is doing</th>
<th>I’ve heard the project exists</th>
<th>Nothing at all</th>
</tr>
</thead>
</table>

6. What do you think the Learning to Learn in Schools project is for?

7. How successful is the Learning to Learn in Schools project in your school for
   a. Learners

<table>
<thead>
<tr>
<th>Success Level</th>
<th>Very successful</th>
<th>Fairly successful</th>
<th>Minimal impact</th>
<th>Not at all successful</th>
<th>Too soon to tell</th>
</tr>
</thead>
</table>

   b. Teachers

<table>
<thead>
<tr>
<th>Success Level</th>
<th>Very successful</th>
<th>Fairly successful</th>
<th>Minimal impact</th>
<th>Not at all successful</th>
<th>Too soon to tell</th>
</tr>
</thead>
</table>

   c. The whole school?

<table>
<thead>
<tr>
<th>Success Level</th>
<th>Very successful</th>
<th>Fairly successful</th>
<th>Minimal impact</th>
<th>Not at all successful</th>
<th>Too soon to tell</th>
</tr>
</thead>
</table>

8. Please circle the statement(s) that best describe how you feel about L2L (or add your own statements)

   a waste of time       it’s intriguing       good for staff development
   provokes new ideas     I’m not interested in L2L       competes with teaching time
   a good thing for some people, not an approach I’d like to use       engages students
   I’m too busy with other things       I’d like to be involved in the future       too time-consuming

Thank you for your time and input!
Appendix 4: Learning to Learn in Schools Teacher Interview

Dear Colleagues,

This is the interview schedule that we’re planning to use for the Year Two interviews (overleaf). These interviews will be conducted over the phone, and should take a maximum forty-five minutes. The interviews will be recorded, transcribed and stored securely. The data from the interviews will be reported anonymously and individual teachers and schools will not be identified. The ideas and information that we get from talking to you are absolutely invaluable to our understanding, so we hope that you will be able to find the time to talk to us in the next few weeks.

Have a look at the questions and discuss them with your colleagues if you get a chance – don’t worry, there are no right or wrong answers!

There are a team of people in the Centre for Learning and Teaching who will be doing the interviews, so we should be able to find a convenient time for you. Elaine and Lucy will have some sheets with times available at the INSETs or you can contact our research secretary, Ulrike Thomas, on U.Thomas@ncl.ac.uk. If you have any questions about the interviews, please contact Elaine or Lucy (0191 222 6371/7449, Elaine.Hall@ncl.ac.uk, L.S.E.Tiplady@ncl.ac.uk).

Many Thanks,

Kate, Elaine, Lucy and the team
Appendix 5: Learning to Learn in Schools Phase 4 Year 2
Interview Schedule

First of all, check that we have all the demographic data straight:
Was the person interviewed in the Baseline (2007) or Year 1 (2008) interviews?
If yes, has their role in school changed since then? If so, to what?
If no, What is their role in the school?
How long have they worked in the school?
How long have they been a teacher?
Are they

<table>
<thead>
<tr>
<th>30 and under</th>
<th>31-40</th>
<th>41-50</th>
<th>51 and over</th>
</tr>
</thead>
</table>

How long have they been involved in L2L?

Last year we used narrative interviews as a change from our usual more structured approach. We’re doing these again this year because we found that by allowing you to tell us stories from your inquiries, we got a broader perspective on what being involved in Learning to Learn was like for you. This year, we’re focusing on students’ experiences so we’re asking you to tell us a story about a student that you feel has really benefitted in one way or another from your Learning to Learn project this year. We’d like to know a bit about this person, what their journey has been and what their experience and the change they’ve undergone has meant to you. It could be over the whole year, or something that happened in a single lesson – whatever you think makes a good story.

Thanks for your time and input!

Interviewer notes:
Make sure you know
Age
Gender
Year Group
Sp. Needs/ GandT
Subject area if relevant
Whether the interviewee considers this student unusual or typical
LEARNING TO LEARN IN SCHOOLS PHASE 4 & LEARNING TO LEARN IN FURTHER EDUCATION

TECHNICAL APPENDICES

March 2010

Kate Wall, Elaine Hall, Vivienne Baumfield, Steve Higgins, Victoria Rafferty, Richard Remedios, Ulrike Thomas, Lucy Tiplady, Carl Towler and Pam Woolner
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Appendix 1: Networking across Schools and Further Education contexts

A key role of the Learning to Learn project is to foster a supportive network in which teachers can share their professional creativity and the ways in which they have developed their craft. As craftspeople, teachers may explore how well a mass-produced solution will address their own problems and instead consider producing something for themselves: a bespoke, tailored resolution. However, given the time and effort involved, there remains a tension for teachers between privileging their contextual expertise and the risk of re-inventing the wheel. When we talk of an engaged teaching profession, one which both uses and challenges the frameworks of ‘evidence-based practice’ we envisage teachers taking on the roles described by Lieberman and colleagues:

“What we have, then, is a new leadership role that can help in the creation of new collaborative structures. It appears that a combination of these new roles and structures is necessary to professionalize the school culture and to bring a measure of recognition to teachers – who may be, in the final analysis, the best teachers of teachers as well as children” (Lieberman et al. 1988:165-166)

Can such a network be designed? Can links between teachers be organised like computer dating, with key themes, characteristics or approaches being ‘matched’ by the project managers? This year in the projects we have sought to explore the web of influence of case studies and teachers on one another more explicitly, making use of visual and traditional research methods in combination.

Using case study posters to elicit learning intentions within the network

The circumstance of running Phase 4 immediately after Phase 3 allowed us to retain many schools and teachers and this cohort of ‘old-stagers’ provided support for the confidence both of the schools and FE teachers new to the project as well as the university team. We therefore felt able to ask the teachers to take a more active role in talking to one another about their research, firstly by asking them to make short presentations to their colleagues at the regional INSET meetings in October 2008 and then at the residential conference in Bristol in January of this year to a much wider audience.

We chose the residential conference as the forum in which to collect our data as face to face meetings are vital in establishing network relationships, particularly so when the focus is on sharing research interests rather than simply the ‘business’ of keeping the network going (Black- Hawkins, 2004; Carmichael et al. 2006). As with our colleagues in the aforementioned SUPER network, we believe the value of a residential conference lies in the opportunity it offers to share common understandings and explore differences in perspective but, unlike this and other similar projects, we also see it as an opportunity to capture data on network learning ‘live’ and as it happens. We wanted to measure, as Little puts it, the potential for these exchanges to leave ‘footprints on practice’ and examine their effect on thinking about future research into learning as well as teaching practice.

The idea of using posters as visual cues began to germinate during the INSET meetings and derived from a very well-structured poster presentation at the European Association of Research in Learning and Instruction conference; interestingly an academic model of sharing expertise, but one that we thought would transfer in a non-scary way to the sharing evidence based practice objectives of the residential.
Our intention in designing the posters was to summarise the case study and to provide a strong visual message about Learning to Learn pedagogy, the research methods used and the ways in which the teacher chose to communicate the results. As not all the teachers would be able to attend the residential, the poster had to work as a stand-alone communication method. The posters were produced by several members of the team and so reflect a variety of aesthetic decisions. The annual residential in January 2009 was therefore organised with the poster presentations of the first year research from the schools project at its heart. This led one teacher to exclaim:

“Oh, I get it – we’re going to have a conference where we actually confer with one another…”

(Richard Gambier, Marlborough Primary School)

The university team produced a poster for every case study and both days were structured around presentation groups. As many schools sent two members of staff, it was possible for them to be directly exposed to half of the presentations. In addition, the posters were on permanent display and there were many opportunities to look at them. How, then to measure the impact of these presentations and posters?

One potential solution was to get participants to draw a map representing the people and or posters that, they felt, had had most influence on their thinking during the conference. Such a technique was used by Fox et al. (2007) to capture practitioners’ views of the roles played within the Learning How to Learn network by individuals and organisations associated with the project. The task was not directed so as to avoid biasing the responses of subjects, and was geared to creating a snapshot of significant actors and relationships involved in the creation and sharing of new knowledge about teaching and learning. However, they found that the mapping tool had several practical limitations as a data gathering instrument, including scepticism and lack of confidence in drawing the diagram as well as difficulties in aggregating and classifying the wide range of formats produced. The latter finding is suggestive of the fact that informant generated visual displays may be most appropriate for inquiries treating each participant as a discrete entity, but researcher generated displays may be better for studies seeking to draw comparisons and relationships across individuals and organisations (Meyer, 1991). In view of this we opted for a verbal data collection instrument that would yield both the qualitative and quantitative data necessary for us to represent teachers’ learning diagrammatically. The feedback sheet, below, was trialled at the INSEts and revised for the residential following comments from the university team and the teachers on the appropriate categories for success within the project: a mixture of research utility, pedagogical fit, personal learning journey and sheer enjoyment.
The feedback sheet was designed to give simple numerical data that could give us some idea of how eclectic the tastes of our teachers were: would secondary school teachers from urban schools be at all interested in the projects from rural infant schools or would the power of specific context prevail? In addition, it also served to encourage delegates to reflect critically on their own practice, thus ensuring that what may otherwise have been a simple ‘show and tell’ was extended to a deeper critical analysis of issues around teaching and learning (Little and Dorph 1998).

Representing learning within the partnership using network diagrams

A first-level analysis of a simple count (see graph below) suggested that while some posters were more popular than others, all but one made their mark on someone. The time spent in the project, the education sector or the region from which the teachers came did not seem to be significant factors in attracting votes. Simply inputting the data began to generate an impression that respondents from primary, secondary and further education were equally likely to vote for the same poster but creating complex graphs did not capture the way in which these networks of interest were forming.

The only strong pattern that immediately emerged was the importance of the teacher being present for the poster to attract votes in multiple categories. Some posters, such as the one produced for
King Edward VI, pulled in a lot of votes but these were overwhelmingly for the ‘idea I’ll use in my own teaching’ category. This supports our wider project hypothesis that the physical working space that the residential creates between and around the teachers allows for the development of more complex understandings (Leat, 2006). In order to develop a clearer picture of the patterns of learning taking place during the presentations, we had to switch tactics.

The new version of NVivo has model-building capabilities and it was possible, by representing the posters as external links and the individual teachers as cases, to set up as data elements the relationships between them. This allowed us to create a ‘knowledge transfer map’ indicating what is transferred (practices, methodologies) and by whom (schools, individuals, brokers). The advantage of visualising the network in this way is that it can elicit the implicit transfer of knowledge that occurs in these exchanges and therefore makes this learning more widely and easily understood by both us and our partners in schools and colleges (Eppler 2006).

Thus two kinds of visual representations emerged – messy and complex maps based on categories that have been very powerful for theory building work and cleaner and more ‘translatable’ pictorial representations of the reach of individual posters. The fact that, in this case, all nodes in the network are known meant that we were able to apply some of the concepts drawn from social network analysis (Hakkarainen et al. 2004) as a frame for their interpretation. In particular, we were interested in finding evidence of the following:

- **Cognitive centrality** - members who produce a high amount of knowledge for other teams.
- **Density** - how often a single piece of new knowledge is shared within a team. This can be used to measure the activity stimulated in the network by a given concept or idea.
- **Social contagion** - the process by which new knowledge is spread amongst actors who are weakly related and do not necessarily form a stable or permanent network.

In terms of boundary crossing activity, we were also interested in the concept of brokerage, namely the ability of some members of the network to provide short cuts to potentially high value nodes that lie outside a practitioner’s locality, or phase of schooling (Carmichael et al 2006).
Brokerage

Carmichael et al. (2006) point to the value of ‘weak’ (i.e. infrequent) contacts in brokering new knowledge within an organisation, and this can be seen in the diagram opposite. The presenters from Hazelbury Infant School were successful in garnering substantial interest in their work on TASC Wheels from colleagues representing both FE colleges attending the residential. The diagram shows that learning centred on a tool traditionally associated with younger children has not only crossed institutional and geographic boundaries but also those of educational phase.

Cognitive centrality

The poster and presentation delivered by Archbishop Benson Primary School, concerning student voice, had something for everyone and this is evident in the wide range of responses and potential uses this inspired in their colleagues. Six of the linkages, opposite, relate to ‘broadening of horizons’, four rate this as the best L2L idea at the conference, three indicate the idea has potential to be applied across the curriculum and three highlight an intention to use this method in their own practice. Interestingly, despite this response, only one linkage shows an intention to recommend the idea to someone else, indicating perhaps the power of the presenter in translating the complexity of a deceptively simple pedagogy.
Density

The poster produced by King Edward VI School, reporting a case study into the use of Learning Mats was striking in its visual in content, which may go some way to explaining the relatively high response to this material, despite the fact that no one from the school was able to attend the residential and present. In terms of ‘density’, the poster seems to have stimulated the same response in each representative, i.e. ‘This is an idea that I will use in my teaching’. As mentioned before, this narrow response may derive from the limited commentary that expands on the visual image. However it is worth noting that Learning Mats as a concept is one that has a long tradition in the project being first developed by St Saviour’s Infant School (McAlevey and Barratt 2004) in Year One of Phase 3 and translated to a secondary setting by Ellesmere Port Specialist School for Performing Arts (Rutter 2006). This type of tool has enduring appeal within the project.
Social contagion

This diagram is interesting in that many of the respondents represented here did not attend the presentation, but heard about it in the course of the conference and approached the school’s representative for more information afterwards. The case study presentation was unusual in that it centred on the notion of ‘permission to fail’ and this seems to have spread by word of mouth, creating a ripple effect. Significantly, there are a more linkages relating to research methodology and data collection than with other examples, suggesting critical reflection on what constitutes a ‘result’ in practitioner inquiry may be at work.
Future applications

As with the SUPER project run at Cambridge University (McLaughlin et al. 2006), the Learning to Learn network is not simply a means by which practitioner enquiry can be supported and developed but is also a focus for study in its own right. In this sense the network diagrams produced serve a similar dual purpose to that of concept maps (Novak and Goodwin, 1984) in that they serve as a tool, both to assess and measure understanding as well as move it forward. The advantage of presenting our researcher developed diagrams for analysis by members of the network at the next residential is that it is likely to encourage the teachers to reflect on the role of the conference in seeding new knowledge and how this might be better achieved in the future (Fox et al. 2007).

It will also allow the democratic nature of the project to be assessed and reaffirmed. As networks can’t be assumed to be democratic simply because they are decentralised, a means is required for all participants to assess the mechanisms by which identity and purpose are formed and the influence, for example, of cliques and ‘hubs’ in steering this process. Without this facility, there is a strong possibility that the trust and ownership of the smaller or less well resourced and experienced nodes could be undermined and the internal life of the network ‘soured’ (O’Brien et al. 2006).
Appendix 2: Developing the 5R Framework

The 5R framework was developed in Phase 1 and 2 (Rodd 2001; 2002) and has been used in two different guises across the L2L in Schools Phase 3 and 4 projects (see Wall et al. 2009 for development). Within this year of the project and the introduction of the L2L in FE research, we wanted to explore the extent to which conceptions of the Rs (Responsibility, Readiness, Resilience, Reflectiveness and Resourcefulness) were different within the further education setting. To examine this aspect two different lots of data were collected. Firstly an odd one out activity which had been used with the school participant teachers was replicated as part of the INSETs in Lewisham and Northumberland Colleges. Secondly, the Rs were used as part of an analysis frame for interviews completed with the FE teachers at the start of their involvement in the research (March/ April 2009).

Conceptualising the Rs

In Year 1 (2007-8) of the Learning to Learn in Schools project we continued our exploration of how the 5R dispositions framework could support our collaborative understanding of the project. As a construct the 5Rs arose out of Phases 1 and 2 (Rodd 2001; 2003) and the work of Bill Lucas, Guy Claxton and Toby Greany at the Campaign for Learning. It became central to Phase 3, although as with the definitions above it was always presented as a flexible construct which could be used by schools and teachers as they saw fit (Higgins et al. 2007). Originally, the dispositions represented in the framework were Resourcefulness, Remembering, Readiness, Resilience and Reflectiveness but taking our lead from the teachers, we felt that Remembering underpinned all of the other Rs while the framework lacked an R which encompassed the social element of learning, so that in 2007 the list was updated to Resourcefulness, Responsibility, Readiness, Resilience and Reflectiveness (Wall et al. 2009).

However, a re-design was not in itself an adequate way to embark on Phase 4. It was also necessary to explore the usefulness of the Rs as a concept and to ask several key questions relating to the usefulness and popularity of the framework amongst staff and students in Learning to Learn schools. These questions were addressed through a range of data collection techniques reported in the Year One report (Wall et al. 2009). One of these –“Are the 5 concepts distinctive from one another?” was explored with the teachers and produced some interesting results. However, we were concerned that some of these results were an artefact of the familiarity of the framework and the longstanding relationships and shared understanding between the schools and the Campaign for Learning and University team. Therefore, repeating the process within the FE project had multiple purposes:

- A new test of the robustness of the framework
- The opportunity to triangulate the data from the schools project
- Allowing the FE tutors to weigh in to the ongoing discussion of what Learning to Learn means
- Developing a common L2L language between the FE colleges and the Campaign and University teams
- Developing a common L2L language in the colleges for staff and students to use day to day in teaching and learning.

The 5 R Framework: the focus of FE teachers in their initial research plans

Research proformas were completed by the FE tutors after they had received their initial Inset, which introduced them to the project and to research methods. The proformas included a series of tick-boxes for tutors to indicate what they felt to be the focus for their research in terms of the 5Rs at this early stage.
The following table shows the responses for each college and how many times, over the two colleges and the 14 proformas submitted (ten from Northumberland and four from Lewisham), each R was indicated.

Table 1: Research intentions of FE teachers with relation to the 5Rs

<table>
<thead>
<tr>
<th></th>
<th>Resilience</th>
<th>Resourcefulness</th>
<th>Responsibility</th>
<th>Readiness</th>
<th>Reflectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northumberland</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Lewisham</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

It is clear from this table, that the FE teachers are particularly concerned about Reflectiveness. This R is indicated by all but one of the tutors. Conversations with them about their research suggest that they view this disposition as a central aspect of the active learners they would like their students to become. This focus on independent learners is also implied by their answers on the proforma to the question of what will change as a result of their new approach, which show links with the other popular Rs: Resourcefulness, Responsibility and Readiness. For example:

“Learners will become more active partners in the learning process” (Lewisham tutor, Cycle 1 proforma)

“The new approach will encourage learners to take a more active role in review and ILP process” (Northumberland tutor, Cycle 1 proforma)

Interestingly, only half of the tutors intend their work to impact on Resilience, and these are mainly tutors at Northumberland College. It is likely that the general under emphasis on this R reflects the stage of the project, with tutors thinking at this early point in terms of initially enabling and empowering their students and themselves, with the development of resilience coming later. Why this might be more pronounced in Lewisham than in Northumberland is hard to see, though with such small numbers it is not wise to read too much into this discrepancy.

What do the 5Rs look like in FE contexts?

FE teachers’ perspectives of the Rs were explored at the May 2009 INSETs, using the same Odd One Out exercise that was used with the schools project during Year One of Phase 4. The Odd One Out is a basic Thinking Skills technique (Higgins et al. 2001) which encourages learners of all ages to explore their understanding of a set of constructs. As the simple example below demonstrates it is possible to work in terms of ‘those two the same, that one different’ – so that the unique quality of the frog is that it has four legs, while the hen and duck share the quality of having two legs – and also in terms of attributing different concepts to the mix – so that the duck and frog share an affinity for ponds but the hen is the odd one out (according to a primary aged child who completed this task) “because it is looking the other way”.

“Learners will become more active partners in the learning process” (Lewisham tutor, Cycle 1 proforma)

“The new approach will encourage learners to take a more active role in review and ILP process” (Northumberland tutor, Cycle 1 proforma)
The flexibility of the frame of the task therefore allowed us to address both whether teachers were able to make distinctions that they felt were meaningful between the Rs but also to identify how key areas of dispositions theory were being enacted in their projects.

The FE tutors were invited to carry out the Odd One Out task during the first part of the May Inset as part of a two-way discussion which was intended to facilitate the sharing of researcher and tutor views about L2L so far. They had previously been introduced to the 5Rs and had categorised their research projects in terms of 5Rs focus, but there had been no lengthy descriptions of what the dispositions might entail. In both colleges, tutors worked in pairs on the Odd One Out, with most pairs completing two or three sheets considering various combinations of three of the 5Rs. The activity generated discussion, mainly within pairs, but also between pairs and with the researchers. The tutors seemed to find it an interesting activity and to enjoy trying to articulate their conceptions of the various learning dispositions.

The FE tutors’ Odd One Out tasks were generally less complex and less abstract than those produced by the teachers. This could be something to do with length of time in the project or it could be related to the context in which they teach. However, they privileged the ways in which the Rs were demonstrated by learners more than their school colleagues.

The tutors clearly had little difficulty making meaningful distinctions between the various Rs and the structure of the Odd One Out produced some interesting over-arching concepts – ‘self awareness’ ‘learner independence’ and ‘creativity’ all appeared in the central star. When the tutors’ responses are compared to the teachers it becomes apparent both that there is common ground and that Learning to Learn is extended and enriched by the FE perspective.

Table 2: Conceptual definitions of the 5Rs from the Schools and FE projects

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resourcefulness</td>
<td></td>
<td>More responsive than analytical, present moment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creative thinking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of the immediate</td>
</tr>
</tbody>
</table>
Considering this table suggests that some of the differences between the FE tutors and the school in their understanding of the 5Rs are indeed due to differences in time in the project, but others may be more closely linked to differences between the FE and school context, including the age of learners. The more over-arching ideas that the school teachers produced, such as their conception of Responsibility as under-pinning the other Rs, would seem to be mainly due to their longer experience with the project, which has allowed them to develop overviews and more analytical perspectives.

The differing ideas about Readiness, on the other hand, seem more likely to reflect the differing ages of the students taught by these teachers. Readiness involves some shared, more abstract, concepts, but the unique features are the practical sides to this disposition, where the differences would seem to relate to student age. Whereas the school teachers identified basic physiological needs in this connection (sleep, nutrition), the FE tutors linked Readiness to external expectations, presumably thinking of their students’ immediate futures for which college is preparing them. The other unique features identified by the FE teachers, however, do not seem so clearly linked to student age and possible reasons for the identification of these features may be found in the context of FE learning. Identifying the completion of tasks and development of self worth and self awareness may seem appropriate to the FE teachers because of overviews they hold about facilitating the development of well-rounded and capable learners, against a background of previous struggles and failures for many of these learners.

**Further Education tutors’ thinking about the Rs in practice**

In February of this year sixteen of our FE colleagues who attended the Bristol residential were interviewed by phone (for schedule, see Appendix 1) in order to capture their initial perceptions and expectations of Learning to Learn and their involvement in the project. The interview included two questions:

What do you think are the 3 key things that a L2L teacher does?

What do you think are the 3 key things that a L2L learner does?

Using the 5Rs as a coding frame, a subsequent content analysis of responses to these questions suggests that there are subtle differences in how FE teachers relate these concepts to their own experience and to that of their students. Although again a degree of caution is merited given the small sample from which the data was derived, it seems there may be a discrepancy in how the 5Rs are believed to influence teaching and learning in the classroom, and that this may have its roots in
recent government policy relating to FE. The results of the analysis are summarised in Table 9, below.

**Table 3: How the 5Rs were related differently to teachers and learners**

<table>
<thead>
<tr>
<th>How the 5Rs relate to learners</th>
<th>Shared concepts</th>
<th>How the 5Rs relate to teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resourcefulness</td>
<td>More responsive than analytical, present moment Creative thinking Use of the immediate environment</td>
<td>An ethical requirement that teachers’ practice reflects the concerns of learners</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Willingness to try and think for themselves rather than rely on teacher guidance</td>
<td>Self-organisation, maturity, ethics Consciousness of learning, concrete, enacted, relational</td>
</tr>
<tr>
<td>Readiness</td>
<td>Confidence in ability and the motivation learn</td>
<td>An emotional state Looking forward</td>
</tr>
<tr>
<td>Resilience</td>
<td>Can maintain motivation in the face of setbacks</td>
<td>Individual and personal quality Courage to innovate despite high stakes accountability structures</td>
</tr>
<tr>
<td>Reflectiveness</td>
<td>Seeing learning as a series of connected, not isolated experiences</td>
<td>Looking back, developing sense of ‘self as learner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using past teaching experiences to identify patterns of need</td>
</tr>
</tbody>
</table>

In terms of **Resourcefulness**, there was little difference between how teachers viewed this quality in themselves and in the learners. When referring to students, comments focused on the skills and knowledge they need to draw on in order to respond effectively to learning challenges:

> ‘A good range of study skills and they would know when to use them and how to use them and would voluntarily do so when the situation warranted’. (Teacher 2)

and the consequences, should these qualities be lacking;

> You get vocational teachers who are very enthusiastic and want to impart their knowledge but are surprised and amazed at the lack of common sense (Teacher 8)

Similarly, teachers spoke of the need for flexibility when reacting to the emerging needs of learners and the creative thinking that this requires of their daily practice:

> ‘It would be someone who is more prepared to respond to something rather than coming with a plan. ‘(Teacher 14)

> ‘Be willing to recognise different approaches and to change with them,’ (Teacher 3)

In both instances, a premium is placed on personal resources that allow individuals to think on their feet, adapt to changing circumstances and turn them to advantage. Comments relating to the trait **Responsibility**, however, show a slight difference in emphasis. In terms of learner behaviour, this was viewed by teachers as a predisposition to act- a willingness to take the lead in learning rather than to accept guidance passively:

> ‘They are picking the learning rather than me just delivering’. (Teacher 11)

> ‘The first years all sit there and they nod and they want to please and if they don’t want to please they do nothing’ (Teacher 13)

> ‘Someone who has taken more responsibility for their learning and can be more proactive rather than relying on the coach to come up with everything’ (Teacher 12)

Teacher responsibility, on the other hand, appears to be seen by some as a matter of moral obligation-to ensure that learning is, at least in part, negotiated with students and that their expressed needs and concerns are heard.
‘They literally come in and they are not aware— they are just told what to do. They are never asked what they would prefer. It’s giving them the choice basically’. (Teacher 15)

‘The more learners that are involved in decisions about their learning, within obviously the constraints of the curriculum, the better.’ (Teacher 8)

It would appear from the opinions expressed above that, to an extent, there is a symbiotic relationship between responsibility as expressed by teachers and by learners. Put simply, teachers give up responsibility so that students can take more on and without this quid pro quo, the limited transmission model of learning is left to predominate. Something of this is also evident in descriptions that relate to affective and emotional factors that underpin the notion of Readiness. In terms of learner readiness, there is an emphasis on confidence and belief, unsurprising perhaps given the negative prior experience of schooling that characterise the experience of a good proportion of FE students.

‘I think learners sometimes feel that they can’t do something lack belief, first of all, a lot of students have a lack of belief in what they can and can’t do.’ (Teacher 7)

‘Perceive or to recognise that having goals that are out of their reach are within their reach because sometimes you think they are coming here to say learn me, teach me.’ (Teacher 11)

When translated to teacher behaviour, readiness seems more a matter of empathy, reflected in recognition of the importance of ongoing relationships with students in developing a learning partnership. Through such a process, the trust and understanding necessary to cultivate learner confidence and esteem can be built and feedback on progress personalised to take into account individual circumstances and challenges.

‘More and more I think it’s about the relationships, because until the relationships have settled and whatever it means….settled, trusting, trusting the teacher.’ (Teacher 2)

‘Really develop a rapport with the learner.’ (Teacher 1)

A possible interplay between teacher and learner characteristics can also be discerned with regards to Reflectiveness. When referring both to teachers and learners, comments focused on the importance of patterns and pathways when looking back on experience. Remarks concerning students suggest the importance of recognising learning as a chain of interlinked experiences leading towards a given outcome, as opposed to a series of discrete encounters:

‘Concentrating on what they’re doing well, what they’re not doing well and how to improve’ (Teacher 4)

‘To recognise and reward themselves for the things that they did do well.’ (Teacher 2)

‘It would be an idea where they want to be.’ (Teacher 14)

In turn, teacher reflectiveness can be viewed as facilitative of this process in that it is geared to ensuring that teaching is tuned to the learning observed in previous sessions and is constantly reshaped to take the lessons of experience into account. Teacher reflection, in other words, is geared to creating learning sequences that are meaningful to students and allow them to position their level of learning within a coherent overall structure:

‘Being more aware and making the students aware of what they can achieve— what they could achieve rather than just going through the motions.’ (Teacher 15)

‘Staff reflecting on whether certain techniques are working as well as they should and reflecting on what students are telling us.’ (4)

‘Use the information that you’ve gained and see if you can raise the student’s achievement and offer support as well.’ (Teacher 1)

Finally, the robustness of confidence in the face of setbacks was cited by relatively few interviewees as an important characteristic of a Learning to Learn learner, mirroring perhaps the comparatively
low incidence of resilience as a focus for their case study research. One teacher, who cited this quality as being important, described it thus:

‘Persistence to do something, perhaps to do try and something that doesn’t feel very natural to start with.’ (Teacher 2)

This notion of performing outside a comfort zone also appears in views expressed that relate to teacher resilience. However, rather than an ability to cope with setbacks on a personal level, teacher resilience appears more a matter of defending notions of good practice that run counter to the cultural norms prevalent in the college and the FE sector as a whole. It would seem that innovation in such a climate takes nerve:

My view was that if I didn’t have any resilience, then everything else pretty much falls apart. At times when push comes to shove you need to make difficult decisions. (Teacher 11)

‘Don’t be scared or worried about what’s coming up’ (Teacher 7)

Not to just go in and teach and deliver what you are told to deliver. (Teacher 15)

‘Looking at learning differently and it not being outcome based,’ (Teacher 13)

The 5Rs and recent FE policy

When learners participate in decisions affecting their learning experience, they are likely to play a more active role in the provider’s quality improvement processes – a key lever of service improvement. (DfES, 2006: 36)

Since 2007, it has been a requirement of FE colleges that they have strategies in place for learner involvement that outline how students are to control and influence their learning experience. Consequently, colleges have been held accountable for their provision in this area through the Common Inspection Framework (Ofsted, 2009). More so than in schools, perhaps, there is a requirement placed on staff that the learner voice is not just heard but is acted upon and is seen to be accommodated in curriculum design and delivery. As one teacher put it at interview:

‘It’s bringing the students more centrally into decisions, so it becomes a college that evolves because of the learners and staff together rather than just one informing the other.’ (Teacher 16)

Hence, it is possible that the interrelationship between teachers’ views as to how the 5Rs relate to themselves and the learners may be a product of an explicit move at policy level to incorporate student views more coherently into systems for planning, teaching and evaluating course content.
Appendix 3: Students’ perspectives on their own learning

What is learning? (School students)

Learners’ conceptions of learning can be thought of as the beliefs and understandings which learners hold about learning. Over the last thirty years or so there has been an interest in identifying and defining a number of different conceptions of learning. An influential taxonomy proposed by Marton et al. (1993) identified six hierarchically related conceptions of learning:

1. Learning as increasing one’s knowledge – the consumption of already existing information;
2. Learning as memorising and reproducing – for a purpose such as a test;
3. Learning as applying, where the learner applies what is learned as the need arises – such as driving skills or manual tasks;
4. Learning as understanding and the abstraction of meaning – developing meaning from learning, developing a point of view;
5. Learning as seeing something in a different way, an interpretative process aiming at understanding how things are;
6. Learning is ‘changing as a person’ or self-actualisation.

Some additions to these ideas have been proposed, such as Cliff’s (1998) suggestion of learning as a social or moral obligation. These aspects map, at least to some extent, onto the Campaign for Learning’s 5Rs model of dispositions for learning (Readiness, Resourcefulness, Resilience, Responsibility and Reflectiveness) as students’ conceptions tend to endure over time and relate to their learning behaviours. Burnett et al.’s study (2003) suggests that secondary school students who adopted a deep approach to learning liked learning new things and displayed a conception of learning as personal development, seeing helpful teaching approaches as experiential and involving social interaction. They indicate that teachers can develop practices which might assist pupils in to developing their conceptions and to view learning as personal development for which they have some responsibility.

Learners’ conceptions of what effective learning is were elicited from students in some of the learning to learn schools with a writing task. This was adapted from a study by Hadar (2009) who based it on an open-ended task eliciting learning conceptions (Tynjala 1997) and from Purdie et al. (1996) open-end task model. Pupils were asked to write a short essay relating to the question: What is learning? The pupils were also given two further sub-questions to consider in developing their ideas about learning: Who is a good learner? What do you do in order to be a good learner?

This idea of this open-ended approach to data collection was that it might serve as a pilot as it has advantages over more traditional methods such as surveys in that it enables more open expression can focus on explanations for the activities in which they participate, and encouraging learners to explain the meanings they give to their experiences. In addition the findings from the L2L project can be compared with those in other studies, such as Hadar’s study of Israeli secondary students.

Analysis in this study found that the students’ conceptions of learning were divided into two separate dimensions: ‘school learning’ a surface level approach designed to satisfy teachers’ demands and allow the learner to ‘survive the system’ and ‘ideal learning’ which reflects a deeper conception of learning as challenging, gratifying and enriching. These two types of learning were found to rarely if ever co-exist in the day to day experiences of students. ‘Ideal learning’ was rarely, if ever applied in the school setting, and Hadar give two possible reasons for this:

The school context, characterised by curricular demands and policy requirements, enforces a notion of learning centred on compliance that is not ‘ideal learning friendly’.
The students, although aware of what ideal learning comprises, are not yet ready to take responsibility for self regulating their own development.

<table>
<thead>
<tr>
<th>‘School’ learning</th>
<th>Listening to what you are being told. Practising so that you can do something correctly. You need to be able to remember it in the future.</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Ideal’ learning</td>
<td>Finding ways to apply knowledge in real situations. Putting together what you know and seeing something new. Developing your own view in relation to the ideas of others.</td>
</tr>
<tr>
<td>‘Shared’ learning</td>
<td>Adding new knowledge to what you already know. Using the skills you have in a different situation. Understanding how ideas are connected.</td>
</tr>
</tbody>
</table>

A total of 33 samples of writing were received from three different schools in the project. The size of the sample and its nature (an opportunity sample from willing volunteers) means that due caution needs to be taken in interpreting the findings. The pupil’s writing has been coded according to whether it was ‘school’, ‘ideal’ or ‘shared’. Although the majority of pupils expressed their conceptions in terms of the dichotomy Hadar found, there are examples of more sophisticated views integrating the different perspectives, whilst at the same time reflecting a number of the dimensions identified by Marton et al. (1993).

Students clearly understood learning in terms of the things they do at school:

- “Learning is writing and Science or Maths or History and new stuff or being sensible and being good on the carpet or not laughing when someone is being silly.”
- “Learning is reading and writing.”
- “Learning means you get to know sums. How to write.”

And a related perspective that learning is related to school success:

- “Who is a good learner is who gets often high levels in things such as school subjects.”

Two further aspects were frequently expressed about school learning in terms of the importance of effort and practice

- “I have work hard to be the best learner.”
- “If you want to be a good learner you have to do hard work.”
- “If you didn’t know what your 12 times tables were if you practice it until you know it means you’ve learned the 12 times table.”
- “A good learner is someone who listens and concentrates.”

Also important to the pupils was novelty or learning new things at school:

- “I think learning is when you get taught new things. We learn things every day for example if you don’t know what a different way to do something and the teacher shows, you have learnt something.”

This was in terms of both curriculum knowledge and physical skills:

- “Learning is trying to teach the brain new stuff e.g. Maths, Science and Literacy. And there is not only mental learning, there is physical such as Cricket, Football and Basketball.”

This view of learning new things was also evident in the broader or more idealised views of learning, but focussing on the individual rather than the teaching situation:
“Learning is when you do something which you haven’t done before so next time you do it you know how to do it.”

“Something you find new and you didn’t know.”

“Discovering new things is called learning and the more you discover the more you’re learning.”

“They also expand their knowledge even more and learn more new things.”

Some students explicitly expressed the relationship between learning in school and more widely:

“Learning is when like you pick a subject and you explore it and learn so many facts you never learned in your life, for example you’re studying Ancient Greece or anything else and you explore it and learn so many facts about it you never knew.”

“Learning doesn’t have to be at school, you can learn anytime anywhere.”

“You can learn even if you’re an adult.”

More sophisticated conceptions were also expressed (at least in terms of Marton et al.’s (1993) taxonomy) in terms of learning being about changing as a person or self-actualisation:

“Learning is what people want to learn. You have to learn because in the future if you want to become something, you will have to know a lot of things for e.g. if you want to become a doctor you will have to know lots and lots of stuff like Maths, English and Science.

“Learning things is what you need to achieve in life.”

“I think learning is part of life. Whatever we learn it’s always useful in the future.”

As well as further dimensions such as those suggested by Furedi (2003) in terms of learning as risk-taking:

“A good learner is somebody who is ready to do work and is willing to take risks.”

This brief analysis indicates the relative complexity of learners’ conceptions of learning at school and of learning more broadly. Articulating and discussing these conceptions as part of the learning to learn approach in classrooms would clearly bear further investigation. As Hadar (2009) found pupils at school do not have a single conception of learning, but also are aware of different sets of learning conceptions and hold these simultaneously.

**What is learning? (Further Education Students)**

Learners’ views on what constitutes learning were elicited by means of a diamond ranking exercise using nine cards marked with different definitions of learning. These were based on the same three categories of learning identified in the article by Hadar (2009) used with the school students above.

The students made two diamonds with the cards in response to the following prompts:

What is the learning that is valued in college?

What is the learning that is important beyond college for lifelong learning?
Figure 10: Diamond Ranking structure

A total of 64 learners from both colleges were interviewed, drawn from a wide range of courses as outlined below in Table 15.

Table 4: Students interviewed and number of diamonds created

<table>
<thead>
<tr>
<th>College</th>
<th>Course</th>
<th>N</th>
<th>No. diamonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northumberland</td>
<td>Beauty Therapy</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Northumberland</td>
<td>Travel and Tourism</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Northumberland</td>
<td>Hairdressing</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Lewisham</td>
<td>Youth Entry to Further Education</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lewisham</td>
<td>Youth Entry to Higher Education</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lewisham</td>
<td>Adult Learners (Full Time)</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Lewisham</td>
<td>Adult Learners (Foundation)</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Lewisham</td>
<td>National Award Art and Design</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
<td>28</td>
</tr>
</tbody>
</table>

We wanted to see if FE learners’ attending both colleges exhibited similar patterns of thinking to those reported in Hadar’s study, or are there factors that potentially distinguish L2L in FE from its sister, school based project? The diamond ranks the learners produced, summarised in the table below, are suggestive of the latter being the case.
Table 5: Students interviews and number of diamonds created

<table>
<thead>
<tr>
<th>Pattern predicted by Hadar results</th>
<th>Overall (28 diamonds)</th>
<th>Lewisham (13 diamonds)</th>
<th>Northumberland (15 diamonds)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lifelong</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>- Finding</td>
<td>- Listening</td>
<td>- Listening</td>
</tr>
<tr>
<td></td>
<td>- Putting</td>
<td>- Adding</td>
<td>- Adding</td>
</tr>
<tr>
<td></td>
<td>- Developing</td>
<td>- Practising/Using</td>
<td>- Practising</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>- Listening</td>
<td>- Using</td>
<td>- Using</td>
</tr>
<tr>
<td></td>
<td>- Practising</td>
<td>- Practising</td>
<td>- Putting</td>
</tr>
<tr>
<td></td>
<td>- Remembering</td>
<td>- Understanding</td>
<td>- Remembering</td>
</tr>
<tr>
<td><strong>College</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>- Listening</td>
<td>- Listening</td>
<td>- Listening</td>
</tr>
<tr>
<td></td>
<td>- Practising</td>
<td>- Practicing</td>
<td>- Practicing</td>
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<tr>
<td></td>
<td>- Remembering</td>
<td>- Remembering/Adding</td>
<td>- Remembering/Adding</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>- Finding</td>
<td>- Putting</td>
<td>- Finding</td>
</tr>
<tr>
<td></td>
<td>- Putting</td>
<td>- Developing</td>
<td>- Understanding</td>
</tr>
<tr>
<td></td>
<td>- Developing</td>
<td>- Remembering</td>
<td>- Developing</td>
</tr>
</tbody>
</table>

What is the learning that is valued in college?

When responding to the prompt ‘What is the learning that is valued in college?’ the FE learners, as with the school aged subjects in the Hadar study, placed high importance on surface level conceptions of learning, such as practising, remembering and, in particular, listening with less emphasis on ‘ideal’ definitions such as putting together what you know and seeing something new (see Figure 29, below). This corresponded to the responses from the school students reported above.

One comment from a learner suggested that this may have its roots in the behaviour management expectations of teachers at the college:

*For the college, listening to what you are being told is the key. Most of our teachers explain to us that we should listen to what they are saying, be quiet in the class and learn from listening rather than talking that much - but obviously expressing your ideas is important as well.*  
(YEHE ‘D’)

However, more common was the view that colleges exist not simply to educate but to instil professional standards and knowledge. Several learners expressed the view that, to an extent,
college learning is necessarily didactic because of the nature of its mission - to show students how to ‘get it right’. Yet, the way that this was expressed through the diamond ranks seemed to depend largely on the nature of the course and the type of experience the learners were engaged in at the time. For example, the Beauty Therapy students, whose course was emphasising mastery of practical skills, placed practicing as having high importance for college learning, whereas, the Travel and Tourism learners judged listening to be equally important. This is reflected in the comments below:

I think that this is important at college- you have to listen- it’s got to be drummed in. We know ourselves, over the past few months, there’s been a lot of repetitive work and it’s been drummed in. it’s getting you to remember parts of the coursework that you’re doing so that you can do the job basically. That’s why it has been that repetitive. (T&T pair 2)

You have to learn your manicures first and get assessed on that and then your facials. You have to keep doing them until you pass. (BT pair 2)

This does seem to be different from the schools data where although a small sample, opinions did seem to be relatively consistent. This would certainly appear to reflect the diversity of the FE sector and the types of learning in represents.

Salisbury et al. (2009), who interviewed 27 FE teachers on their experiences, found that many were consciously socialising learners for the habits, norms and practices of the workplace. Moreover, they found that considerations involving funding, inspection and audit were driving provision towards a delivery model that emphasised transmission of expertise over enabling learners to experiment and express their emerging understanding. This, again, has echoes in the comments of some learners.

We thought about the here and now and we thought that listening, absorbing and understanding are more important than voicing your opinion and thinking about what’s in the future. You are foundation level here, where you are building up your skills, so it is more important to listen and absorb than it is in 5 years time when I can say ‘Yes, I’ve got the paperwork to back it up- I’ve passed the course and now can go out into the real world and adapt what we’ve learnt.’ It’s building on your skills till you are comfortable enough to take it to the outside world. (ALF1)

A learner, commenting on why ‘Putting together what you know and seeing something new’ had been ranked low down said:

This is experimenting, not learning. (YEHE ‘D’).

Comments by FE teachers in the course of the phone interviews at the start of cycle 1 corroborate this and suggest that teachers and learners co-construct a notion of college as a deliverer of content as a consequence of the heavily regulated and monitored climate in which they both work.

It will change early delivery with the learners in the hope that it will aid retention and achievement. (Teacher 16)

Not to just go in and teach and deliver what you are told to deliver. (Teacher 15)

I think that we are falling in to a trap again and teaching towards a test so it is about throwing all that out and thinking how students retain the things that we are supposed to be doing. (Teacher 13)

To some participation in the project is perceived as a potential way of side stepping these pressures, confirming that practitioners have an understanding of and a curiosity for how learning occurs that is perhaps is stifled by regulatory pressure from external agencies.

We can seize the initiative that comes from within the college which is unusual. Normally, it’s the kind of stuff that comes in from outside. (Teacher 4)

The point is constant improvement- to look at whatever it is, but in its broadest sense. Because a lot of stuff in FE is done at a micro level and what I like about L2L is that it works on a macro level and looks at anything that may inform. (Teacher 16)
What is the learning that is important beyond college for lifelong learning?

Although resulting from different underlying factors, perspectives on ‘school’ learning held by the FE learners we interviewed bear a good deal of resemblance with those voiced in Hadar’s work with secondary students. Where our findings differ is in learners’ expressed notions of lifelong learning. Unlike the aforementioned study, there is no clear demarcation between ‘school’ and ‘ideal’ learning concepts - in fact the data suggests a significant degree of overlap – as documented in the schools data. The results, shown below, suggest that to a large degree ideal and school learning amount to the same thing in the eyes of the learners we interviewed.

![Lifelong learning cross-colleges chart]

To some extent, this can be explained by the motivation for attending college which, particularly in the case of vocational courses, is governed by the need to enhance employability. In this respect, the students are happy to comply with the delivery model of skills development because, as clients, that is an area of provision they value highly.

That’s why you come to college, so that you can learn skills that you are primed for in your job. (T&T pair 2)

However, many students talked about organising the cards, not in order of importance necessarily, but in a temporal sequence, whereby knowledge had to be received and practiced so it could be remembered and added to what was already known. Only after this had been accomplished could the higher order skills of applying new learning to practical situations and forming a personal view in relation to those of others be attempted. For many, listening is the gateway to this process and is a sine qua non in learning, regardless of the prior knowledge and expertise that they bring to their studies.

This [listening] is in the middle because if you don’t listen then you aren’t going to learn anything. You could come to college and do what you already know and get by, but you need to listen to get new stuff. (A&D)

If you don’t listen you can’t know what to do. If you don’t listen you won’t know where to start from. (YEHE ‘T’)

Listen and then you practice and then you put together and find out ways and then add new knowledge and develop your own view so you can see how ideas are connected. (ALFT)

A cyclical link was made between practising and remembering as a way of embedding new knowledge gained through listening.

We put practising second because if you don’t practice you won’t remember. (T&T pair 7)
It’s near the top because if you don’t constantly practice something, you will never learn or remember it. But then again, if you haven’t learnt something you can’t practice it... how do you practice something you don’t know- you have to learn something first. (A&D group 2)

Although the importance of higher order skills related to applying new learning and connecting ideas were recognised by some, they were seen more as end points in the process that should be attended to later, once the received knowledge has been fully assimilated.

This is my first priority. Learning doesn’t mean that what I learnt in the past I have to neglect- I have to add it to the new things that I have been told. I have to put the past one and the new one together and make a new knowledge. (ALF2)

It’s near the bottom because you don’t need to know why they [ideas] are connected straight away. That all comes at the end of the course. (BT pair 3)

This [using skills in a different situation] happens later, in the future, when you adapt what you have learnt in the real world. (ALF1)

This [understanding how ideas are connected] is at the bottom because all the ideas you have to learn and practice so that you can put them all together and connect them. (A&D group 2).

This [finding ways to apply knowledge] is at the bottom because you need to know all the knowledge before you can do it in real life. (T&T pair 5)

This seems to be particularly important for those who are just embarking on a course of study and are in the early stages of orientating themselves to what the curriculum requires of them as learners.

I’d say that this is quite low down because we are early on in the course at the moment. They are still helping us to develop our skills so that we can use them in a final project where we can use all our skills together. (A&D 2)

Others expressed the view that conscious effort need only be expended on rote activities such as practising, listening and remembering because higher order skills such as recognising when to apply learning in practical situations is a natural process that will take care of itself. For example, a learner said of ‘Finding ways to apply knowledge in real situations’:

This isn’t as important because it is something that comes naturally as you learn. (YEHE ‘D’)

Another expressed the view that real life learning is tacit in nature and therefore is different from the type of activity that characterises college learning.

In college it’s more explicit. Outside college it’s just your life. (YEHE ‘R’)

Summary

Underlying the overall picture described above, it’s important to remember that there is wide variation in the data we collected. This reflects the way that FE colleges cater for a wide range of students with very different needs. The students we interviewed varied in age (school age to adult learners (19+) and previous educational experience as well as current route through college (see Table 15). The students we met held quite varied views, both about learning in general and the characteristics of their college learning. This makes it difficult to identify a definitive FE voice. In view of this, it is also not surprising that the diamond ranks and the comments they elicited during interview were different from those predicted by Hadar’s results. However, as shown above, there are some important consistencies in the ideas students appear to have about college learning and learning more generally.

In the Hadar study it was concluded that school students complied with the schools notion of learning at the expense of their own ‘ideal’ version as a way of surviving and coping with compulsory education. The learners in this study, however, although given financial incentives to study, are doing so voluntarily and appear to be in collusion with the transmission model of teaching. In other words, they would rather be taught than organise and manage their own learning. This has echoes in
a study by Salisbury and Jephcate (2008) that examined experiences of learning and working in Welsh FE colleges. They concluded that for many students, entry to college, either from school or family rearing or unemployment, represented crossing a threshold that presented real challenges in terms of self-directed study. One learner in their study put it thus:

I did AS levels for a year at school but this course is far more work, you’ve usually got four assignments on the go at any one time. I find this quite difficult because I’m used to more traditional lessons with more teacher input. I am learning to take more responsibility for my work now but it was very hard at the beginning. (p.155)

They also found a similar lack of confidence and doubt in adult learners which corresponds with the lack of certainty we found as to how and when learning should occur outside the classroom and beyond the range of the teacher. These findings reinforce the need, expressed by colleagues from both colleges, that lifelong learning needs not only to be scaffolded for learners but, possibly more importantly, has to be sold to them as a skill crucial to their future success in the workplace and world beyond the college gates. Without such a sales pitch, it would seem many will fail to see the relevance of initiatives geared to engender reflection and greater learner responsibility.
Appendix 4: Student Opinion Lines

Student interviews were completed as part of the school visits in the summer of 2009. At present equivalent data has not been collected from FE students and therefore the findings reported in this section are limited to the Schools Project; although we do see this as having potential for the next year of the project and hope to repeat the process in colleges to be reported in the final project report.

The interviews were designed to be completed on a one to one basis with children of all ages and aimed to be narrative in style, asking children to tell the story of their learning as part of the L2L project. The story element was felt to be important and linked to the work of Yair (2009). With the joint objectives of inclusivity and high levels of reflection, a mediated interview was chosen with a visual prompt providing the mediation.

As with the Odd One Out activity we returned to a powerful pedagogic technique as a basis for this data collection method. Fortune lines are a thinking skills technique which has been shown to support young children’s thinking about a particular factor over time (Higgins et al. 2001). We decided that this structure would be an appropriate scaffolding tool to support the narrative response we wanted. The mediated interview tool can be seen in appendix 00.

Students were asked how they felt about their learning on the day of the interview to make a distinction between academic self-concept and their general mood. They were then asked to think backwards to gauge their feelings about learning at ‘the beginning’. For most students, this was the beginning of the school year, as we were looking at the impact of the particular cycle of inquiry in the school. Students were then asked to track their journey from beginning to end, either as a linear progression or reflecting ups and downs. Whatever kind of line they drew, students were then asked to explain what had either supported an increase in positive affect or contributed to a decline.

In total 69 fortune lines were completed (see table 10) across all four local authorities. This included a range of age groups including four teaching assistants (excluded from this analysis due to the increased number of variables).

<table>
<thead>
<tr>
<th>Region</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire</td>
<td>12</td>
<td>17.4</td>
</tr>
<tr>
<td>Cornwall</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Enfield</td>
<td>16</td>
<td>23.2</td>
</tr>
<tr>
<td>Northumberland</td>
<td>21</td>
<td>30.4</td>
</tr>
</tbody>
</table>

The age range sampled included a small number of children from the Foundation Stage (4% of the sample), 33% from Key Stage 1, 51% were Key Stage 2 children through to the oldest students in Key Stage 3 (12%). Therefore overall the sample was weighted towards primary age children and specifically children aged between seven and eleven years old. The gender split is 32 male to 37 female with normal variation between key stages and regions. This reflects the schools participating in the L2L project.
The fortune lines were analysed in three main ways for this first level analysis: overall direction, range of affect and the type of learning journey described. These three elements interact, as the data will reveal. A deeper, heuristic analysis of the interview transcripts against the fortune line graphs is reported later in this section. Firstly, we will report on the visual aspects of this hybrid data collection method.

We looked at the overall direction of the line, whether it was positive, negative or neutral.

Sometimes, as in the positive example above, this was easy; in other cases it was more complex. In the example given below, the fortune line was coded as negative because the end point was below the beginning point.
As the bar chart below indicates, the majority of fortune lines were positive in direction. It was interesting that Key Stage 2 children were much more likely to report a positive direction (Pearson Chi-square 0.87).

<table>
<thead>
<tr>
<th>Direction of the fortune line</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>49</td>
<td>71</td>
</tr>
<tr>
<td>Neutral</td>
<td>13</td>
<td>18.8</td>
</tr>
<tr>
<td>Negative</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

The stories told were mainly happy endings, though the maintaining a level and downward paths are represented. The affect range is very positive too, with all but two neutral responses having some elements of happy. The affect range was calculated by the extent to which the graph used the three ‘face-determined’ thirds of the graph area (Neutral, Neutral-Happy, Happy).

<table>
<thead>
<tr>
<th>Affect range</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>2</td>
<td>2.9</td>
</tr>
<tr>
<td>Neutral-Happy</td>
<td>34</td>
<td>49.3</td>
</tr>
<tr>
<td>Happy</td>
<td>10</td>
<td>14.5</td>
</tr>
<tr>
<td>Full range (Unhappy-Neutral-Happy)</td>
<td>23</td>
<td>33.3</td>
</tr>
</tbody>
</table>

The interaction of direction and affect range is fairly predictable. The bar chart below shows that positive directions tend to have more happy and neutral-happy affect.
Five of the negative trajectories were still in the neutral- happy affect range and three of the neutral trajectories were happy kids who just could not get any happier. Moreover, ‘full range’ fortune lines were significantly more likely to have positive overall direction (Pearson Chi-square 0.61).

The journeys tended to be filled with reversals (peaks and troughs/curves and blips) or steady progress in whatever direction (straight line/ curve/ wobbly line). A summary is included in Table 14 below. The single or unconnected points tended to be younger participants. Peaks and troughs contain sharper and deeper changes than curves and blips. Examples of two types of journey can be seen in figure 25 and figure 26.

**Table 10: Analysis of the journey**

<table>
<thead>
<tr>
<th>Journey</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single point</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td>Unconnected points</td>
<td>5</td>
<td>7.2</td>
</tr>
<tr>
<td>Straight line</td>
<td>14</td>
<td>20.3</td>
</tr>
<tr>
<td>Curve</td>
<td>8</td>
<td>11.6</td>
</tr>
<tr>
<td>Wobbly line</td>
<td>8</td>
<td>11.6</td>
</tr>
<tr>
<td>Peaks and Troughs</td>
<td>30</td>
<td>43.5</td>
</tr>
<tr>
<td>Curves and Blips</td>
<td>3</td>
<td>4.3</td>
</tr>
</tbody>
</table>
As the bar chart below indicates, the majority of respondents chose to illustrate a full range of emotions, with the most common being a ‘peaks and troughs’ style.
Our previous experience of interviewing in the project suggested the possibility of an interviewer effect. However, an analysis showed that the interviewer, the gender of the learner and the region were not determinants of direction, affect or journey type.

**Thematic analysis**

It has been interesting to explore the reasons students give for their turbulent learning stories and to highlight the key themes that students bring to the accounts of their learning journeys. Clearly the differences in ages and confidence have had some impact on the length and complexity of the interviews. Some of the younger students and indeed some of the older ones, were happy to complete the graph but did not want to expand on it in detail. Other students, some as young as Year 2, gave long accounts of their schooling, going back to nursery. Others have given us intense snapshots of particular incidents or key turning points. Despite the diversity of the ages of learners and their contexts, several clear areas of concern have emerged. The students in L2L are able to articulate very clearly the kinds of things that support and retard their learning. The graphic below illustrates the thematic elements (Figure 00).
Self-regulation

This section deals with material that students reported in relation to their own internal processes: how they think about their learning, how it makes them feel and how they manage this on a day to day basis.

Mastery of content

The majority of the stories unsurprisingly dealt with the mastery of content knowledge, often in literacy and numeracy and the confidence that comes from the mastery of tasks, information and skills.

*Interviewer:* So you are feeling happy about your learning, why do you think that you are so happy in your learning?

*A:* Well it is that Maths is going really well because...

*Int:* Which bits do you like best in the Maths?

*A:* When she explains what we are going to do because then we know what to do and then

*Int:* Then do you get it all right?

*A:* Yeah \(\text{(Arlette, Y2)}\)

*Interviewer:* You find me something that you found hard to do? This one here so Rashid writing numbers on a whiteboard, he looks round at the numbers displayed. Is it writing the numbers you find hard?

*R:* Yes

*Int:* When was this, was this yesterday or a couple of weeks ago or a long time ago

*R:* A long time ago
Int: So what about numbers now are? Are you quite good at numbers now?
R: Yes
Int: Can you write all these numbers?
R: Yes
Int: How did that happen because you found that it was hard and now you are saying it is easy? What helped you?
R: Teacher
Int: What did your teacher do?
R: She said the numbers and I write it.
Int: So you practice. Do you like doing that now?
R: Yes, do it every day. (Rashid, Reception)

Interviewer: What do you think of yourself as a learner?
A: I think that I am very clever and I love maths, reading, writing and lots of stuff at school (Amber, Y1)

Students take this confidence with them to their next learning encounter. It is extremely important to emphasise that Learning to Learn is about the mastery of content, since the generic ‘learning skills’ do not in themselves support the development of a sense of mastery, especially as they are not assessed.

Metacognition

Some students included accounts of their learning which included the internal processes of metacognitive awareness and skilfulness. A full deductive analysis of this data set looking at metacognition, information gathering, building understanding and productive thinking will take place at a later date. In this section we offer a few examples of students thinking about their learning in a reflective way. This is often expressed in cognitive terms and in terms of a cumulative model of learning and success:

“because L2L tells you how the brain works I was thinking more positively” (Beth Y9)

“I have heard in Science we are doing space and I really liked space and I learnt about it lots now I think that is still in the back of my head so I think that I will enjoy science more than I have done this year.” (Joshua, Y4)

Interviewer: Why do you think that you are so happy about your learning at the moment?
L: Because it is really interesting
Int: Can you think back to the beginning of the year when you first came in to this class how were you feeling then?
L: I was scared because the work had been harder than class 2.
Int: So if you were to draw yourself on here at the beginning of the year, where would you have put yourself?
L: Here
Int: Right down at the bottom. So if we think about the journey from here and here, it could be a straight line getting a bit better every day or it could be a really big zig zag or a wiggly line with some ups and downs, what would your line look like?
L: It would probably be down to here and then go a bit further up and get higher and higher and higher.
Int: Would you like to draw that on for me the journey of the year. So that is like steps.

L: You learn different things every day. (Lucy, Y4)

However, metacognition also encompasses the emotional self-management that learners have to undertake in order to access help when they are challenged:

“when I was in Y5 I couldn’t really read or write and I thought I was a bit dumb and I asked my teacher because I was a bit embarrassed to say and I can’t really read proper so she read it for me and that was a bit embarrassing for me and I get embarrassed a lot” (Andrew, Y5)

The awareness of mood and emotion allows the learners to exercise self-management in their own learning and in their interactions with others.

**Awareness of self and others**

This section examines students’ sense of their own processes and how they interact with those of other students and the rules of the learning environment. A key element of this is the explanation for the overall positive trend of the graphs: almost all students reported that they experienced worry about their new teacher, class or school, so because we used the school year as our framework, most of the graphs start at a lower point than they ended.

“I wasn’t sure what we were going to do and I wasn’t sure what it was going to be like. I was a bit like that at the start, I didn’t get mostly anything then but when it started, day after day I started to learn and understand.” (Jake, Y5)

“I was really scared because I didn’t know what would happen but you know, when you are just in Year 3 and everything was so different in Year 4, when you grow up you feel that you don’t know what is going to happen and you feel scared. You think the work is going to be harder and you won’t be able to do anything but when you get used to it, it is really nice” (Ifrah, Y4)

Although our interviewees soon overcame the very common belief was that the work would become considerably harder in the next year group and settled in to their new classes, it is significant that the issue of transition is not just confined to new key stages or new schools. For young people, each change is a source of stress and anxiety, as Ashleigh emphasises:

*Interviewer: What about at school, is there anything that makes you happy with your learning?*

A: Discussing really.

L: So you are enjoying the discussing, pop that on. So how do you feel about your learning now at the end of Y2?

A: It sucks because I will be leaving so I won’t be able to do philosophy.

L: So you are a bit sad because you might be leaving school but how do you feel about you learning? Do you feel confident because you have learnt lots or sad?

A: I am happy because I have learnt lots but also scared because I am going to have to learn harder things now. If you talk when you are on the carpet in that school you go straight to the Head Teacher (Ashleigh, Y2)

In L2L classrooms the roles and rules are arguably more fluid than in traditional classrooms. Nevertheless, some students were very aware that there are certain roles to be played in the classroom and that they might take them up:

“There’s this girl called Charlie and she’s left now. And I’ve kind of taken her place cause she was really good at stuff and I’m doing more....I can explain things better and I’m just more confident...Yeah, cause when she was here we were like both the same and I’ve become more confident now” (Erica, Y5)
Overall, students displayed a sense that they knew the expectations of the classroom and that they had reasonable expectations of peers and teachers, in particular, how they would talk together about learning.

**Learning conversations**

Talking about learning is one of the cornerstones of L2L and so it is not surprising that the majority of students reported that they have been part of learning conversations, that is to say, genuine interactions where everyone is interested in everyone else’s ideas and everyone has the right to be heard and acknowledged:

“One time we had a really good conversation. We read books every week and then we have a conversation and then we put some questions on the board and then after that we agree with them. One day we did really good and I liked that.” (Tilly, Y2)

**Interviewer:** What was good in that session?

**S:** About the discussion that we have at the end about our story.

**Int:** What did you find particularly interesting about that discussion

**S:** When someone says something and then someone disagrees and then you can agree or disagree but the main thing that I had in Y2 was when I agreed.

**Int:** What was the discussion about in this one that you are thinking about?

**S:** Well about Peter Rabbit

**Int:** So what did you talk about?

**S:** We talked about some questions, ‘do we kill animals?’. We discussed it for ages and someone said do we keep some for our pets and some do we kill. (Sam, Y2)

“Well we were doing about arguments that are really proper arguments that people think about a lot, there was one about zoos and whether we should keep animals in zoos or let them be free. Or should children have to go swimming. And I liked finding out about different arguments and thinking my opinion about them” (Miranda, Y4)

What unites the accounts of learning conversations is that there is no sense in which a pre-ordained ‘right’ response has been identified by teacher or students; instead, there is a genuine inquiry in process. The authenticity of conversations is of course sometimes dependent upon there being a genuine area of doubt or uncertainty: however, the organisation of peer to peer learning, collaborative and co-located groups and the role of the teacher seems to have shifted many more everyday conversations in to this exciting area.

**Working with peers**

This is welcomed by the majority of students, with emphasis placed on both the role of peers as helpers and on their own role in helping others learn.

**C:** It feels like oh I can never do this and I will be really stuck but my friend really helped me by supporting me and saying if you do that you can do that and each time I get to that again I get it right. My friend has been pushing me on to get it right and helping me.

**Interviewer:** So friends pushing you.

**C:** Yeah

**Int:** So do you think that friends have become more important as you have got older?

**C:** Yes because they have always helped me, with things like really hard sums. There was one where there was this really hard sum and it was put in to complicated words and we could
understand it but it was a really easy sum in the end. I said Alice if you times that by that or divide that by that you have got the answer. She said oh yeah it might just be the wording. (Chloe, Y4)

Group working in secondary schools is particularly valued although it is noticeable that many students feel that its’ use is inconsistent across subjects and over the course of the year, leading to some of the ‘curves and blips’ in their fortune lines. Moreover, students are aware of the different ways in which they use their groups either to be comfortable or to extend their learning:

S: we did converting weights and stuff and we have been doing a bit of that from weights of animals and stuff, I wasn’t too bad at that and I was with a girl called Jill who isn’t much better than me so we worked well together working stuff out.

Interviewer: So you like working with someone else?

S: Yeah

Int: But you say she is similar to you, do you like working with someone similar?

S: Yeah because if someone is not as clever you do most of the work and it is hard but if someone is clever you feel like you can’t do anything and they do most of the work but if you work with someone who is about the same ability you can work stuff out together.

Int: Right and is it always the same person that is good or less good for the project or do some of the projects need different skills?

S: Well the smoothie one you had to do a lot of working out and stuff and I was with a girl of about the same ability and we did ok but had to work out how much fat was in a smoothie and we weren’t very good at that so we ended up not doing it. I do like, my best friend Sophie she is a lot cleverer than me and she goes to special maths class and I like working with her because rather than doing all the work she helps me. (Suzie, Y5)

However, some students report frustration with unequal responsibility taken in group situations and the disruption that other students can cause to the learning environment.

“I was] quite confident and I knew what I was doing... because I am quite bossy and there was one girl that went off a bit so I usually took control and did most of the stuff and that and volunteered as spokesperson. I am quite a constant learner and I like doing things on my own and in groups and friendship groups I like working in because it is more easy because the other two people sometimes can’t be bothered and I would do all the work or something... because I didn’t want to show off and do all the work I wanted them to do some of the work but then on the other hand I wanted to get the work and get a good mark” (Jessica, Y9)

The students feed back some promising solutions to this problem: a classroom management strategy is suggested by Matthew and a peer management strategy by Lauren:

“I think that some people enjoy the lessons but there are particular people that don’t enjoy most of the lessons and they just disrupt the whole class, so we stop and can’t listen or learn anything... it is much better if we are doing something, if [the teacher] says “I am just going to go and sort this person out, work with a partner”... so at least we are doing something...because other people might have ideas and other people might not so they can tell them and understand so it is helping in lots of different ways” (Matthew,Y4)

When we did about the animals, if it was the monkey we learned lots and if it was elephant it would be resilient and all the different kinds of animals we have... we looked at the elephant because we wouldn’t give up doing what we were doing and just keep on trying to do it.

When people are distracting you, instead of putting our hand up and telling Miss we could just do something about it. Instead we have something that you can do and instead of Miss getting angry we just try and move on and forget about what they are doing” (Lauren, Y4)
Overall, there appears to be a growing trend for learners to focus on their peers as the first point of call and to call on adults only if that strategy is not successful, although as Tia’s response shows, in Learning to Learn classrooms, adults are not all-knowing and questions may have to be put on the ‘we’ll go and look it up’ board:

Interviewer: How would your friends help?

T: If I asked them and they don’t know I would ask someone else and if they don’t know, we would ask the teacher and if they don’t know we would have to go up and write it down.

(Tia, Y3)

**Support from adults**

The most common supporters - teachers and parents – tend to be appealed to by the children in their own accounts rather than actively stepping in, though we speculate that this is an artefact of asking the children to tell us about what happened to them and what they did in response to success and challenge. It is a natural narrative response to talk most about what I as the narrator and principal character in the story have done, so the supporting roles given to parents and teachers has to be seen in this context. There are some key things that teachers seem to do well which are highlighted by students: being open and non-judgemental; offering multiple approaches and strategies and giving the students responsibility and real life roles to fulfil.

“the teachers are good supporters and they support you to do well. They listen to you and don’t judge you by looking at you like my primary school teachers did.” (Beth Y9)

A: I remember one of the lessons we were doing a different adding up thing and I said something like 16 add 14 so I added the 6 to the fourteen and then added the 10 to make forty but no one else did it that way. That was on the carpet with Miss and she said that is one way that you could do it but most other people did it a different way.

Interviewer: So how did that make you feel?

A: It made me feel good because it was a different way of doing it but a good different way? (Alice, Y4)

“It has been about how people learn and we have been doing databases, only our class in the whole school has been doing this and Miss asked us, we have been doing all the work [interviewing students, analysing data]. This how to get ready to learn from home and school and me and my friend Lauren did this [poster]... then we have finished I think we are going to do a presentation... So the teachers know what the children like to do and ways to learn and all this stuff, doing timetables” (Okay, Y4)

Interestingly, a number of students highlighted that they enjoyed a high level of challenge in their work and a degree of strictness from the teacher:

“[last year] we like didn’t have a very strict teacher and we weren’t like working as hard and then this new teacher came in and then we started working harder and she wanted us to like do better.” (Harry, Y5)

Parental and family support is mentioned by around a quarter of the interviewees.

“I like to learn and my grandma used to read to me a lot and she helped me a little bit” (Archie, Y5)

“It helped with points and angles and stuff because my mum she was really good at maths and she helped me with that so I got really good with that” (Suzie, Y5)

Some students make repeated use of a range of sources to help them with something they find difficult, highlighting the ongoing (and not necessarily linear) process of learning:

Well, I started practicing at home, I was practicing all the things that ...all the stuff that I had learned in the day and I was kind of a bit wobbly on. And I would go home and I would ask my
mum or my dad to ask me questions and I would write down what we’d learned in the day. I think it was probably maths that I was less confident in because in literacy I think that was my best subject. Because maths all the numbers just sort of like left me and I was like okay, this is getting confusing. When I looked at it, so instead of like in literacy sometimes you just write what you think looks right, but in maths you’re given questions instead of being told to write down your own questions and answers...Well I had some help, I had the teaching assistant, they helped me a bit because I didn’t normally get much help, because they thought that I was quite bright and I was thinking I still need help because not everybody can like do something. Even if you think they’re really good they can’t do everything, I still struggle with some of the stuff, I still struggle with some homework, struggle with some of the maths. Yeah, and then I still think that sometimes I don’t get the help I need, but then sometimes because I have all my friends who know what they’re doing who can help me” (Dane, Y5)

Assessment and recognition

The burden of stress that assessment places on students is well-reported in our culture and we might have expected our interviewees to refer to it more often. However, explicit negative mention of assessments was only made by one person and that was the parent of a child who happened to be volunteering in the school on that day and kindly agreed to join in the interview:

“They have had a lot of homework this year and the work has got harder so she was under pressure and she got a bit upset. She was confident but she got upset that she wasn’t going to do well in her SATS and that she was going to be put in a lower class in high school, she would cry sometimes. Then all of a sudden things started to fall in to place really. She is definitely a lot happier, she was dreading it at the beginning when they explained the SATS and I think it took a while for it to sink in with her.” (Kelly’s mum – Kelly is in Y6)

We may have lost sight of the fact that for learners, assessment can be an important recognition of their achievements:

T: Year 2 is probably about the same as year 1 but a bit more fun.
Interviewer: So what made it more fun?
T: We had a bit more fun, we got more information we had loads of information, and the more fun bit was we actually got to do assessments and assessments help your learning more, they tell you what the teacher needs to tell us, to make us learn it and we ....
Int: So the assessments helped you to know where you were and helped the teacher know where you were? And that was a good thing?
T: Yeah
Int: And what did that help you to think about?
T: It helped me to think about what I need to learn, how much learning I need to do.
Int: So it made you think about how to get better?
T: Yeah
(Tyler, Y4)

Students’ accounts of assessment tended in contrast to be about formative experiences, peer and self-assessment. A great many techniques of formative assessment are used (Black and Wiliam, 1998) but what is clear from the interviews is that the understanding of the processes is well embedded and nuanced:

J:[showing some of his work] If I am good at stuff and I use capital letters and full stops it is covered in green.

Interviewer: What about the yellow?
J: The yellow means you are using some of them and red if you are using none of them. (Jake, Y2)

K: the teacher gives us a full triangle, half a triangle or one line of the triangle and if you get a full one it means you have understood and if you get half you have kind of understood and one line means you don’t. Also we can feel what we feel about the work so we put a smiley face, a middle face or sad face.

Interviewer: When you have put a smiley face on your work does the teacher normally put a triangle or a middle face do you get half a triangle, does it work out like that?

K: Sometimes, most of the time but sometimes it doesn’t. If you have a sad face you can still get a triangle because you might have worked very well but you just weren’t comfortable with the work. (Kate, Y6)

“[reading comment from her book] ‘This is a good start Hannah but you can write more next time and I want to see bigger finger spaces’. I am getting better because I am good at the finger spaces but it is hard to remember.” (Hannah, Y2)

Another key aspect that many of the younger students mentioned was the opportunity to be praised and have their work and achievements recognised at school through display, performance and certificates in assemblies.

T: I do really good things and do good work and listen.

Interviewer: Listening is important isn’t it?

T: I got good working in my listening and I work hard and get the stickers.(Tommy, Y2)

Older students tended not to mention public praise but were very keen on the relational and formative feedback from teachers whose opinions they valued. Indeed, the distinction between those teachers whose opinions could be trusted and those who could not appeared in a significant number of accounts.

However, our emphasis on collaborative and co-operative strategies in the project should not blind us to the significant minority of students who reported that they solve problems on their own:

Interviewer: So when you drop down like this what sort of things happen to make that happen? What goes on?

A: Sometimes I don’t understand what the teacher is saying but are saying that you should understand it but I don’t or when I haven’t been here I haven’t learnt certain things so I have to catch up.

Interviewer: So what do you do to get yourself back up again?

A: I don’t talk to anybody; I just get on with it. (Archie, Y5)

What happens in L2L classrooms

Fun

The simple and inescapable fact that learners prefer their learning to be fun was stated time and again by our interviewees. This is one of the ways in which the tools of Learning to Learn have catalytic value: by providing a change in the way things are done, the motivation levels are raised simply by the novelty. In addition however, looking at a familiar task from a new angle allows teachers and students to explore the level of understanding, the questions that still need to be asked
and the range of ways in which they can be pursued. Many of our L2L students were able to go beyond a surface desire for a pleasant experience to a deeper understanding of how fun helps them in their learning longer term:

“The fun helps you get it in your head because you remember the fun that you had and then what you learned. So like today in the first lesson, I have a really bad memory but I would remember what we would have done because it was fun.” (Callum, Y5)

**Active learning**

A lot of the students made reference to active learning strategies, trips, enquiry learning, personalised approaches, creative work and unusual approaches to simple tasks:

“There have been quite a few things, quite a few of us like the work on the Amazon rainforest and the Egyptians because we took a trip to the National History Museum and a few of us really liked that because they had warrior armour and things like that and it is interesting learning about the stories. We went to the school camp that was really good there, I think that is when a lot of us changed for the best because a few enemies became friends and it brought us a lot better together.” (Matthew, Y5)

“my Egyptian project... I have got like a tick list thing and drawings and I stick them in. We have done some of it at school in our spare time but the front cover and a lot of it we did at home ourselves. We had to get pictures and in ICT time we found stuff we wanted like pictures and information and stuff. When we did this one, we got someone, a girl in our class that is quite small and she had to get on the table and we had to wrap her up and we all had to help, so we know how to mummify someone” (Alice, Y5)

Interviewer: And was there anything that you have done this year that you thought was really good?

Z: Well my tables because we normally play games sort of thing, like pumpkin pie because if you get it wrong you get pie and have to sit down so we have learnt it like that. We have tests and she takes us into the ICT suite and teaches us, at the moment we are learning nines but now we are learning our 11s because we all have our 9’s... It did take me a while to learn my 8s because at first I thought I really don’t know these but then I went in to the ICT suite and I played a few games and times tables and I started doing them really quickly and I got much better at them. Me and Amy did both find them quite difficult because we were playing games about the 8 times tables and we didn’t know them so we sat down and went through our times tables again but now we do. (Zoe, Y5)

**Integration and transfer of learning skills**

In many of our L2L classrooms, the approaches and conversations about process and purpose go well beyond the initial sharing of these perspectives and skills. Most of our schools integrate L2L into their teaching and learning throughout the year and across curriculum areas. This is in part no doubt because the schools believe that this is a more effective approach, a view supported by systematic review evidence on the implementation of thinking skills (Higgins, et al, 2005; 2007). Our interviewees also support this approach, provided that the L2L approach is timely, fit for purpose and not over-used.

“I didn’t think that the L2 classes were that great. I think that if they were going to do them that they should probably do them younger because you have already been at school seven years and I think that you have already picked up how to learn in them. I don’t think it is a good time to start in Y7” (Tom, Y9)

Interviewer: Was there an event or a time that it dipped a bit?

C: I suppose it was about a third of the way through Y7 because we were doing a lot of L2L and we had to record it in our booklets a lot.
Int: Was there may be a bit of that you had been doing it a while?
C: Yes and it got a bit boring and we had the same teachers and the same knowledge behind all the words. (Chloe, Y9)

The use of project-based approaches is becoming more popular and students appear to enjoy the extended work and the more realistic contexts for honing their skills:

“Yeah because every 3 days you start something new and you keep referring back to something and it feels like it is something different but it is the same project and you are working to get the same answer but you don’t get bored of it” (Lucy, Y5)

There is a lot of talk about transfer amongst teachers in the project and it is exciting to see that even the youngest L2L students are aware of the possibilities:

Interviewer: Do you think doing the philosophy helps in other lessons when you are doing the talking or listening?
S: Yeah because you can remember the music and then relax, it slows your brain down. (Saskia, Y2)

Learners appear to appreciate the opportunity to ‘join up’ their understanding, particularly if the process of doing so is made explicit by the teachers.

Interviewer: So in Y1 you worked in a different way to how you do this class, can you tell me how it is different?
Ellie: We don’t do phonics and stuff separately.
Int: Ok, so, you used to do everything separately, which way do you enjoy best?
Ellie: Joined up
Int: Why?
Ellie: Because you don’t have to stop thinking about one thing and start thinking about something else (Ellie, Y2)
Appendix 5: Pupil Views Templates

Pupil Views Templates (Wall and Higgins 2006) were used extensively in Phase 3 to explore students’ perspectives of their learning (an example of a completed template can be seen below). The resulting analysis revealed interesting findings around the impact of involvement in Learning to Learn. Firstly, students in the project were found to be presenting evidence of metacognitive knowledge and particularly, metacognitive skilfulness (Veenman and Spaans 2005) at a much younger age than had previously been reported (Wall 2008). It was also found that students in the Learning to Learn project, when compared to an equivalent sample of students not involved in the project, were expressing this knowledge about learning and metacognition across both thought and speech bubble whereas the other sample would tend to write comments in the thought bubble only. It was hypothesised that this may be due to the increased privileging of talk about learning in the L2L classrooms (Wall and Higgins 2007).

The templates have continued to be used in Phase 4; however two analyses have been completed of the data. Firstly the same deductive coding scheme which was used in Phase 3 based on the work of Moseley et al. (2005) and Veenman and Spaans (2005) has been repeated. But secondly a more inductive analysis, drawing on ideas related to grounded theory (Glaser and Strauss 1967). The two analyses aimed to complement each other but also explore the extent to which the original deductive process missed integral aspects of the students’ perspectives on learning. The following describes both analyses and findings.

Students’ perspectives of metacognition (Deductive analysis)

In total 548 Pupil Views Templates from Year One of the project were analysed. The same process was used as in Phase 3 (see Higgins et al. 2007; Wall 2008). Exemplification of the coding can be seen in Table 17 where examples of each coding category are given. All the examples were taken from the same school where teachers were focusing their professional enquiry on how circle time could support children in talking about their learning experiences. These templates come from a class including Year 1 and 2 students (age 5, 6 and 7 years old).
Table 11: Exemplifying the different coding groups

<table>
<thead>
<tr>
<th>Code</th>
<th>Example quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information gathering</td>
<td>In circle time we share our thoughts and smiles</td>
</tr>
<tr>
<td>Building understanding</td>
<td>I like Circle Time because you tell other children about you.</td>
</tr>
<tr>
<td>Productive thinking</td>
<td>I didn’t feel nervous because I got to know the other children and new friends.</td>
</tr>
<tr>
<td>Strategic &amp; Reflective</td>
<td>Metacognitive Knowledge Circle Time is a bit scary because sometimes you have to speak in front of everyone.</td>
</tr>
<tr>
<td>Reflective Thinking</td>
<td>Metacognitive Skillfulness If people are stuck on a work, asking the person or a friend to help you.</td>
</tr>
</tbody>
</table>

The following variables were explored: school, length of school’s involvement in the project, gender, age and which year of Phase 4 the templates were collected in. In addition, the variable of socio-economic status was also coded (using the information collected in Section 2.1.1) and any influence examined. In that these templates had been completed by the schools and we did not have extensive data about specific children, we coded based on the locality of the school. The text units were also tagged at this stage with whether they were written in the speech bubble or thought bubble.

**Findings from frequency analysis**

This section will report on the cross project characteristics of students’ thinking about their learning, taking each of the variables in turn to explore impact.

**Age:** Previous research has provided evidence of a developmental progression of metacognitive knowledge and skillfulness (Kuhn 1999). Using the templates in Phase 3 of the project revealed students involved in L2L to be developing metacognition, in particular metacognitive skillfulness, at a younger age than might be expected (Wall 2008). The graph below shows that in line with past research we are seeing some evidence of a developmental progression for both metacognition knowledge and skills. This also adds confidence to the idea that there is a developmental relationship between productive thinking and metacognitive skillfulness: one does not appear to occur without the other.

![Figure 21: Graph showing variable of age and occurrence of cognitive skills and metacognitive knowledge and skillfulness](image)

However with the added range of data that we now have into the secondary age phase, eleven to 18 years, there does seem to be evidence of some kind of transition effect: students transfer to secondary school at the age of eleven or thirteen depending on the local authority system. This
effect can be seen in the dip in both metacognitive skilfulness and productive thinking of students aged between eleven and thirteen years. This analysis will be examined further in the next section, as it has potential for important pedagogic interventions if the findings are used in partnership with teachers.

**Gender:** The link between metacognition and gender is one that has seen limited development within the metacognition field, although popular acceptance is that boys are likely to fall behind girls, as with work looking at attainment data (for example, Sammons 1995). Within these results it can be seen that there was a skew towards the girls with regard to the number of metacognitive, knowledge and skilfulness, comments made; however the boys were more likely to make a comment coded as productive thinking. In light of the potential link between productive thinking and metacognitive thinking that was made above, then this does shed some doubt on the relationship being causal. On the other hand it also shows that conclusions about the gender gap and expected differences are difficult to make and are potentially more complex than expected. Again as gender differences are currently an important area of policy development this aspect will be included in the more detailed analysis below.

![Figure 22: Graph showing variable of gender and occurrence of cognitive skills and metacognitive knowledge and skilfulness](image)

**School:** Much is made of the culture and context provided by individual schools and the potential impact it can have (for example, Wikeley *et al.* 2009). Indeed in the Learning to Learn in Schools projects we have talked about differences in impact that have been identified between schools with a whole school L2L approach and those that have a more class/teacher focused innovation: a potential impact has been found on attainment outcomes and students attitude (Higgins *et al.* 2007).

Figure 34 indicates that there a school effect was found. Templates from some schools included evidence of a full range of cognitive skills as well as metacognitive knowledge and skilfulness whereas other schools have a more distinctive profile with peaks and troughs in certain categories. It is certainly the case with the latter type of school that peaks tend to occur in the cognitive skills, information gathering and building understanding but not productive thinking, and metacognition, in knowledge but not skilfulness. This would again signal towards this link between productive thinking and skilfulness which has been highlighted previously, but it also has the potential to be used formatively for schools within the L2L project. It would be interesting to triangulate these data with results from the attainment measures: do schools with a ‘better’ cognitive/metacognitive profile do better in attainment outcomes?
The school level difference however, reveals potential for further research and development with teachers: What is it about the schools where the students are expressing the full range of cognition and metacognition on their templates in comparison to others? What is it that they are doing that others are not?

**SES of school location:** Admittedly a rather crude measure of socio-economic status was used in this element of the research, basing it around the school postcode rather than where individual children live (this data was not available due to process of data collection), but it is included despite these disadvantages as a starting point and potential indicator of further avenues for exploration: would it be worth in the future looking at this at student level? In light of the school level impact above, it is particularly important to ask the extent to which this can be explained by SES.

The results show no obvious impact of school SES. There are schools which are ranked with lower and higher SES that have seemingly proportionate levels of cognitive skills and metacognition.
Length of school involvement in the project: The last aspect that was explored was the length of time the school had been involved in the L2L project. Due to the cumulative nature of Phase 3 and 4, we have schools that have been involved for up to six years as well as schools that have only recently joined with a participation time of a year – to what effect does this exposure to the philosophies of L2L impact on children’s perspectives of their cognition and metacognition?

From the graph above it is definitely possible to see that there is an increased proportion of comments categorised as productive thinking, metacognitive knowledge and metacognitive skilfulness in schools that have been involved for a longer period of time. This could be indicative of a number of things and, as with school SES; the relationship between school involvement and children’s responses is fraught with potential variables and impacts. However, the first thing we have checked is the length of time the teachers have been involved in each of these schools and whether this could have contributed to this effect: teachers involved in the discourse of L2L for longer may be more likely to pass this experience on to just their classes. This was not the case. The potential impact seen here in this element of the analysis is very exciting and is certainly worthy of further exploration and again it would be useful to triangulate with other data sources collected across the project.

Statistical analysis of metacognitive development

A further statistical analysis of the Pupil Views Template data was completed exploring the relationship between age and gender. The statistical analysis was conducted using a fully between-subjects 3 (Age) x 2 (gender) two-way factorial ANOVA. Sample sizes are shown in Table 18.

<table>
<thead>
<tr>
<th>Table 12: Sample sizes broken down by Key Stage (KS) and Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KS1</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Totals</td>
</tr>
</tbody>
</table>

The purpose of the analysis was to examine whether there would be differences in five dependent variables that were based on observers’ scores of students’ ability to perform several cognitive skills. These skills were Information gathering (IG), Building understanding (BU), Productive thinking (PT), and Metacognitive knowledge (MK) and Metacognitive skilfulness (MS). These five dependent variables were mapped against two factors, age (three levels: Year 4-6, KS1, Year 7-9, KS2 and Year 10-15, KS3) and gender (two levels: Male and Female).
With regards to main and interaction effects, the hypotheses across the dependent variables Building understanding (BU), Productive thinking (PT), Metacognitive knowledge (MK) and Metacognitive skilfulness (MS) were as follows.

There would be main effects for age whereby older students would use more sophisticated types of cognitive thinking.

There would be a main effect for gender with boys using more sophisticated types of cognitive thinking.

However, these main effects would be qualified by an age by gender interaction whereby boys would only use more sophisticated cognitive thinking in KS1 and KS2 but that these gains would be equalised in KS3.

Because Information gathering is considered a lower level cognitive skill, the usage of this thinking technique was hypothesised to be observed less frequently with age. No or interaction effects were expected for this particular measure.

Summary of findings

Before present the individual findings, Table 19 summarises the findings across the five dependent variables.

Table 13: Summary of main effects and interactions for the five dependent variables examined in this study

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Main effect Gender p</th>
<th>η²</th>
<th>Main Effect Key stage p</th>
<th>η²</th>
<th>Gender x Key stage interaction p</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Gathering</td>
<td>.88</td>
<td>.05</td>
<td>.001</td>
<td>.25</td>
<td>.58</td>
<td>.03</td>
</tr>
<tr>
<td>Building understanding</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>.12</td>
<td>&lt;.05</td>
<td>.03</td>
</tr>
<tr>
<td>Productive thinking</td>
<td>.06</td>
<td>&lt;.001</td>
<td>.07</td>
<td>.07</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Metacognitive knowledge</td>
<td>&lt;.001</td>
<td>.08</td>
<td>&lt;.001</td>
<td>.11</td>
<td>.06</td>
<td>.06</td>
</tr>
<tr>
<td>Metacognitive skilfulness</td>
<td>.40</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
<td>.04</td>
<td>.06</td>
<td>.06</td>
</tr>
</tbody>
</table>

Table 19 reveals that there were very few main effects for gender but there were consistent main effects for Key Stage. Only one interaction effect was observed (Building Understanding) but some of the interaction effects were marginally none significant. The next section examines the findings for the individual measures in more detail.

Individual dependent variables: Information Gathering

The two-way ANOVA revealed a main effect for Key Stage F (2, 349) =59.58, p <.001 but no effects for Gender F (1,349) =1.96, p=.88. nor was there an interaction effect F (1, 349) =46.85 p=.58. The patterns of means are shown in Figure 37.
Figure 26: Means for the dependent variable Information Gathering broken down by Key Stage and Gender

Figure 37 reveals that contrary to hypothesis, both girls and boys used the strategy of information gathering more in KS2 relative to KS1 and more in KS3 relative to KS2. Simple main effects analyses revealed that these differences were significant.

**Individual dependent variables: Building Understanding**

For the measure of Building Understanding, the findings were more complicated. In a similar fashion to Information Gathering, the two-way ANOVA revealed a main effect for Key Stage $F(2, 350) = 23.66, p < .001$ but this time there was also an effect for Gender $F(1, 350) = 19.22, p < .001$. Crucially there was also interaction effect $F(2, 350) = 5.19, p < .01$. The patterns of means are shown in Figure 38.
Figure 38 reveals that in line with hypotheses, students used the cognitive thinking skill of Building Understanding more in KS2 relative to KS1. However, although the means suggested a difference from KS1 to KS3, simple main effects analysis\(^1\) of the interaction effect revealed that the key finding was that the means for Girls at KS2 (30.51) was significantly different to all the other means. No other conditions were significantly different from each other.

**Individual dependent variables: Productive Thinking**

For the measure of Productive Thinking, the findings were similar to Information Gathering, the two-way ANOVA revealed a main effect for Key Stage $F(2, 350)=81.94, p < .001$ but no effects for Gender $F(1,350)=3.72$, $p=.06$. nor was there an interaction effect $F (2, 350) =2.64$ $p=.06$. The patterns of means are shown in Figure 39.

---

\(^1\) Using technique suggested by Ho (2006) p.64-71. This technique was used for all subsequent analyses of simple effects.
Although the statistical results followed the pattern observed for Information Gathering, Figure 39 reveals the similar pattern observed for Building Understanding whereby students across used the thinking skill significantly more in KS2 relative to KS1 but significantly less in KS3 relative to KS2. Also, although the interaction effect was not statistically significant \((p=.06)\), simple main effects analysis revealed that the means for Boys at KS1 \((M=1.91)\) and Boys at KS3 \((M=0.78)\) were significantly different from Boys at KS2 \((M=12.74)\) and Girls at KS2 \((M=11.08)\). No other conditions were significantly different from each other.

**Individual dependent variables: Metacognitive Knowledge**

For the measure of Metacognitive Knowledge, the findings were similar fashion to Building Understanding but this time, main effects were observed for both Key Stage \(F(2, 350)=20.58, p < .001\) and Gender \(F(1,349)=29.84, p < .001\). The interaction effect was marginally non-significant \(F (2, 350) =2.76 p=.07\). The patterns of means are shown in Figure 40.
Figure 29: Means for the dependent variable Meta-cognitive knowledge broken down by Key Stage and Gender

Figure 40 reveals the similar pattern observed for Building Understanding whereby students used the thinking skill significantly more in KS2 relative to KS1 but significantly less in KS3 relative to KS2. This was true for boys and girls. Because the interaction effect was only marginally not statistically significant (p=.06), we carried out simple effects analysis. This analysis revealed that the mean rating for Girls at KS2 (M=27.69) was significantly different from all other means. In addition, the mean rating for Boys at KS1 (M=5.20) was significantly different from Girls at KS3 (M=16.15). No other conditions were significantly different from each other.

**Individual dependent variables: Meta-cognitive Skilfulness**

For the measure of Metacognitive Skilfulness, the findings were similar fashion to Productive Thinking, namely a main effect for Key Stage F (2, 349) =7.31, p <.001 but no effects for Gender F (1,349) =.70, p=.40 nor was there an interaction effect F (2, 350) =1.42 p=.24. The patterns of means are shown in Figure 41.
Summary of findings II

Across four of the five dependent measures (see Figures 37-41), the pattern observed was that skill usage was significantly more prevalent in KS2 relative to KS1 but significantly less in KS3 relative to KS2. The findings in relation to gender were more equivocal with the results suggesting that Boys performed better at some skills and girls at others. To try to get a better overall picture for the data, we collapsed the ratings for the four positive thinking skills, Building understanding, Productive thinking, Metacognitive knowledge and Metacognitive skilfulness and labelled this variable “Positive Thinking” and conducted the same factorial analyses we conducted for the single measures. The means can be seen in figure 42.

Figure 30: Means for the dependent variable Metacognitive Skilfulness broken down by Key Stage and Gender

Figure 41 reveals the by now relatively consistent pattern whereby skill usage is significantly more prevalent in KS2 relative to KS1 but significantly less in KS3 relative to KS2.
Figure 31: Means for the dependent variable “Positive Thinking” broken down by Key Stage and Gender

Figure 42 revealed a main effect for Key Stage $F(2,) = 32.29, p < .001, \eta^2 = .16$ and a main effect for Gender $s \ F(1,) = 22.54, p < .001, \eta^2 = .06$. The interaction was not significant. These findings suggest that there is a consistent trend whereby students use positive thinking skills significantly more in KS2 relative to KS1 but significantly less in KS3 relative to KS2. Although the factor of gender was significant, the effect size was very small suggesting that gender has some effect but the effect should be treated with caution.

**Students’ understanding of learning situations (Inductive analysis)**

Due to the large sample size a sub-sample of 96 templates was chosen for this part of the analysis. A random five templates were chosen from each of the twelve schools that used the templates as part of their case study research. However on occasion fewer than five were chosen; this could be due to legibility of the templates or fewer than five being submitted by the school. In addition for some schools where templates had been used for a variety of purposes or in different classes, additional sets of five were taken to represent these strands of research. A table showing the sample can be seen below.

A process of construct generation was then used to explore the prominent trends and themes.
Table 14: Sample for inductive analysis of Pupil Views Templates

<table>
<thead>
<tr>
<th>School</th>
<th>Number of templates</th>
<th>Focus of template</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooler</td>
<td>5</td>
<td>Marking ladders</td>
</tr>
<tr>
<td>Duchess</td>
<td>5</td>
<td>Group work</td>
</tr>
<tr>
<td>Duchess</td>
<td>5</td>
<td>Individual work</td>
</tr>
<tr>
<td>Duchess</td>
<td>5</td>
<td>Working in pairs</td>
</tr>
<tr>
<td>Hexham East First School</td>
<td>4</td>
<td>Individual work</td>
</tr>
<tr>
<td>Duches</td>
<td>5</td>
<td>Working in a group</td>
</tr>
<tr>
<td>Duchess</td>
<td>5</td>
<td>Listening to the teacher</td>
</tr>
<tr>
<td>Duchess</td>
<td>5</td>
<td>Working in a group</td>
</tr>
<tr>
<td>Hexham Middle</td>
<td>5</td>
<td>Activate (Autumn 07)</td>
</tr>
<tr>
<td>Hexham Middle</td>
<td>5</td>
<td>Activate (Summer 08)</td>
</tr>
<tr>
<td>Weaverham</td>
<td>5</td>
<td>Learning: making progress</td>
</tr>
<tr>
<td>High Street</td>
<td>5</td>
<td>My learning (Year 2; Nov 07)</td>
</tr>
<tr>
<td>High Street</td>
<td>5</td>
<td>My learning (Year 2; July 08)</td>
</tr>
<tr>
<td>High Street</td>
<td>5</td>
<td>My learning (Year 4; Nov 07)</td>
</tr>
<tr>
<td>High Street</td>
<td>5</td>
<td>My learning (Year 4; July 08)</td>
</tr>
<tr>
<td>Hipsburn</td>
<td>3</td>
<td>Lollipop partners</td>
</tr>
<tr>
<td>Packmoor</td>
<td>4</td>
<td>Using learning skills</td>
</tr>
<tr>
<td>Perranporth</td>
<td>5</td>
<td>Paired work</td>
</tr>
<tr>
<td>Perranporth</td>
<td>5</td>
<td>Learning outside in a group</td>
</tr>
<tr>
<td>St Meriadoc</td>
<td>5</td>
<td>Talking to a group (P4C)</td>
</tr>
</tbody>
</table>

Findings from the inductive analysis

It became apparent that this analysis of the templates revealed a lot more information about different learning situations. The visual representation of different contexts appeared to mean that we could pick up a lot of information about children’s understandings of process, support for that process and outcomes. Therefore the key themes identified were affective and motivational dispositions to different learning experiences, ideas about progression, understanding of tools for learning and the importance of managing social contexts for effective learning to take place. These will be exemplified and discussed in turn.

Dispositions

For many students comments about learning were closely linked to emotions and motivation. Comments provided evidence of a predominantly happy outlook on learning. However students tended to single out specific aspects which they particularly favoured. This could be because of the content, the type of activity or the processes which they associated with learning in this context:

*My favourite subject is literacy. I like learning about stories and verbs. And I give out the literacy books. (age 8)*

*I feel happy. It is good because I have fun (female, aged 5)*

The templates certainly gained insight around different learning contexts and Learning to Learn. For example this student comments particularly on learning outside of school:
I feel nice because I like learning out of school. Wow, this is fascinating (age 7)

Progression

The templates revealed a strong theme around progression. Students demonstrated a strong understanding of what it meant to succeed in learning, how they had progressed and the evidence that they needed to know that they had moved forwards. For example,

“I know that I’m making progress because I’m getting higher marks in tests and teachers say well done and that I’m getting full triangles.” (age 9)

Linked to the idea of progression was value in being presented with something new. Students really appreciated new pieces of information, new experiences and new ways of learning:

Are you learning anything new? I am learning loads – it’s well interesting (age 11)

I like learning in the park because I can discover new things (age 6)

The students could see benefit in moving forwards in their learning, with regards to self motivation as well as strategic insight into their own learning career:

I liked it because at the end I had something that I had made myself (age 14)

Tools for learning

‘Tools for learning’ was a comprehensive category which provided the most cross over with the deductive analysis findings. Many of the students elaborated on tools and individuals that helped them to learn and the way in which they described them reflected elements of metacognition, and particularly metacognitive skillfulness. For example, the student below is talking about how different techniques support her learning:

The best way to learn my spellings is practising at home and breaking them up. The best way to practise my timetables is to use my fingers. (age 8)

The following child is starting to think how techniques and tools can be transferred to other lessons to support learning; this would fit with ideas surrounding metacognitive skillfulness:

I think we should keep putting coloured squares to help by putting it in the maths books and I think we should put it in other books as well. (age 9)

Tools could be activities like those above, but they could also be physical resources such as computers and clocks:

I think I learn best when I listen and look at things and work on the laptops with a partner, like playing on a game to help fractions, divisions and times tables (age 9)

Students were keen to highlight the impact of using these tools. This was in terms of the pace of their learning or the speed with which it was completed:

I learnt that if you help someone on a job you can work together and get the job done faster (age 14)

As well as the amount of work that could be completed:

I prefer working as a team as we were one of the first finished and got everything done. It was good because you didn’t have as much pressure on you (age 14)

Social aspects of learning

Findings from Phase 3 and so far in Phase 4 have shown strong associations between Learning to Learn approaches and specific types of talk and characteristics of social learning. Further evidence of this relationship was found within this sample of Pupil Views Templates. Students articulated the importance of group work:

I think I learn more by working in a team because you can teach each other new things (age 14)
I like sharing the workload, it worked well. You can listen more to the video (age 14)

A key trend was the support gained from working with particularly peers. For some this was a friend:

I think I am making progress because I am checking with my friends (age 9)

I like sitting next to my friend doing my work (age 5-6)

But others cited the characteristics of the peer as being just as important as friendship to aid learning. Students showed critical thinking about how best to manage their work with peers:

I’m all right with lollypop partners, but they are a bit distracting when you’re with your mates. But when you’re with your friends you are not afraid to discuss with each other (age 9)

I like working with different people because you can see what ideas they have and more. (age 12)

This critical reflection related not only to whom they worked with, but related this decision to different subjects and the social pairings and groupings which might be more or less effective:

I don’t like it when we do times in maths because if I am on five and other people are finished they laugh at me. If we did times tables more, I would get better at it (age 8)

I think activate helps me to concentrate especially as I’ve got two irritating boys around me (age unknown)

Students also expressed perspectives on talk with their teacher. Comments focused on the support provided by teachers for learning:

Miss ***** helps me to learn (age 6)

But it also related to the learning role model that the teacher could provide:

Wow, this teacher knows a lot about history. I’m impressed. I wish I was him knowing all this. (age 12)

Parents were also mentioned as having an important role to play in their learning:

I want to show it to my mam so they are proud of me (age 14)

I would show them to my mum so she would know what I am capable of (age 14)

This was not just a ‘show and tell’ capacity, but also a two way relationship where students talked about sharing learning and enjoying the outcomes together:

I would like to share my work with my mum because she always checks what I have done and enjoys my work (age 14)

While social contexts were predominant in the templates, there were also comments which related to the positives of working independently:

I learn better on my own because you don’t get distracted by anyone. I get my work done quicker and I won’t get told off for talking. I will do my work neater and I will concentrate because no-one will be there to talk to (age 9)

Again critical reflection was evident with regards to when it was best to work with peers and when to work independently:

Less confidence when you have to do everything. I like working on my own when I am certain, but I don’t like it sometimes if I am uncertain (age 14)

Overall, the Pupil Views Templates showed students to be communicating their learning in a wide variety of ways to a range of people. They were able to critically reflect on combinations of who, when and what would suit different kinds of learning and this showed a strategic (metacognitively skilful) perspective.
Appendix 6: Teacher perspectives

Teachers’ experiences of the project have been collected annually throughout Phase 3 and 4 by a series of telephone interviews; a process which has been extended to the FE Project. Through these data we have explored teachers’ perspectives on the development of Learning to Learn through enquiry based approaches and the link perceived with professional development (Higgins et al. 2007) and the change to seeing themselves as learners. Last year, we found evidence of the way teachers were exploring projects which linked beyond their own interests and professional development (Wall et al. 2009). They were seeing potential to make effective associations between school and national priorities and their own work in the classroom. This process was allowing L2L to become much more embedded in teachers’ own practice but also in school systems and processes.

This year interviews took place in both the schools and the further education project. The former wanted to extend knowledge of the teachers’ understandings of L2L towards their views of student development. A narrative interview was designed to explore teachers’ perspectives on children’s learning and development. We had extensive knowledge of teachers’ understandings of their own learning, but little around their view on children’s development through involvement in the project. In the further education project, we wanted to look at transferability of ideas, to what extent if interviews from the schools project were repeated with the FE tutors would equivalent findings be achieved: would the associations and effects perceived by the tutors in the FE Sector be the same or different?

In addition we have tackled challenges around knowledge transfer of L2L within project schools, using a questionnaire to other members of staff in project schools asking what their perspectives of the project and the associated approaches are.

Appendix 6a: Teacher interviews (Schools project)

In 2008 in order to obtain a detailed picture of what the school project teachers felt it was like to be involved in Learning to Learn, as well as to gain an understanding of the issues that arose within each context, the research team undertook narrative telephone interviews with self-selected participants. The success of these interviews and the resulting rich data (Wall et al. 2009), led the research team to undertake similar narrative interviews in 2009, at the end of the second cycle of the teachers’ enquiries.

Narrative interviews focus on facilitating ‘a co-construction of the interviewers and the informants experience and understanding of the topic of interest’ (Miller and Crabtree, 1999: 93). The interviewer does not follow a detailed interview schedule with specific questions to be answered, but introduces a question or theme that will produce a story (or narrative). As a result the areas that are explored in the interviews ‘arise from the interviews themselves and are not predetermined’ (Mroz and Letts, 2008:75).

The adoption of narrative interviews in the Learning to Learn project, reflects the continuing desire of the research team and the Campaign for Learning to cede the locus of control to the teachers and to create genuine collaboration. Thus through the introduction of a more natural conversational encounter, the teachers are given greater control over the direction of the interview process.

The Student Experience

In 2009, as in the previous year, the teachers were approached at the regional INSET days and asked if they would take part in optional end of year telephone interviews. Throughout June and July 15 teachers were interviewed by members of the research team (although it should be noted that two of these teachers were interviewed together from the same school and so this will be classed as one interview).
The teachers were provided with an interview schedule (see Appendix 3) which asked them to reflect upon the experiences of their students. In order to provide a clear focus for the interviews, the teachers were invited to tell a story about a particular student that they felt had really benefitted from the Learning to Learn project that year. Thirteen narratives were analysed, in the other interview no particular student/adult was identified, so this was not classified as a narrative.

Table 15: Age range of narrative subjects talked about by teachers

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Year 3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Year 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Year 7</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Year 8</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Year 9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 10</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Year 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

Although each interview undertaken described a unique student in a unique context, analysis of the interviews revealed a ‘meta-narrative’ (Crabtree and Miller, 1999) of unifying themes, which provides evidence of the impact of Learning to Learn on students in general. These themes demonstrate that teachers felt that their students showed:

- Improvements in confidence levels;
- Increased engagement in their lessons and in school;
- Increased metacognitive awareness

The narratives also reveal that witnessing the positive changes in the students over the year impacted both on the teachers themselves and many of the parents.

Table 16: Base Line performance of students as defined by the teachers

<table>
<thead>
<tr>
<th>Baseline performance Of students</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Average</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Average</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>High Ability</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

The student Experience – Improvements in confidence levels

The students described in the teachers’ narratives represented a range of abilities (see table 22). However it was interesting to discover during the analysis, that the majority (ten out of twelve students) were described as lacking in confidence. This ranged from a lack of confidence in the students’ belief in themselves and their own abilities.
He didn’t have any confidence in his own ability to read, he always used to say I can’t read. (Year 2 student)

To a lack of confidence when having to talk to the teacher or in front of the class:

Although he was academic he was never a child that would volunteer information, you’d have to go to him and ask him, he wouldn’t put his hand up or be particularly vocal in a group. (Year 6 student)

As the narratives progress, the teachers describe both the changes that they witnessed over the year:

I know before he wasn’t very confident at speaking to the whole class, and now he’s willing to stand up and address everyone, especially when talking about his work. (Reception student)

The difference with her now two years later is amazing. Now she’s confident, she takes part in so much, she’ll talk to everybody, she’ll help out with anything, she’ll do anything you ask her to do. (Year 3 student)

And also provide a range of explanations regarding the factors they believe led to the improved levels of confidence in their students. These fall broadly into three categories:

Support (tools and structures)
Culture/Environment
Language (vocabulary and dialogue/talk)

Tools and structures
Many of the teachers involved in the project were developing particular tools and structures with their students which they hoped would support their learning. These included for example Learning Logs, Lollipop partners, Kagan Structures and P4C enquiries. The teachers commented that for particular students these acted as a ‘prop’, providing a beneficial structure/framework, which made the students feel safe to try things out.

But this [community of enquiry] gave them an opportunity, a platform, to be able to….actually in a word, to be able to talk to the teacher or talk to other people and to say what they’ve done, or take part in a discussion. And it was ok. It was safe to take part in a discussion because everybody had to do it and it was a very structured way to take part. (Year 8 student)

Culture/environment
A change in classroom culture as a result of taking part in Learning to Learn was also a theme which emerged during the interviews. In many cases this change presented the students with a new type of environment - one in which it was “okay to say you didn’t understand” and where you should not to be afraid to ask questions.

Language
The role of language forms an integral part of the above two categories, and is consequently difficult to disentangle from them. However, its significance was referred to explicitly in every interview, demonstrating that language is a major feature of Learning to Learn. The two main aspects of language highlighted in the interviews are vocabulary i.e. providing the students with the words to describe their learning (the tool) and talk/dialogue i.e. providing them with the opportunity to talk about their learning (the environment). The following narrative provides a typical example of the impact of language in the Learning to Learn classroom:

So to start out with he didn’t really even know what…talking about learning…he didn’t have any idea what I was referring to at all. He had no vocabulary to use to express how he felt about his learning. He couldn’t think about how he fitted within learning either. His priority was playtime not learning.
And we talked about that and that’s when I started to see a change really, because he could express what was annoying him about going out, that we weren’t going on the play equipment, it wasn’t a visit about having fun, it was about learning. And he was starting to have that level of conversation with me. (Year 2 student)

The student experience - Increased engagement

The narratives also provide evidence that many of the students participating in the Learning to Learn projects became more engaged in their learning and with school in general. The ability to articulate thoughts, to understand why you are asked to do something and in some cases to determine what you learn appears to lead to greater motivation and interest in lessons:

We then gave him the opportunity to be a Learning Detective and I think the sense of responsibility has really helped to settle him. He’s done ever so well in Year 6, he’s starting to take responsibility for his own learning, so I think he understands why teachers ask him to do certain things now, so that’s had a positive impact on him. (Year 6 student)

Just the fact that he would write a sentence and you would read it with him, and then you would say ‘Okay, now think about the next thing you want to write’. And he would come out with some fantastic ideas. And he would go away and he would try to write them and now he’s started. He’s bringing his dictionary up to me if he doesn’t know how to spell a word and I’ll put it in there for him. Whereas before he wouldn’t even bother, he would just sit at his table and stare into space.’ (Year 2 student)

There is evidence from the narratives that a shift in the traditional teacher/student relationship can influence levels of engagement. One Year 2 teacher describes how after successfully basing a history topic on the questions that her students had wanted to answer, she then “focused in on the things that they enjoyed and incorporated them into all the subjects that I was teaching”. The result was that this new way of teaching, this new teacher-student relationship, had a “beneficial” effect on her class.

The student experience - Increased metacognitive awareness

Although the majority of the teachers interviewed did not explicitly refer to the development of their students’ metacognitive knowledge or skillfulness, it is evident from the narratives that many of the students are beginning to develop an awareness of themselves as learners, and that this is impacting both on their confidence and classroom performance. Thus many of the students are aware of the resources and strategies that they need to use in order to help them succeed and they are able to articulate and reflect upon how and why these help them:

Later in the year we completed another response sheet about reviewing our learning and by this time Student A demonstrated in her response that she understood why we review learning - so that we know if we’re ready to move on or we know if we need more practice. And she also understood that Walt and Wilf is reviewed at the end of the lesson by showing thumbs up or thumbs down. So she knew how to do it, but she also knew why she was doing it. By May she was also now demonstrating that she understood that mixed paired shares and rally robins help her to learn and [she] understands that she learns co-operatively as well as independently. So she can say what strategies help her to learn basically.’ (Year 2 student)

The teacher experience

An often underreported aspect of taking part in a teaching innovation is the impact that it can have on a teacher when they see previously disengaged students flourishing in the classroom. There was general agreement expressed that it was very “rewarding” being involved in Learning to Learn and that being able to see their students “thrive as a person” was “why you go into teaching.”

It’s made me feel quite good really. No teacher likes it when children don’t get things but you accept that they’re not going to get things straight away and you know that you’re going to
review it and go back to it and revisit. But the child doesn’t. And to think that they’re going home and getting upset about something really upsets me. So I’m really chuffed that she knows that she’s not lacking in confidence any more. (Year 2 student)

Many of the affective comments made by the teachers also demonstrate that when students show an interest in what and how they are taught, this can have a positive impact on how the teachers feel about their own role and achievements:

*She actually came up to me before that meeting and said to me, Miss I really think that everyone should be linking the school and the 5 Rs. And for a child to come up and tell me they think this should be a whole school initiative ....and I went whoa..... (Year 4 student)*

**The parent experience**

A theme which permeated many of the narratives was how important it was to acknowledge the potential impact of the Learning to Learn projects on the parents of the students involved. This was particularly evident for those parents who, in the past, had experienced difficulties with regard to their children’s education – whether it was because their children showed little interest in wanting to learn, because of their behaviour or because they struggled in their lessons. Many of the teachers describe how important it was to be able to show parents how much their children had progressed:

*But now he’s capable of reading, he’ll come in and he’ll say I can read ...he tells his mum how much he enjoys school. (Year 2 student)*

**Q: And is he doing that now, going home.....**

**A: Yes.**

**Q: I bet his mum doesn’t know what’s hit her**

**A: She’s really pleased (Year 2 student)**

*Well it’s been good to actually show his mum some work for a change, because up until then it was always...he hasn’t got any work done. (Reception Student)*

**Summary**

The 2009 school project interviews provide an insight into the student experience from the perspective of their teachers. Although each story focuses on a unique student in a unique context, analysis of the narratives provides us with an overarching meta-narrative which reveals several unifying themes. The teachers highlight that, through the introduction of support structures, changes in culture and a focus on language, students involved in Learning to Learn projects have the potential to become more confident, more motivated and engaged in their learning and in some cases to become more metacognitive.

Affective comments made during narratives also demonstrate that witnessing positive changes in their students had a beneficial effect on the teachers and how they felt about teaching. There is also evidence that some parents experienced changes in their children’s attitude towards school and learning and that this has been articulated to the teachers.

**Appendix 6b: Teacher interviews (Further Education context)**

The interviews carried out in February with FE teachers provided an insight into their initial perceptions as to what participation in the project would mean for them, their college and their learners (see appendix 1 for interview schedule). The data gathered also provided a benchmark against which the evolving role of Learning to Learn in each institution could be compared.
What Learning to Learn had to offer colleges

Colleges as learning organisations

Because, within the department, there is a set standard as to what happens- this is what happens this week and we are going into that classroom- it’s about changing that. (Teacher 15)

Many comments from teachers suggest a feeling that involvement in the project was seen as an opportunity to refresh practice in a sector that has, when compared with schools, been overlooked in terms of investment and research into pedagogic innovation. Learning to Learn was seen by some as a means by which colleges as institutions could become more creative in the way they function; becoming learning organisations that evolve to meet changing need rather than simply providers of curriculum content.

‘Being a learning organisation in the true sense, so that we are always learning, so that we are seen as learners as well.’ (Teacher 5)

A cultural shift within what is already quite a learner centred college. The beauty of this is that for it to be really successful, the organisation takes some risks and reacts to what it is given rather than fit the learner voice into a hypothesis that the organisation already had. (Teacher 8)

For many, the source of this creative energy is the expertise and insight of teaching staff within the college. Essential in this shift towards organisational learning, therefore, is an ethos of trust between leadership and practitioners and a mutual understanding of the need for, and potential value of, experimentation.

‘To listen to the teachers and allow independence to change their approach to learning and have more autonomy. (Teacher 13)

‘Encourage people to be adventurous’ (Teacher 10)

A vehicle for an intra-organisational discourse about learning

Rather than lone researchers pursuing idiosyncratic research interests, the FE teachers often expressed to desire that the fruits of their work be shared within the college for the benefit of colleagues and learners alike. Rather than a clique operating independently of staff, therefore, participants in the projects expressed the ambition that their ideas and practices be made available to all and that effective systems for dissemination were seen as key to this.

I particularly want to cascade what I’ve learned from this project to my colleagues to help them be more effective with their learners. (Teacher 6)

A vehicle for an inter-organisational discourse about learning

As important as the opportunity for forging links within the college, was the access Learning to Learn provides to the practices and expertise of teachers from other institutions. It was clear at the Bristol residential that FE colleagues found much of interest in the research activities of primary teachers and this is borne out in comments made in the course of the interviews:

It takes you outside the box. Teaching to the bigger picture as to what you can do to assist the students and prepare themselves for. Because, from what I have seen, it is up and coming from primary schools right the way through. If the same- and I don’t think standard is the right word- if the same environment was kept, there would be more of a continuous flow. (Teacher 15)

I’ve tried to talk a colleague into doing the same because she loved it as well, but if we do the same idea that’s been kicked round primary school, but do it in college. (Teacher 1)

Synergy with the personalisation agenda

Both colleges have, for some time, been concerned with harnessing the views of learners in order to better tailor provision to need. Remarks by teachers indicate that participation in the project was seen as a way of furthering this goal and improving the responsiveness of the college to its learners’
requirements. Importantly, these comments also make clear that this change should be enshrined in the processes and systems of the college rather than the practices of individual teachers.

‘A culture where you would have responsiveness at all levels of the organisation. So when something from the learner voice feeds into the course annual review, it then feeds into the self assessment report from the schools and that feeds into senior management decision making.’ (Teacher 8)

‘I think that we have to put more emphasis and empower our learners and mature from that perspective, when they start thinking about coming here... looking at recruitment, selection and from the beginning endorse these things’ (Teacher 11)

What Learning to Learn had to offer teachers

Immediately apparent was the wide range of roles carried out by practitioners in both colleges. Amongst others, interviewees reported the following as duties that characterise their daily practice: quality assurance; liaison with external professional bodies; delivery of training courses; line management; budgeting; mentoring; pastoral care; recruitment; teaching study skills; developing basic skills of literacy and numeracy. In view of this, it is perhaps unsurprising that most comments referred to the opportunities that Learning to Learn offers for practitioners to focus on learning and, to an extent, re-engage with the students.

Gaining knowledge about how students learn

Given that some interviewees had worked in the education sector for some time, there was a surprising thirst for knowledge as to how learners learn. Despite the recent focus on learner voice and personalisation, some staff feel that this, in itself, is not enough and that enquiry may offer the best route to a better understanding of how students develop.

I hope to get an interaction with the students again, which I’ve lost. (Teacher 16)

There is quite a bit of stuff there that is interesting for me in terms of how they reflect on their learning, how resilient they are, how they deal with responsibility for their learning and their football development. (Teacher 12)

One of the ambitions is getting an idea for what a learner is and what their expectations are of them coming here (Teacher 14)

Some staff were also interested in investigating how they themselves learn, seeing this as a natural extension of their research into the development of students.

So although it is exciting but what we have to do at the same time as these initiatives is apply those skills to ourselves and assess those skills, I think that is something that is refreshing for practitioners. (Teacher 11)

It might be a way of improving my strategies for getting a better grade. So it’s for college and also for my personal development. (Teacher 6)

Invigorating practice

On one level, teachers saw enquiry as a way of ensuring quality of teaching. Research was seen as offering a framework within which staff could reflect on practice and employ evidence gleaned to improve their effectiveness.

And the more knowledge we have and gain about learning the more effective we will be in our role. (Teacher 5)

On another, the chance to pursue a personal interest has proved motivating in its own right in that it offers a break in routine and a challenge to staff in term of their own learning.

Capture best practice and ideas and have a stimulus for our job role, so that we keep our education fresh (6)
It is going to give us a challenge and not necessarily more work to do but I think it will make our day more exiting. (Teacher 11)

A nice challenge to do something different. (Teacher 10)

Increased effectiveness

Unsurprisingly, many teachers placed a premium on the improvement in their provision that would accrue as a result of insight gained through enquiry. In addition, colleagues charged with monitoring quality standards also recognised the potential impact that research could have on their own role.

One of the problems, being a quality manager, is that it is not like teaching where you can see the impact straight away. This helps us to qualitatively and quantitatively look at some of our measures (Teacher 8)

What Learning to Learn had to offer students

Increased metacognitive ability

Comments from staff laid emphasis on the perceived need for greater learner autonomy and stressed the desire for students’ to better reflect on and regulate their own learning. In view of this, many quoted an improved self awareness and self knowledge related to learning and how to learn as a valued outcome.

You are looking for players who are able to reflect and take responsibility for their training and preparation rather than being over reliant on the coach to lead everything. (Teacher 12)

To instil in learners the skills for teaching themselves (Teacher 9)

It’s about them being aware of their learning and what part of their learning that they are going through. (Teacher 15)

Engagement- a partnership in learning

Student engagement and retention was cited as a major priority by FE practitioners, a concern that is perhaps felt more strongly than by colleagues in the compulsory education sector.

‘We look after the 19 year olds for whatever reasons aren’t able to exit school. We have certain expectations that they will be motivated towards, securing their place which they think is fine and this is not what we find. They aren’t really interested in opting in.’ (Teacher 14)

Consequently, a hope was expressed that enquiry might provide fresh insight into how this could be achieved and student motivation to participate improved.

To get them to take responsibility for their own learning and to have a culture where learners feel they are contributing to the life of the college and helping to shape it. (Teacher 8)

Taking responsibility for their learning in making sure that they come to class every time and on time and doing their homework (Teacher 9)

Summary

There was a collective hope expressed by the FE teachers we interviewed that involvement in Learning to Learn would lead to practitioners, learners and colleges to take a more proactive role in deciding how learning occurs. There seems to be a desire across both colleges for more autonomy in setting the parameters for teaching and learning and a feeling that this process should be steered by the insights and understanding gained through practice as well as by external monitoring and regulatory systems. However, this is not to suggest that the colleges are inward looking. There was also openness to the ideas and professional knowledge of practitioners from different educational settings as well as an aspiration that locally acquired understandings be shared in a wider debate about learning across the partnership.
Appendix 6c: Perspectives of other staff (Schools Project)

Rationale

The nature of the project is that we view schools through the lens of ‘our’ teachers’ experiences and we might be vulnerable to assuming that schools are a lot more ‘Learning to Learn’ in ethos and practice than they are in reality. On our school visits we have an opportunity to meet senior managers and learners but pressure of time has made it hard to gauge staff attitudes more widely. For these reasons, we decided to distribute a short questionnaire for staff not involved in Learning to Learn, known to the project team as the ‘other’ staff questionnaire, or OSQ (see Appendix 4).

The questionnaire consisted of a section collecting demographic data about respondents, a series of closed questions, which aimed to assess the level of knowledge staff had about L2L and their views of how successful it had been and a final section (Figure 43, below) which invited them to agree with a range of positive, neutral and negative statements about L2L.

![Figure 32: Exemplar question from the other staff questionnaire](image)

Respondents

A total of 58 staff from nine primary and three secondary schools across the four local authorities completed the questionnaire (see table 23 below)

<table>
<thead>
<tr>
<th>phase</th>
<th>primary</th>
<th>secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA</td>
<td>9</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>teacher</td>
<td>11</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>teacher/coordinator</td>
<td>14</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td>senior teacher</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>head teacher</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>39</td>
<td>19</td>
<td>58</td>
</tr>
</tbody>
</table>

As figure 44 (below) indicates, the roles reported are linked to the phase of school that they work in, with TAs all coming from primary schools and senior teachers mainly from secondary schools.
The age profile is similar in the secondary and primary schools (Fisher’s Exact Test: p=0.562):

<table>
<thead>
<tr>
<th>age</th>
<th>phase</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>primary</td>
<td>secondary</td>
</tr>
<tr>
<td>30 and under</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>31-40</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>41-50</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>51 and over</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

There is a range of educational experience across the respondents, both in terms of time in their current school and total time in education (Figure 45).

Respondents from primary and secondary schools are extremely similar in terms of their time at the current school and time in education, and as expected there are no statistically significant differences between the two groups of respondents.

**Knowledge about L2L**

Although some of the respondents knew very little about L2L, the majority had some awareness of the project. Judging by these respondents, awareness appears to be similar across secondary and primary schools (Fisher’s Exact Test: p=0.729):
The knowledge of L2L reported by these staff does not have a simple relationship with their role, but there is perhaps a tendency for the more senior teachers to report more awareness of the project than the TAs and classroom teachers. As figure 47, below, displays, TAs tend to know quite a bit, or not very much about L2L, whereas teachers with additional responsibilities are much more likely to pick the mid-point of being ‘aware’ but not having experienced L2L. We were delighted that all three Heads had more than heard of the project!

The knowledge of L2L reported by these staff does not have a simple relationship with their role, but there is perhaps a tendency for the more senior teachers to report more awareness of the project than the TAs and classroom teachers. As figure 47, below, displays, TAs tend to know quite a bit, or not very much about L2L, whereas teachers with additional responsibilities are much more likely to pick the mid-point of being ‘aware’ but not having experienced L2L. We were delighted that all three Heads had more than heard of the project!

**How successful do they perceive L2L to be?**

**Perceived impact according to role and phase of school**

There were no statistically significant differences between respondents with different roles or from different educational phases in their perceptions of the success of L2L. An example of this is shown in table 25 below of frequencies of response regarding the impact on learners by staff in primary and secondary schools.
Table 19: Response regarding impact on learners

<table>
<thead>
<tr>
<th>Impact</th>
<th>Phase primary</th>
<th>Phase secondary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>too soon to tell</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>minimal impact</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>fairly successful</td>
<td>17</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>very successful</td>
<td>12</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>19</td>
<td>55</td>
</tr>
</tbody>
</table>

Perceived impacts on learners, teachers and whole school

Most respondents were of the opinion that L2L was broadly successful for learners, teachers and the school as a whole. Nobody felt that L2L was unsuccessful, though a significant minority thought that it was too soon to know.

Table 20: Respondents views about how successful Learning to Learn is

<table>
<thead>
<tr>
<th>Impact on learners</th>
<th>Impact on teachers</th>
<th>Impact on whole school</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>too soon to tell</td>
<td>9</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td>not at all</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>successful</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>minimal impact</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>fairly successful</td>
<td>24</td>
<td>28</td>
<td>79</td>
</tr>
<tr>
<td>very successful</td>
<td>20</td>
<td>15</td>
<td>47</td>
</tr>
</tbody>
</table>

There is a tendency for respondents to be more positive about impact on learners, slightly less convinced about the impact on teachers and slightly less convinced again about the success of L2L for the school as a whole (figure 48 below).

Figure 37: Respondent views on who is impacted upon by Learning to Learn

Relationship to knowledge of L2L

There is a distinct positive relationship between respondents’ level of knowledge about L2L and their perception of it being successful. The following table shows significant correlations between perceptions of impact on learners, teachers and school (as might be expected), but also positive correlations of a similar magnitude between knowledge level and level of impact on learners, teachers and school. There appears to be confirmation of our previous findings that initially people
involved in the project tend to focus on the impact on learners, with awareness of impacts on teachers and whole school communities developing over time.

**Table 21: The relationship between knowledge and perceptions**

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>knowledge Correlation Coefficient</th>
<th>learners Correlation Coefficient</th>
<th>teachers Correlation Coefficient</th>
<th>Whole school Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td>1.000</td>
<td>.683**</td>
<td>.580**</td>
<td>.551**</td>
</tr>
<tr>
<td>learners</td>
<td>.683**</td>
<td>1.000</td>
<td>.724**</td>
<td>.787**</td>
</tr>
<tr>
<td>teachers</td>
<td>.580**</td>
<td>.724**</td>
<td>1.000</td>
<td>.775**</td>
</tr>
<tr>
<td>Whole school</td>
<td>.551**</td>
<td>.787**</td>
<td>.775**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

What else do they think about L2L?

Respondents were given the opportunity to circle any number of twelve statements about L2L (as in figure 48 above). The overall numbers agreeing with each statement is shown in figure 49 below.

**Figure 38: Respondents views of Learning to Learn**

It is clear from this chart that the vast majority of these respondents consider L2L to be a potentially useful approach. Our belief that L2L is something that teachers can shape to their own ends is supported by the leading statement ‘provokes new ideas’. As expected, engaging students outstrips staff development: students come first in teachers’ hierarchy.

None of the respondents considered that it was a ‘waste of time’, or an approach that they would not use or were not interested in. Only one of the seven respondents who added their own statement added a negative statement: “the children don’t get much out of it”. In contrast, there were many agreements with the statements about L2L’s potential to develop staff, engage students and provoke new ideas. Notably, over a third of the total number of respondents suggested they would like to be involved, but the agreements with L2L’s benefits went beyond these people.
Appendix 7: Self Description Questionnaire

Phase 4 of Learning to Learn in Schools Project and Learning to Learn in FE are making use of the Self Description Questionnaire (SDQ) developed by Prof Herb Marsh and his colleagues (Marsh, 2006) to measure self concept. There are a number of versions available, which are intended for differing ages of respondent (child through to adult). We are mainly using the SDQI administered online to students across the L2L schools and colleges.

The SDQI differs from many measures used in educational psychology since it has separate scales for the various aspects of self concept, which common sense suggest exist and which Marsh has found evidence for. The eight factors include ‘physical abilities’ (student ratings of their skills and interest in sports, games and physical activities), ‘peer relations’ (student ratings of their popularity with peers, how easily they make friends, and whether others want them as a friend) and ‘general-school’ (student ratings of their skills, ability, enjoyment and interest in school subjects in general). There are also separate scales for a learner’s concept of their efficacy in differing school subjects. The ‘reading’ and ‘mathematics’ subscales draw on the tendency for people to identify themselves as either a numbers person or a words person, whatever their absolute ability in these areas.

During Phase 4, the schools involved are using an online facility to administer the SDQ to their students. In the L2L in FE project, the FE teachers have been introduced to the SDQ and encouraged to administer the online SDQ to students of the appropriate age to expand our baseline. Coding will allow us to track students from particular year groups through the school and look at how self concept varies over time. During childhood and adolescence self concept tends to decline. It will be interesting to see whether this is the case in the L2L schools, or whether the L2L approach is able to slow this decline. This might be seen in some aspects of the overall self concept, which is what makes the SDQ so useful, or differing patterns of change might be revealed for the various subgroups of children.

In addition to this cross project use of the SDQ, teachers in the schools and colleges have made use of either the online SDQI or, in some cases, the SDQII (intended for adults). This use has centred on teachers’ developing understandings of the characteristics of their learners, either over time or compared to other learners within their institution. This case study level use of the SDQ will be discussed in a later section (section 3.5).

Our baseline

Over the early part of this school year (2008-09), a number of schools used the SDQ with their students. We have collected and analysed data from 567 students, both boys and girls, who had not been previously involved in L2L. This includes, this year, a sizable number of secondary age students, among them a group of Y11 students studying at FE college:

Table 22: Students completing the SDQ in 2008-09

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>49</td>
<td>40</td>
<td>89</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>38</td>
<td>88</td>
</tr>
<tr>
<td>4</td>
<td>58</td>
<td>65</td>
<td>123</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>103</td>
<td>109</td>
<td>212</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>292</td>
<td>567</td>
</tr>
</tbody>
</table>
This represents a considerably larger number of completions than last year and will eventually be added to that data, from 357 students, to produce a baseline for the whole project. Initially, though, it is interesting to consider the data from this year and make some comparisons to that previously collected.

**Responses for the eight elements of self concept**

The SDQ questions form subsections, and average scores on each section can be used as measures of particular aspects of overall self concept. The eight elements are as follows:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Appearance</td>
<td>AP</td>
<td>Student ratings of their physical attractiveness, how their appearance compares with others, and how others think they look.</td>
</tr>
<tr>
<td>Physical Abilities</td>
<td>PH</td>
<td>Student ratings of their skills and interest in sports, games and physical activities.</td>
</tr>
<tr>
<td>Parent Relations</td>
<td>PA</td>
<td>Student ratings of how well they get along with their parents, whether they like their parents, and the quality of their interactions with their parents.</td>
</tr>
<tr>
<td>Peer Relations</td>
<td>PE</td>
<td>Student ratings of their popularity with peers, how easily they make friends, and whether others want them as a friend.</td>
</tr>
<tr>
<td>General School</td>
<td>SS</td>
<td>Student ratings of their skills, ability, enjoyment and interest in school subjects in general.</td>
</tr>
<tr>
<td>Reading</td>
<td>RE</td>
<td>Student ratings of their skills, ability, enjoyment and interest in reading.</td>
</tr>
<tr>
<td>Mathematics</td>
<td>MA</td>
<td>Student ratings of their skills, ability, enjoyment and interest in mathematics.</td>
</tr>
<tr>
<td>General Self</td>
<td>GE</td>
<td>Student ratings of themselves as effective, capable individuals, who are proud and satisfied with the way they are.</td>
</tr>
</tbody>
</table>

**Mean response for each subscale**

Each questionnaire item is answered on a scale of 1 to 5, where 5 is most positive. Across all the learners who completed the SDQ this year, the pattern of mean response for each subscale, together with the average response across the subscales, SDQav, is shown below:
Since the scale used is 1-5, all these average responses are broadly positive. The pattern of responses is fairly similar to last year, though with all the means tending to be slightly lower. It is generally found that the self concept of children and adolescents declines with age, so it seems likely that this difference between data from the two years is due to increased number of responses from secondary students now included. Indeed, if the respondents are considered by year group, the following pattern emerges:

As expected, and as found last year, self concept declines with age. However, the subscales of the SDQ reveal that different aspects of self concept appear to be differently influenced by age. It can be seen from the bar chart that ratings of relationship with parents (PA) is broadly the same for the younger and older children, and the adolescents, in contrast to the other aspects of self concept. Also, the age where self concept declines most dramatically seems to vary systematically across the subscales. For the subscales most closely related to school learning (SS, RE and MA), the scores of the primary age students are quite similar, but the mean responses of the Y9 and Y11 students are considerably lower. In contrast, for the other subscales, the age-related decline seems to happen earlier, with the responses of the first school age students (i.e. Y1-Y4) tending to be considerably higher than those of the Y6, Y9 and Y11 learners. This progression is interesting to consider in relation to that found in the analysis of metacognitive knowledge and skillfulness in section 2.5.

Relationship between the elements of self concept

It is possible to correlate the subscale averages. For this group of 567 learners, the correlation coefficients between the various scales of the SDQ are all positive, as would be expected. Unlike last year, when we found much variation in how closely the different aspects of self concept parallel each other, most of the correlation coefficients lie between 0.3 and 0.6. Only a few of the correlations lie outside this range, including the correlation of two subscales with reading self concept (RE & PH 0.248; RE & PE 0.112). A low correlation for reading with physical abilities was also found last year. The correlation of reading and peer relations is the lowest correlation this year, suggesting that learners perceive these as quite different aspects of people, without much overlap.

Contrary to expectations based on wider use of the SDQ, and our findings in L2L last year, the correlation between mathematics and reading self concept is bigger than might be expected (0.501). Therefore, there would appear to be less tendency among these learners to identify as either numbers or words people. Further analysis reveals that this is not purely due to the inclusion this year of some older learners.
Variation in response according to gender

If the respondents are grouped by gender, the following pattern emerges (for all participants):

This shows clear differences between the boys and the girls in how they see themselves, with the boys’ responses tending to be considerably higher on all the subscales apart from reading and parent relations. These differences are all statistically significant (t test p<0.05).

Although last year’s finding also revealed some gender differences, these were much less pronounced, with more subscale means being similar and girls rating themselves significantly higher on reading. Last year responses were only collected from primary age children, so the findings from this year for this age group were considered alone, producing the following pattern of results:

This pattern of mean responses is more similar to that found last year, suggesting a tendency for the self concepts of adolescent girls, in particular, to drop dramatically. Among these younger, primary school aged, children, the boys tend to rate themselves more positively in terms of physical appearance and abilities, peer relations and general self, but girls see themselves as more successful readers (all these differences are statistically significant at the 5% level). Although the boys’ mean response for mathematics self concept is slightly higher than the girls’ this difference is not statistically significant for this year’s data from learners in Years 1 to 6.
Change over the school year

Some schools administered the SDQ to the same students towards the beginning and towards the end of the school year, allowing quite precise ‘before’ and ‘after’ comparisons to be made for these groups of L2L learners. This data will be considered in the case study section of the report. In many schools, however, there was only one use of the SDQ, sometimes towards the beginning, sometimes at the end of the year. Some of these students were L2L learners, either at the beginning or towards the end of their experience of L2L, some were from comparison classes in the same school and some were students who had experienced L2L throughout the previous year. From this very mixed data, it is possible to compile a baseline 2009 dataset (described above) and a dataset of responses from children who had had a distinct L2L approach over at least two terms (and up to a maximum of nearly two years). Thus some students will have contributed responses to both datasets, but the responses of some students will only be recorded in one dataset.

The table below shows the year groups and gender balance of the 246 students who responded later in the year, having experienced L2L:

Table 24: Sample demographics for re-test of SDQ

<table>
<thead>
<tr>
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<th>Female</th>
<th>Total</th>
</tr>
</thead>
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<td>15</td>
<td>24</td>
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<tr>
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<td>79</td>
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<td>246</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a good balance of boys and girls and the range of year groups is broadly similar to that represented in the baseline data. A crude comparison of mean responses to the SDQ subscales shows that there are some differences between the baseline group and the L2L group:

Figure 43: Baseline and pre-test SDQ results across the 8 factors
As can be observed, there is a tendency for the responses to be slightly higher at the end of the year. Although this does not hold for all the subscales it is notable, given the general tendency of self concept measures such as the SDQ to show a decline as children get older. Considering the statistical significance of these results, it is only for RE that there is evidence significant at the 5% level (i.e. \( p<0.05 \)) of a change in response over the year. As the bar chart above shows, this is an increase in mean response from 3.912 (standard deviation=0.951) to 4.071 (standard deviation=0.852). Although not a huge change (this represents an effect size of 0.17), this does provide evidence of a consistent tendency for L2L learners to rate themselves as more confident and capable in reading than they and their peers did at the beginning of the school year before the L2L input. Some of the L2L teachers have explicitly targeted reading and other literacy skills, while the general approach of L2L often involves an emphasis on verbal communication of ideas about learning, including familiarity with the necessary vocabulary. Thus there are good reasons to suppose that this increase in reading self concept may be linked to the L2L style of teaching and learning with which these learners have been involved throughout the year.

Looking at the mean responses for each of the four year groups for which there are adequate data at the beginning and the end of the year (Years 2, 4, 6 and 9), shows that this increase in reading self concept is fairly consistent across the different ages of learner (see charts below). The only exception to this pattern is found for the Y6 children where reading self concept is on average lower at the end of the year. Here, however, the decrease in RE is part of a general sharp decrease in self confidence in the subscales relating to school learning. This finding should be considered in connection with the analysis of pupil view templates across the Key Stages (see section 2.5) and may be linked to the end of KS2 SATs.

![Figure 44: Mean response rates: change across academic year 2008/9 (Year 2)](image-url)
Figure 45: Mean response rates: change across academic year 2008/9 (Year 4)

Figure 46: Mean response rates: change across academic year 2008/9 (Year 6)

Figure 47: Mean response rates: change across academic year 2008/9 (Year 9)
Appendix 8: Attainment data

Introduction

Within the case studies in each of the L2L schools various research methods are being used to identify and, where appropriate, measure any effects. This includes considering impact on various indicators of achievement and attainment. However, an over-arching analysis across the schools of school level data seems a worthwhile addition and one that could be expected to add to the explanatory value of any results reported by individual schools. Furthermore, the current dominance at the policy level of ideas about school effectiveness and judgements based on school performance indicators suggests that for an intervention to be seriously considered it helps to have a demonstrable impact on school level attainment. As a minimum, it seems important to establish whether there is any evidence that giving attention to L2L depresses results on external, school level, performance measures.

Findings from L2L Phase 3

This follows on from the L2L Phase 3 analysis, which suggested that L2L was not generally having an impact, either positive or negative, on the GCSE and SAT results of the schools involved.

There were some indications of improved GCSE results in two of the secondary schools, both of which tended, over the three years of Phase 3, to involve the whole school or the majority of the year groups. This included the Year 11 pupils who actually sit the GCSEs whose results we consider, so L2L could be directly affecting these students. Also, the involvement of more students, and the important exam year groups, might also be suggestive of the high priority and prestige of L2L in these schools. Conversely, the difficulty of implementing and sustaining a L2L approach in a secondary school was suggested by the relatively large number of secondary schools that dropped out over Phase 3.

In the L2L primary schools, results were very mixed, as is to be expected given the small cohorts involved in each school. This produces much bigger fluctuations in year to year results so fitting a curve to make predictions is less defensible.

As with the secondary schools, there was some indication that the way L2L is implemented in different schools may affect whether and how L2L impacts on SAT results. When the 2006 results for the schools which consistently embraced L2L over the three years of Phase 3 (as evidenced by producing at one, or more, case studies each year) and included Year 6 pupils in 2006 were aggregated this showed no significant difference between predicted and actual SAT results, showing that L2L was not impacting negatively on SAT scores.

At the end of Phase 3 it was concluded that L2L might take time to produce measurable effects, particularly on exam results. It is notable that apparent improvements in GCSE results in the Phases 1 and 2 secondary schools only appeared at the end of Phase 2. After Phase 1, the patterns of predicted and actual results in the L2L and comparison schools were very similar. Even change with individuals takes time (Adey & Shayer, 1994), so with a whole institution time could prove to be
extremely important. The suggestion that time is needed for the L2L approach to have a positive effect is given credence by the comments of teachers involved in the project.

Any impact of time on exam results could also be mediated by the factor of how much L2L the year groups taking the exams have experienced. If the approach has only been tried out in the lower years, it could not really be expected to have much influence on the older children then taking the exams. There is probably a tendency to do this since teachers might be reluctant to risk innovation in exam years. As Phase 3 progressed it is likely that an increasing proportion of the pupils had had some L2L teaching, but it is still difficult to quantify the L2L input for particular schools.

As L2L Phase 4 progresses, it seems important to continue the analysis of school level exam data. Increased consideration of the nature and extent of the L2L approach within schools and the opportunity to follow some schools over an extended period (four secondary and six primary schools have continued from Phase 3 to 4; this includes one secondary school that also participated in Phases 1 and 2) should allow us to draw some conclusions about the impact of the approach on public exam performance.

**Effectiveness research: a theoretical basis**

Arguments about ‘school effectiveness research’, and its attempts to assess school performance through considering test results, often become very heated. Thrupp (2001) contends that there is simplification, narrowness and misunderstanding on both sides, with a tendency to see the opposing view as occurring at an extreme position on this sort of continuum:

Schools make no difference, it's all society's fault

<table>
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<tr>
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<tbody>
<tr>
<td></td>
<td>School make all</td>
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<tr>
<td></td>
<td>the difference,</td>
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<tr>
<td></td>
<td>other factors</td>
</tr>
<tr>
<td></td>
<td>can be</td>
</tr>
<tr>
<td></td>
<td>accounted for</td>
</tr>
</tbody>
</table>

It seems sensible to bear in mind the opinion of Rutter and colleagues based on their study of 12 similar London schools in the 1970s:

“We agree with Bernstein (1970) that education cannot compensate for the inequities of society. Nevertheless, we do suggest that schools constitute one major area of influence, and one which is susceptible to change” (1979; p.182).

However, even if it is accepted, as Rutter concludes, and as many involved in school effectiveness research continue to emphasise (e.g. Reynolds & Teddlie 2001), that there is variation in achievement and behaviour due to the actions of schools, can we assess that influence? In particular, in relation to evaluating L2L, the challenge becomes one of assessing change and improvement due to the intervention. Although considering such change is a fundamental part of school effectiveness work, it has been admitted that it is not always emphasised and, consequently, “much less is known about how to effect change in schools” (Sammons & Reynolds 1997).

Goldstein (2001) argues that the two main assumptions of the government about tests (that they are objective and reliable) are both “questionable”, while Tymms (2004) contends that the rises in KS2 SATs results do not equate to a straightforward improvement in numeracy and literacy skills in primary-aged children. Yet, data about pupils’ performance on SATs and GCSEs are freely available, allowing access to data from previous years and from schools other than those involved in the
project, facilitating various comparisons. It seems obvious that this data must be indicating something. The question is “What?”

Over the years there have been numerous declarations that considering aggregate data, either at the school or LEA level, can be extremely misleading (Woodhouse & Goldstein 1988; Fitz-Gibbon 1996; Goldstein 1997). These writers argue that such analyses should be avoided in favour of analysis of pupil level data.

The difficulties of comparing even pupil level data between schools, however, have been well described (see e.g. Gray 1993) and the use of ‘value added’ scores is often seen as a solution. Calculating value added scores can be done in a number of ways, with differing indicators being used as input measures on which the ‘expected’ outcome for an individual is based. Different decisions have been made, for example, by those calculating the value added component of the DfES performance tables, the RAISEonline figures accessed by schools and the analyses available through school testing systems (e.g. CEM; Fischer Family Trust). This makes comparisons between value added systems problematic, especially as it is not always clear which methods have been used.

When a comparison of value added scores between schools, encouraged by the performance tables, is attempted, there are further concerns. For instance, a paper by two political economists argues that a “substantial proportion of the variation in the value added indicator between schools in England can be explained by factors outside of the school’s control” (Taylor & Nguyen 2004). This is backed up by analyses (e.g. Gorard 2008) which show that school ‘value-added’ scores are highly correlated to the raw school level scores, which are known to be mainly predicted by the nature of the school intake (Gray 2004). Goldstein (1997) points out that since these are still relative judgements, the “connotation of ‘adding value’ seems somewhat misleading. The term ‘adjusted comparison’ is more accurate”. Furthermore, we have returned to the position of dealing with aggregates, which is rejected by so many involved in school effectiveness research.

However, most of this school effectiveness research is concerned with making comparisons between schools. The general difficulty is that any comparisons between schools rely on ranking and relative judgements, so that all schools could be adequate, absolutely, but some will still rank higher than others (Goldstein 1997).

It would seem then that comparison between schools is likely to be misleading, for various reasons, but it might be possible to assess a school against its own previous performance using the published indicators. It is this school level data, in the form of percentages of the eligible students achieving certain levels, which have been collected for a number of years, are freely available and are used by many outside education to make judgements.

Gray (2004) discusses the major problems likely to result from considering such indicators. He emphasises avoiding the unwarranted assumption that improved year on year performance is due to schools’ efforts, when, he argues, it is more likely to result from changing intakes. This needs to be remembered when considering the L2L schools, so that final conclusions are valid, based on information from the schools about their intentions and any results, not just on observation of exam performance. Returning again to a problem of aggregate data, it has been pointed out by various writers that focusing on averages ignores the possibility of differential effectiveness, where a school
might be systematically succeeding with some of its students but not others. Again this can be addressed by examining the pupil level results produced by individual schools.

Therefore it would seem that although the use of performance table results can be criticised for comparing schools, it can be argued that it might be appropriate for assessing change at school level, especially if such methods are applied with caution and backed up by other analysis. If L2L is making any sort of difference to learning, through whatever means, it seems reasonable to wonder if this finally translates into an improvement in exam results. This is the rationale behind what we attempted to do with the whole school data.

**Measuring and predicting attainment at school level**

Using results from school league tables, it is possible to predict performance in subsequent years. As has been argued above, these performance indicators have certain distinct advantages. They are freely available, for schools both inside and outside a project, and have been published in the same form for some years, facilitating certain comparisons. Unlike value added scores, they do not rely on calculation decisions and assumptions that may not be made clear or may be changed. This is school level, not pupil level data, with all the inherent problems of aggregating information, but it has been argued that these can be eased by additional analyses. Although within school effectiveness research’ school level data are treated with suspicion, the underlying aim of such work is often comparisons between schools. Here the motivation is assessing a school against its own performance.

The method of analysis described here was developed during L2L Phase 3. Initially, an exploratory, retrospective, analysis was completed, using the GCSE results for the secondary schools involved in phases 1 and 2 of L2L. Then the method was applied to the GCSE and KS2 SAT results of the phase 3 schools as they were produced.

The analysis of secondary school results takes the percentage of Year 11 pupils achieving five or more GCSEs at grade A* to C over the years from 1994 (when these results were first recorded in league tables) to the last year before L2L (2001 for Phases 1&2; 2003 for Phase 3; 2007 for Phase 4). Although there are concerns about the small sample sizes involved in the primary schools’ SATs data, an equivalent analysis was carried out, considering the proportions of pupils achieving Level 4 or above in each of the subject areas (English, mathematics and science).

Through SPSS, a logistic regression is used to fit a curve to these values and predict values for the coming years. These values are then taken as prespecified proportions which can be compared with the actual proportions, as results are produced, using the hypothesis test recommended by Fleiss et al (2003) for deciding whether an actual proportion found in a particular sample differs significantly from a prespecified proportion. This uses the following formula to calculate a critical ratio (z) to compare with critical values of the normal distribution:

\[
  z = \frac{|p - \hat{p}_0| - 1/(2n)}{\sqrt{\hat{p}_0\hat{q}_0/n}}
\]
p is the actual proportion, Po is the prespecified proportion, Qo = 1 – Po and n is the number of pupils who actually contribute to the school's results that year (i.e. the number of Y11 students in secondary schools; Y6 pupils in primary schools).

Considering an example school

The following graph (Figure 00) shows the percentages of a L2L school's pupils achieving five or more GCSEs at grade A* to C over the years 1994 to 2003 and the fitted logistic curve. As can be seen, the curve predicts results for the years of L2L Phase 3, but also for the years up to 2010, the final year of Phase 4 (this school was involved in Phase 3 and has continued into Phase 4).

Figure 00: Predicting GCSE results for an example school

During Phase 3, the actual values of 61%, 64% and 48%, for 2004, 2005 and 2006 respectively, were then compared with the relevant predicted values. It was found that all three results differ significantly from the predicted values.

Clearly a possible problem with this method is that any deviations from the performance that is predicted for a particular school could just reflect more general fluctuations. For this reason, ‘matched’ schools are identified from the same LAs as the L2L schools, since these could be expected to be subject to similar local influences. For each Phase 3 school, two matches were found and we
have continued with this aspect of the analysis in Phase 4. For the school which have continued from Phase 3 to Phase 4 the same matches have continued to be used, while new matches have been found for the new Phase 4 schools. Schools are chosen which had similar GCSE results in the year before L2L began (again 2001, 2003 or 2007), similar proportions of SEN to the L2L schools, and so that their student numbers were similar because the comparison of proportions test used is very sensitive to sample size.

Extending this analysis to the L2L primary schools

It is clear that an equivalent analysis of the primary school SAT results can be carried out using this method, considering the percentage of the Year 6 students who achieve level 4 or above in each of English, mathematics and science tests. However, a difficulty is that the numbers of children taking these tests from each school are so small that results can be expected to vary more dramatically from year to year, so a deviation from the predicted performance would need to be extreme before any conclusions could be drawn. So, for example, with a year group of around 30 pupils, as found in one form entry schools, a difference of 10 percentage points in the proportion achieving level 4 might be judged statistically non-significant. A solution is to group the schools, with a possible categorisation being the type of L2L project or the extent of impact on the whole school. However, this leads to concerns about the validity of any judgements about appropriate grouping, and so included below is the basic school by school analysis.

The impact of Learning to Learn Phase 4

Analysis has been carried out on the 2008 and 2009 secondary school GCSE results and on the 2008 and 2009 KS2 SAT results.

Year One

The process described above was completed for the Phase 4 secondary schools (see Table 00) and primary schools (see Table 00).

Table 00: 2008 results for L2L and matched secondary schools

<table>
<thead>
<tr>
<th></th>
<th>Actual 2008 result compared to predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. ABOVE</td>
</tr>
<tr>
<td>L2L schools</td>
<td>4 (33%)</td>
</tr>
<tr>
<td>Matched schools</td>
<td>11 (46%)</td>
</tr>
</tbody>
</table>

Table 00: 2008 results for L2L and matched primary schools

<table>
<thead>
<tr>
<th></th>
<th>Actual 2008 result compared to predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. ABOVE</td>
</tr>
<tr>
<td>L2L schools</td>
<td>5 (9%)</td>
</tr>
<tr>
<td>Matched schools</td>
<td>2 (2%)</td>
</tr>
</tbody>
</table>

Year Two
This year the analysis was again completed for the Phase 4 secondary and primary schools.

**Secondary schools**

The following table (Table 00) shows how predicted and actual percentages of pupils achieving five or more GCSEs at grades A* to C compare for the secondary schools involved in Phase 4 Year Two of L2L.

**Table 00: L2L secondary schools: Predicted and actual results (2009)**

<table>
<thead>
<tr>
<th>L2L Schools</th>
<th>N</th>
<th>Actual</th>
<th>Predicted</th>
<th>Significant p&lt;0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>1**</td>
<td>224</td>
<td>59</td>
<td>31.24</td>
<td>↑</td>
</tr>
<tr>
<td>2</td>
<td>227</td>
<td>55</td>
<td>57.56</td>
<td>ns</td>
</tr>
<tr>
<td>3</td>
<td>250</td>
<td>71</td>
<td>65.67</td>
<td>ns</td>
</tr>
<tr>
<td>4 - dropped out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5**</td>
<td>239</td>
<td>78</td>
<td>87.10</td>
<td>↓</td>
</tr>
<tr>
<td>6</td>
<td>209</td>
<td>66</td>
<td>65.25</td>
<td>ns</td>
</tr>
<tr>
<td>7</td>
<td>191</td>
<td>554</td>
<td>59.91</td>
<td>ns</td>
</tr>
<tr>
<td>8**</td>
<td>110</td>
<td>51</td>
<td>30.78</td>
<td>↑</td>
</tr>
<tr>
<td>9**</td>
<td>241</td>
<td>65</td>
<td>26.61</td>
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</tr>
<tr>
<td>10</td>
<td>222</td>
<td>76</td>
<td>70.71</td>
<td>ns</td>
</tr>
<tr>
<td>11</td>
<td>263</td>
<td>72</td>
<td>63.44</td>
<td>↑</td>
</tr>
<tr>
<td>12</td>
<td>339</td>
<td>87</td>
<td>82.57</td>
<td>↑</td>
</tr>
</tbody>
</table>

**Indicates schools that participated in phase 3.

The following table (Table 00) shows how the pattern of results for the L2L schools compares to that found in the matched schools.

**Table 00: 2009 results for L2L and matched secondary schools**

<table>
<thead>
<tr>
<th></th>
<th>Actual 2008 result compared to predicted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. ABOVE</td>
</tr>
<tr>
<td>L2L schools</td>
<td>5 (45%)</td>
</tr>
<tr>
<td>Matched schools</td>
<td>13 (59%)</td>
</tr>
</tbody>
</table>
The pattern of results is broadly similar for the L2L and matched schools, as was found in 2008. It may be worth noting, however, that three of the five schools with GCSE results significantly above their predictions have had a long term involvement with L2L.

Primary schools
As described above, an equivalent analysis was carried out, considering the proportions of pupils achieving level 4 or above in each of the SAT subject areas (English, mathematics and science). This produced the following results (Table 00), which were then compared with those from matched schools (Table 00).
Table 00: L2L primary schools: Predicted and actual results (2009)

| School | English: Level 4 | | Maths: Level 4 | | Science: Level 4 | |
|--------|----------------|----------------|----------------|----------------|----------------|
|        | Actual | Predicted | Sig | Actual | Predicted | Sig | Actual | Predicted | Sig |
| 1      | 91     | 88.87     | ns  | 98     | 80.79     | ↑  | 98     | 92.03     | ns  |
| 2**    | 83     | 88.88     | ns  | 86     | 70.14     | ns | 94     | 46.32     | ↑  |
| 3      | 97     | 92.51     | ns  | 81     | 76.93     | ns | 97     | 100       | ns  |
| 4      | 82     | 73.79     | ns  | 82     | 77.92     | ns | 88     | 83.99     | ns  |
| 5      | 100    | 90.95     | ns  | 90     | 96.12     | ns | 100    | 99.11     | ns  |
| 6**    | 62     | 53.21     | ns  | 74     | 62.38     | ns | 76     | 84.82     | ns  |
| 7**    | 66     | 91.97     | ↓   | 66     | 92.94     | ↓  | 84     | 96.86     | ↓   |
| 8      | 76     | 85.97     | ns  | 73     | 77.09     | ns | 91     | 93.15     | ns  |
| 9      | 93     | 74.63     | ns  | 93     | 93.28     | ns | 100    | 93.08     | ns  |
| 10     | 93     | 84.12     | ns  | 89     | 77.82     | ns | 89     | 96.48     | ns  |
| 11     | 75     | 68.48     | ns  | 69     | 69.67     | ns | 85     | 87.74     | ns  |
| 12     | 68     | 85.47     | ↓   | 86     | 84.98     | ns | 81     | 91.22     | ↓   |
| 13**   | 67     | 82.57     | ↓   | 70     | 74.03     | ns | 81     | 97.44     | ↓   |
| 14**   | 61     | 75.26     | ↓   | 53     | 87.12     | ↓  | 67     | 95.24     | ↓   |
| 15     | 60     | 67.84     | ns  | 74     | 62.96     | ns | 87     | 65.42     | ↑   |
| 16     | 55     | 83.76     | ↓   | 63     | 68.06     | ns | 85     | 87.52     | ns  |
| 17**   | 97     | 92.65     | ns  | 94     | 97.49     | ns | 100    | 100       | ns  |
| 18     | 84     | 87.74     | ns  | 73     | 82.18     | ↓  | 86     | 93.8      | ↓   |

Table 00: 2009 results for L2L and matched primary schools

<table>
<thead>
<tr>
<th>Actual result compared to predicted</th>
<th>Sig. ABOVE</th>
<th>Sig. BELOW</th>
<th>Non sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2L schools</td>
<td>3 (6%)</td>
<td>13 (24%)</td>
<td>38 (70%)</td>
</tr>
<tr>
<td>Matched schools</td>
<td>3 (3%)</td>
<td>28 (27%)</td>
<td>74 (70%)</td>
</tr>
</tbody>
</table>
As was found for the secondary schools this year, the pattern of results is similar in the L2L and matched schools. The proposed association of long term involvement with L2L, slightly suggested by the secondary school results, does not hold for the primary schools. In both 2008 and 2009, however, in the primary schools a slightly higher proportion of L2L schools compared to the matched schools achieved SAT results significantly above those predicted.

**Concluding thoughts**

As can be seen, there is some difference between the L2L and the matched primary schools in the proportions which have achieved results that are significantly higher than predicted. This is not a big difference, however, and for the secondary schools there was no parallel difference. Therefore, at this stage there is no compelling evidence that L2L has a negative, or a positive, effect on either GCSE or SAT performance.

It is worth noting that the secondary schools which progressed through from earlier stages of the project were over represented in both 2008 and 2009 among the schools where results were significantly higher than expected.

This reminds us that the majority of the schools have, at this point, only been part of the L2L project for two years. It might be expected that a positive effect on attainment, as measured by public exams taken in the final school year, would take longer to occur. We must be careful of over-extending this explanation, however, as it does not fit the results from the primary schools in 2008 or 2009.

Instead the findings of L2L Phase 4 so far, and perhaps those of Phase 3, may be linked to variation between schools in how L2L is implemented and developed, which has affected the overall impact on exam results. There is evidence in both the secondary and primary schools for differences in how L2L has been implemented, with considerable variation, both in the content of individual school approaches and in the extent of projects. This could influence how likely it is that improvements in learning will filter through to affect exam results or how long it takes for a L2L cohort to reach the examined year groups.

** These schools were involved in Phase 3 of L2L.
Appendix 9: Case studies overview

The current analysis has been completed on those case studies submitted by the 1st November 2009. It is possible to see that of these 37 case studies, 27 from schools and ten from the two participant FE colleges. In the Schools Project seven were from Cheshire, nine from Cornwall, schools in Enfield produced six and Northumberland, five. In the colleges four were from Lewisham College (although it should be noted that these four case studies represent a much larger group of teachers working independently and as a group) and six from Northumberland. A summary can be seen in table 32.

There are a number of schools who continue to be part of the project, but have not submitted a case study this year and, sadly, some schools that are no longer able to continue in the project (see table 31 for full list). This has been for a variety of reasons including staff changes, new roles and responsibilities for key staff, inspection and general workload pressures and issues with the amount of data collected by the deadline. Given this, we are particularly grateful to those schools that have restated a commitment to the project and intend to submit a case study in Year Three and we are delighted to have new schools joining the project.

Table 25: Summary of schools/college teachers not submitting a case study this year

<table>
<thead>
<tr>
<th>Not submitting a case study this cycle</th>
<th>Reason</th>
<th>Next cycle?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archbishop Benson Primary School, Cornwall</td>
<td>Lead L2L teacher transferred to another school during the year</td>
<td>Yes</td>
</tr>
<tr>
<td>Hebden Green Community School, Cheshire</td>
<td>L2L teacher on Maternity leave</td>
<td>Yes</td>
</tr>
<tr>
<td>Amble First School, Northumberland</td>
<td>L2L teacher on Maternity leave</td>
<td>Yes</td>
</tr>
<tr>
<td>Aylward High School, Enfield</td>
<td>School in period of re-organisation</td>
<td>Yes</td>
</tr>
<tr>
<td>Hazeldbury Junior School, Enfield</td>
<td>Staff changes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hexham Middle School, Northumberland</td>
<td>Case study not completed</td>
<td>Yes</td>
</tr>
<tr>
<td>Debra Middlemiss (Northumberland College)</td>
<td>Work pressures</td>
<td>Yes</td>
</tr>
<tr>
<td>Linda Huddlestone-Brown (Northumberland College)</td>
<td>Leave of absence</td>
<td>Yes</td>
</tr>
<tr>
<td>Maureen Charlton (Northumberland College)</td>
<td>Change in responsibilities</td>
<td>Yes</td>
</tr>
<tr>
<td>Julie Foster (Northumberland College)</td>
<td>Leave of absence</td>
<td>No</td>
</tr>
<tr>
<td>Mark Young (Lewisham College)</td>
<td>Change in responsibilities</td>
<td>Yes</td>
</tr>
<tr>
<td>David Harrild &amp; Dan Thomas (Lewisham College)</td>
<td>Work pressures</td>
<td>No</td>
</tr>
<tr>
<td>Houndsfield Primary School</td>
<td>L2L teacher promoted to Local Authority job</td>
<td>No</td>
</tr>
<tr>
<td>Ellesmere Port SSPA, Cheshire</td>
<td>Withdrawn from project after lead L2L teacher promoted</td>
<td>No</td>
</tr>
<tr>
<td>Verdin High School, Cheshire</td>
<td>Withdrawn from project after lead L2L teacher promoted</td>
<td>No</td>
</tr>
<tr>
<td>Portreath Primary School, Cornwall</td>
<td>Withdrawn from project after change of Head teacher</td>
<td>No</td>
</tr>
<tr>
<td>Richard Lander High School, Cornwall</td>
<td>Withdrawn from project due to personal reasons for lead L2L teacher</td>
<td>No</td>
</tr>
<tr>
<td>Central First School, Northumberland</td>
<td>Withdrawn from project</td>
<td>No</td>
</tr>
<tr>
<td>Harbottle First School, Northumberland</td>
<td>Withdrawn from project after lead L2L teacher given additional responsibilities</td>
<td>No</td>
</tr>
<tr>
<td>Benet Biscop High School, Northumberland</td>
<td>Withdrawn from project</td>
<td>No</td>
</tr>
</tbody>
</table>
### Table 26: Case studies Schools Phase 4 Year Two (n=27) and FE Cycle 1 (n=11)

<table>
<thead>
<tr>
<th>School</th>
<th>Lead teachers</th>
<th>Title</th>
<th>Teachers involved</th>
<th>Students involved</th>
<th>Year group(s)/Learners</th>
<th>Time in project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cheshire (n=7)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloughwood Community School</td>
<td>Alan Sherwood</td>
<td>5 Before Me- Helping Pupils To Become More Independent Learners</td>
<td>4</td>
<td>6</td>
<td>5/6</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>Fallibroome High School</td>
<td>Claire Burstow, Caroline Wood</td>
<td>To what extent is our curriculum/ classroom experience supporting the motivation/ offering challenge for the most/least able students?</td>
<td>2</td>
<td>32</td>
<td>7</td>
<td>Carrying on from Phase 3</td>
</tr>
<tr>
<td>Hallwood Primary School</td>
<td>Sarah Stanners, Marie Madden</td>
<td>Will raising intrinsic motivation to learn have a positive influence on achievement?</td>
<td>3</td>
<td>29</td>
<td>4/5</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>Packmoor Primary School</td>
<td>Vicki Shaw</td>
<td>How can co-operative learning and a cross curricular thematic approach impact upon pupils' attitude and success in learning?</td>
<td>1</td>
<td>427</td>
<td>R-6</td>
<td>Phase 3 teacher, new school</td>
</tr>
<tr>
<td>Tytherington High School</td>
<td>Alison Whelan</td>
<td>Do students need to be consistently guided in their L2L strategies in order to maintain a positive attitude towards and awareness of learning if they have had previous L2L training?</td>
<td>1</td>
<td>150</td>
<td>7-9</td>
<td>Carrying on from Phase 3</td>
</tr>
<tr>
<td>Weaverham Forest Street Primary School</td>
<td>Ann Saunders and Clare Rushworth</td>
<td>Raising pupil attainment and engagement with the learning process through the use of focused marking and assessment, pupil self assessment, targeted intervention groups and precise target setting</td>
<td>2</td>
<td>58</td>
<td>4 &amp; 6</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>Winsford High Street Primary School</td>
<td>Helen Barwick, Chris Anderson</td>
<td>To continue to involve children in the process of learning and assessment, and to continue to develop a language for learning</td>
<td>2</td>
<td>56</td>
<td>2, 3/4</td>
<td>Carrying on from Phase 3</td>
</tr>
<tr>
<td><strong>Cornwall (n=9)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camborne Science and Technology College</td>
<td>John Welham</td>
<td>Why do some students engage more fully with L2L than others?</td>
<td>1</td>
<td>20</td>
<td>10</td>
<td>Carrying on from Phase 3</td>
</tr>
<tr>
<td>Lanner Primary School</td>
<td>Pippa Pender and Sue Sayer</td>
<td>A whole school Learning to Learn ethos</td>
<td>40</td>
<td>258</td>
<td>R-6</td>
<td>Carrying on from Phase 3</td>
</tr>
<tr>
<td>Liskeard School</td>
<td>Tamsin Hamilton, Gary Smith, Sue Braddick and John Golding</td>
<td>If students have a better understanding of their own learning styles and Learning to Learn strategies, will this help them develop into more active learners?</td>
<td>4</td>
<td>1350</td>
<td>7-11</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>School Name</td>
<td>Name</td>
<td>Project Description</td>
<td>Pages</td>
<td>Position in Phase</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Marlborough Primary School</td>
<td>Kathy Rowe</td>
<td>Ways of Promoting a Pro-active Skills Curriculum</td>
<td>1</td>
<td>31</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Marlborough Primary School</td>
<td>Paula Ross</td>
<td>Ways of Promoting a Pro-active Skills Curriculum in Year 1</td>
<td>1</td>
<td>30</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Perranporth Primary School</td>
<td>Lynne Keast</td>
<td>The world beyond the classroom</td>
<td>1</td>
<td>31</td>
<td>1/2</td>
<td></td>
</tr>
<tr>
<td>St Meriadoc CE Nursery and Infant School</td>
<td>Linda Stephens, Clare Walsh</td>
<td>Developing Philosophical Questions in Maths Lessons</td>
<td>2</td>
<td>25</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>The Learning Space</td>
<td>Becky Williams</td>
<td>‘On Your Doorstep’ Designing a Summer Challenge Programme to personalise learner experiences</td>
<td>5</td>
<td>22</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Treloweth Primary School</td>
<td>Ann Webb, Sarah Uren</td>
<td>How will the promotion of speaking and listening skills across the curriculum impact on pupils’ ability to take responsibility for and reflect on their own learning?</td>
<td>2</td>
<td>374</td>
<td>R-6</td>
<td></td>
</tr>
<tr>
<td>Enfield (n=6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carterhatch Primary School</td>
<td>Lucy Fisher</td>
<td>Does children’s involvement in investigating barriers and aids to their learning have an impact upon their learning?</td>
<td>1</td>
<td>30</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Eastfield Primary School</td>
<td>Ellie Fitzpatrick &amp; Rachel Robinson</td>
<td>If children could choose what they learn, would they be more active learners?</td>
<td>2</td>
<td>60</td>
<td>2 &amp; 5</td>
<td></td>
</tr>
<tr>
<td>Fleecefield Primary School</td>
<td>Gerry Wright</td>
<td>Giving children time to reflect independently on their previous learning</td>
<td>1</td>
<td>24</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Hazelbury Infant School</td>
<td>Tania McDonald and Melanie Scull</td>
<td>Increasing boys’ access to writing through the outdoor environment</td>
<td>2</td>
<td>30</td>
<td>FS</td>
<td></td>
</tr>
<tr>
<td>Lavender Primary School</td>
<td>Chris Daly and Michelle Harvey</td>
<td>What do children know about being a good learner?</td>
<td>1</td>
<td>30</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Oakthorpe Primary School</td>
<td>Kathryn Soulard</td>
<td>Evaluating the impact of developing teaching assistants’ questioning skills to support maths learning.</td>
<td>1</td>
<td>6</td>
<td>TAs</td>
<td></td>
</tr>
<tr>
<td>Northumberland (n=5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duchess’ High School</td>
<td>Gill Maitland</td>
<td>Developing the Classroom Experience for Post 16 students: Learning to Learn Collaboratively</td>
<td>1</td>
<td>14</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Hexham East First School</td>
<td>Bernadette Noon</td>
<td>Can ICT be used as an effective tool for engaging pupils, in particular boys in literacy?</td>
<td>1</td>
<td>18</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>School/Department</td>
<td>Authors/Contact Person</td>
<td>Title/Description</td>
<td>Participants</td>
<td>Duration</td>
<td>Audience</td>
<td>Cycle</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------</td>
<td>-----------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Hipsburn First School</td>
<td>Dot Charlton and Jean Arthur</td>
<td>Which tools do pupils choose to help them to be good learning mentors?</td>
<td>2</td>
<td>200</td>
<td>R-4</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>The King Edward VI School</td>
<td>Helen Shipley and Louise Fitzgerald</td>
<td>Investigating group work within the Geography classroom</td>
<td>2</td>
<td>40</td>
<td>9-10</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>Wooler First School</td>
<td>Deborah Currans Victoria Symons</td>
<td>How effective are Learning Metaphors in helping children to talk about and reflect on their own learning?</td>
<td>2</td>
<td>27</td>
<td>2/3</td>
<td>New in Phase 4</td>
</tr>
<tr>
<td>Lewisham College (n=4)</td>
<td>Academy for Foundation Skills</td>
<td>Jason Gottfried Do targets work?</td>
<td>1</td>
<td>30</td>
<td>16-19</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td>School of Health, Care and Early Years &amp; Learner Services</td>
<td>Pele Mobaolorunduro, Geoff Davidson, Mo Pamplin &amp; Dean Britton</td>
<td>The impact of ‘study skills’ on metacognitive knowledge and skills</td>
<td>4</td>
<td>45</td>
<td>16-18 and Adults</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td>Academy for Foundation Skills</td>
<td>Azumah Dennis</td>
<td>What Makes Learners Resilient in Their Learning?</td>
<td></td>
<td></td>
<td>16-18 and Adults</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td>Director of Quality and Improvement</td>
<td>Jayne Morgan</td>
<td>Does Internal Inspection Raise Standards?</td>
<td>31</td>
<td>none directly</td>
<td>all</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td>Northumberland College (n=5)</td>
<td>Education department</td>
<td>Theresa Thornton Facilitating Reflection about Learning with Learning Support Staff</td>
<td>1</td>
<td>2</td>
<td>LSAs</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td></td>
<td>Hair and Beauty</td>
<td>Michelle Tait Will the Role of the Teacher Change with the use of ICT?</td>
<td>1</td>
<td>12</td>
<td>14+</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td></td>
<td>Essential/ Key Skills Department</td>
<td>Helen Handyside Encouraging the Learner to take Control</td>
<td>1</td>
<td>12</td>
<td>Adult</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td></td>
<td>Essential/ Key Skills Department</td>
<td>Lesley Toyne Can Practical Activities Help Learners With Their Numeracy Skills?</td>
<td>1</td>
<td>20</td>
<td>16-18</td>
<td>FE Cycle 1</td>
</tr>
<tr>
<td></td>
<td>Department of Access and Education</td>
<td>Kevin Warren Exploring How Rewards Can Raise Learner Motivation &amp; Confidence in Mathematics</td>
<td>1</td>
<td>40</td>
<td>Adult</td>
<td>FE Cycle 1</td>
</tr>
</tbody>
</table>
Summary of Case Studies themes

It is possible to see that of the 27 case studies from the Schools project, seven were from Cheshire, nine from Cornwall, schools in Enfield produced six and Northumberland, five. The case studies come from a range of school types, (see table 33 below) across the four LAs.

Table 27: Overview of schools case studies

<table>
<thead>
<tr>
<th>LA</th>
<th>High schools (13-18)</th>
<th>Secondary schools (11-18)</th>
<th>Special schools/ LA provision</th>
<th>Primary schools (4-11)</th>
<th>Junior schools (7-11)</th>
<th>First schools (4-9)</th>
<th>Infant schools (4-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheshire</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cornwall</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enfield</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northumberland</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>13</td>
<td>1</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Six of the projects were completed at whole school level, in other words all teachers and students were involved to some extent with L2L approaches rolled out across all classes and year groups, an increase on last year. It is important to recognise however, that although other schools produced case studies on a smaller scale, this does not necessarily mean that there is no L2L ethos underpinning practice across the school. As Phase 4 continues, there are some signs of ‘scaling up’ within schools with more teachers and classes becoming involved and data from a staff questionnaire (section 2.6.3) indicates that awareness of L2L is spreading. It will also be interesting to see the extent to which this happens in the colleges although it is acknowledged that scaling up may look different in this sector, being to maybe groups, departments or subject areas in the first instance.

In the L2L in FE project, Lewisham College generated four case studies and Northumberland College six. These case studies represent a wide range of contexts and although the names of departments and sections across the two colleges are different we have tried to draw some comparisons in the table below. It is particularly worthy of note the apparent association which has been found in both colleges between the foundation and key skills curriculum and Learning to Learn.

Table 28: Overview of FE case studies

<table>
<thead>
<tr>
<th>Department</th>
<th>Lewisham</th>
<th>Northumberland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation and Key Skills</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>School of Health, Care and Early Years &amp; Learner Services</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hair and Beauty</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Director of Quality and Improvement</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Department of Access and Education</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Use of the 5R Framework across case studies

The teachers chose a 5R focus for their research: the R or Rs that they felt had best fit with the L2L approaches they had employed. As can be seen in table 35, there is a fairly even spread across the Rs, in contrast to Year One, where Responsibility was the most common R to be focused on (25/30 case studies) with Reflectiveness (17) and Resourcefulness (14), Resilience (7) and Readiness (6). Last year we speculated that Responsibility was so popular because it was a new R and it is interesting to see that while it continues to be the most commonly used, the other Rs have experienced a resurgence. Notably, those teachers choosing only one R were more likely to choose
Responsibility and teachers choosing only two Rs favoured Reflectiveness. More teachers this year have had three or more Rs as their focus, perhaps reflecting a more complex view of learning dispositions as they experience L2L in a second year.

No obvious difference was seen between the choices made by the schools and colleges. This could be construed as indicating a commonality in thinking across the project or as a reaction to common policy agendas across sectors. However it is interesting that trends reported in the Phase 3 Year Two report (Higgins et al. 2006) where schools started with Readiness and then moved onto Resilience and other Rs, leading us to suggest there may be some sort of progression route, are not apparent in this first set of case studies from the college teachers.

Table 29: Summary of 5R focus of case studies

<table>
<thead>
<tr>
<th>SR focus</th>
<th>Resilience</th>
<th>Readiness</th>
<th>Resourcefulness</th>
<th>Reflectiveness</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloughwood school</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Fallibroome High</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Hallwood Primary</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packmoor Primary</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Tytherington High</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Weaverham Primary</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Winsford High Street Primary</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Camborne Secondary</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Lanner Primary</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Liskeard Secondary</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marlborough Primary (Kathy)</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Marlborough Primary (Paula)</td>
<td>✔</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Perranporth Primary</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
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<td>Wooler First</td>
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<td>Pele, Mo, Geoff &amp; Dean</td>
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</table>
L2L focus

In addition to choosing an R or Rs, teachers were also required to choose an L2L focus from four themes derived from the Phase 3 findings. The results can be seen table 36.

Table 30: Overview of L2L focus

<table>
<thead>
<tr>
<th>L2L focus of the case study</th>
<th>Primary focus</th>
<th>Secondary focus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Learning relationship &amp; interactions in classroom</td>
<td>Tools for learning</td>
</tr>
<tr>
<td>Cheshire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloughwood</td>
<td>✓</td>
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<tr>
<td>Fallibroome High</td>
<td>✓</td>
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<tr>
<td>Hallwood Primary</td>
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<tr>
<td>Packmoor Primary</td>
<td>✓</td>
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<td>Tytherington High</td>
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<tr>
<td>Weaverham Primary</td>
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<tr>
<td>Winsford High Street</td>
<td>✓</td>
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<tr>
<td>Cornwall</td>
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<tr>
<td>Camborne Secondary</td>
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<tr>
<td>Lanner Primary</td>
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<tr>
<td>Liskeard Secondary</td>
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<tr>
<td>Marlborough (Kathy)</td>
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<td>Marlborough (Paula)</td>
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<td>Perranporth Primary</td>
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<td>The Learning Space</td>
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<td>Treloweth Primary</td>
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<td>Northumberland</td>
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<tr>
<td>Carterhatch Primary</td>
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<td>Eastfield Primary</td>
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<td>King Edward VI High</td>
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<td>Woober First</td>
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<td>Pele, Mo, Geoff &amp; Dean</td>
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<tr>
<td>TOTAL</td>
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</table>

As in Year One of the Schools Project, the most popular theme was Learning Relationships and Interactions in the Classroom but in contrast, most teachers limited themselves to one theme this
year (only five did so in Year One). The result of this is that Students as Researchers appears to have dropped out of favour: however, case study evidence reveals that student engagement in the development of research questions and instruments, involvement in data collection and analysis is actually increasing. However, in the wider project, the dominant theme of our conversations has been about relationships and how they support learning and this could have had an impact.

**Learning to Learn approaches employed**

Teachers in each context have complete autonomy to decide which Learning to Learn approaches to use in their classrooms and, indeed to define what Learning to Learn approaches are. The locus of control is something which we are firm in wanting to maintain as fitting within the successful professional enquiry through action research paradigm that has been developed in the project (Baumfield et al. 2008), and therefore allowing the definition of L2L to have a certain amount of plasticity and flexibility to fit around the other agendas and requirements that are made of schools. The latter is arguably essential in a longitudinal project such as this. However the disadvantage is that it introduces a significant unknown quantity into the analysis of the approaches being used in schools as fitting with L2L.

So that we could start to categorise these approaches we developed four themes from our analysis of the Year One case studies and find that they are still have warrant this year.

- Language for learning;
- Student autonomy and well being;
- Creative and enquiry curriculum; and
- Organisational change.

This analysis is important and adds to the perspective of the four themes by providing a dimension which indicates, to some extent, the scale at which L2L is being considered. Language for learning focuses on processes and student autonomy on outcomes. Creative and enquiry curriculum signals an embedding of pedagogic change, while organisational change suggests systematic efforts at structural and cultural innovation. This does not necessarily correlate with any concept of progression in developing L2L as a school or teacher may decide to return to classroom processes after focusing on curriculum for a period.

As can be seen from the table below, the first two themes are most popular; this is the same trend as was observed last year in the schools project. There is a reasonably significant concentration of case studies from L2L in FE focusing on student autonomy. This can be linked to comments made by FE teachers during interview and informally where they expressed concerns about student independence and desires to increase the ability of students to take responsibility for their own learning and move towards self-actualisation (Marton et al. 1993) and critical intelligence (Coffield 2002).
<table>
<thead>
<tr>
<th></th>
<th>Learning to Learn approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language for learning</strong></td>
<td></td>
</tr>
<tr>
<td>Fallibroome</td>
<td>Exploring students’ motivation and understanding of L2L ideas</td>
</tr>
<tr>
<td>Tytherington</td>
<td>Exploring students’ understanding and internalisation of L2L</td>
</tr>
<tr>
<td>Weaverham</td>
<td>Nurture, circle time and AFL to embed the L2L vocabulary and ideas</td>
</tr>
<tr>
<td>Liskeard</td>
<td>Developing understanding of approaches to learning</td>
</tr>
<tr>
<td>St Meriadoc</td>
<td>Philosophy and mathematical language</td>
</tr>
<tr>
<td>Duchess’</td>
<td>Learning pairs and AFL techniques</td>
</tr>
<tr>
<td>Hexham East</td>
<td>Thinking about literacy differently with ICT</td>
</tr>
<tr>
<td>King Edward VI</td>
<td>Exploring the complexity of group work</td>
</tr>
<tr>
<td>Wooler</td>
<td>Learning metaphors</td>
</tr>
<tr>
<td>Theresa (Northumberland)</td>
<td>Developing Learning Support staff understanding of learning</td>
</tr>
<tr>
<td>Lesley (Northumberland)</td>
<td>Transferring numeracy skills</td>
</tr>
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<td></td>
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<tr>
<td><strong>Student autonomy and well being</strong></td>
<td></td>
</tr>
<tr>
<td>Cloughwood</td>
<td>Five Before Me</td>
</tr>
<tr>
<td>Hallwood</td>
<td>Linking motivation to L2L techniques focusing on self esteem</td>
</tr>
<tr>
<td>Winsford High Street</td>
<td>Involving children in assessment and identifying learning strategies</td>
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<tr>
<td>Camborne</td>
<td>Student researcher programme</td>
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<td>Eastfield</td>
<td>Student autonomy in selecting topic focus</td>
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<td>Fleecefield</td>
<td>Making space for reflection on learning</td>
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<td>Hazelbury Juniors</td>
<td>Encouraging self-regulation and choice</td>
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<td>Lavender</td>
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</tr>
<tr>
<td>Hipsburn</td>
<td>Learning mentors</td>
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<tr>
<td>Jason (Lewisham)</td>
<td>Exploring students’ understanding of target-setting</td>
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<td>Pele, Mo, Geoff &amp; Dean (Lewisham)</td>
<td>Exploring students’ study skills and metacognition</td>
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<tr>
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<td>Impact of independent ICT learning</td>
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<tr>
<td>Helen (Northumberland)</td>
<td>Structuring a student-centred approach</td>
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<tr>
<td>Kevin (Northumberland)</td>
<td>Improving confidence in mathematics</td>
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<tr>
<td><strong>Creative and enquiry curriculum</strong></td>
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<td>Packmoor</td>
<td>Curriculum development for pupils and staff</td>
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<tr>
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<td>Enquiry curriculum</td>
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<tr>
<td>Perranporth</td>
<td>Outdoor learning</td>
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<tr>
<td>Learning Space</td>
<td>Challenge programme</td>
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<tr>
<td>Treloweth</td>
<td>Scientific enquiry</td>
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<td>Whole school ethos, training and language</td>
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<tr>
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<td>Staff learning and planning approaches</td>
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<tr>
<td>Carterhatch</td>
<td>Student researchers into learning</td>
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<tr>
<td>Oakthorpe</td>
<td>Training Teaching Assistants to support questions in maths</td>
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<tr>
<td>Azumah (Lewisham)</td>
<td>Developing staff understanding of maintaining students’ resilience</td>
</tr>
<tr>
<td>Jayne (Lewisham)</td>
<td>Effect of internal lesson observation on teaching quality</td>
</tr>
</tbody>
</table>
Appendix 10: Pupils perspectives recorded in the case studies

In the Year One report we found that the key themes emerging from the case studies about the learners’ perspectives were:

- Progression in understanding L2L and what ‘good learning’ looks like
- Development of a vocabulary to talk about learning
- Using tools for supporting learning
- Making the link between learning and feelings
- Greater learner independence
- Learners’ awareness of the ethical aspects of learning.

As with other areas of analysis, we have found this year that the perspectives contained similar content but were more complex and sophisticated in bringing several aspects together. Learners tended to talk about the language of learning while making links with the affective aspects of their experience; they tended to talk about tools in relation to their independence and their learning relationships with others. For this reason, the structure of this section follows the bullets listed above but there are no section headings: we have resisted an organisational structure that reduces the complexity of what learners have reported.

![Diagram of learning concepts]

**Figure 48: Understanding learning, Wooler First School**

The 5Rs have continued to be a useful vehicle for introducing metacognitive and dispositional language to all learners. For younger learners, the use of animals to represent the concepts has continued to be a successful strategy, with some interesting regional variations.

“The 5Rs are something that you can be proud of” (Year 4 pupil)

Carterhatch Junior School
“The children were asked whether the Learning to Learn display in the classroom and the work we had done on this helped them. Here are some of the quotes that refer directly to the animal pictures that the class chose:

“The bird helps you to write more and more. The chameleon helps me to remember to traffic light”

“It has helped me loads this year. The chameleon has helped me to remember my traffic light. The parrot has helped me to keep trying to do my work”

“The parrot helps because if baby parrots couldn’t fly they would keep trying to fly then they will be able to fly”

“The bird helps me to try again”

(Hexham East First School)

“The jaguar has helped me because it helps me to be ready to do my work or to do sport or listen and learn.” (Y3 girl)

“I think the elephant has helped me a lot because it reminds me to be careful with my work.....I think that the elephant helps me with my work because it reminds me to be responsible for all my mistakes.” (Y2 boy)

“I like the bear because when I am doing my work I look at the bear and think I’m not gonna give up because sometimes I think I will give up and then I look at the bear and think ‘no’ I won’t give up.” (Y3 girl)

(Wooler First School)

Students’ understandings of the vocabulary of learning in schools is not limited to understanding the 5Rs but reflects a wider procedural autonomy (Ecclestone 2002) which encompasses understanding of target-setting and broader assessment agendas or of the complexity of learning as self-awareness develops.

“Sometimes they’re really hard to understand and difficult to do the harder stuff.” (Less able student)

‘Sometimes targets do not help you move on as you might just have forgotten to do it but were able to’; (More able student)

‘Generally feel OK about being given targets. However if you have worked really hard on it and the teacher says you need to put in more effort, this can upset you. If they had said you obviously worked hard in this but next time you could ……then that would be OK’; (More able student)

(Key stage 3 students, Fallibroome High School)

“This is easy. What comes next?” to “It was very hard. I had to concentrate a lot on it. If it wasn’t for Miss and Abu, I wouldn’t have wrote anything down”. (Development of Year 6 pupil Fleecefield Primary School)

Over the year, most students show a development in their ability to describe and analyse their learning.

“As the year progressed so the children were able to write more freely in their logs and reflections began to show more depth.” (Paula, Marlborough Primary School)
By the end of the year children had a wider view of what learning is and a greater range of vocabulary to describe it. One child was even heard to exclaim in November, “but Mrs. Currans.....learning is learning” (Y3 girl). We recognised that this was representative of a lack of interest and knowledge about the learning process. Later in the year, the language the children used had completely changed. For example:

**Nov – good, love, hard, fun, easy**

**July – understand, concentrate, helpful, fun, good, new things, for when you are older.** (Wooler First School)

Use of a specific tool, like the concept maps used in Duchess’ High School can make learning easier, more collaborative and more enriched as well as promoting transfer of skills between subjects:

“Over time I have added to the concept map as I learnt more, teaching other people made it easy to understand.”

“The mapping helped me make the links...understand the ‘so what’”

“Concept maps helped me see the big picture, I used them to break the information down and make the links”

“I have started using them in other subjects e.g. psychology” (Year 12 students, Duchess’ High)
For many of our learners, the L2L approaches can seem difficult, both in terms of the content and the style. This re-framing process re-shapes the relationships as well as the cognitive learning taking place as this example from Northumberland demonstrates.

“The cars weren’t that good but still fine to do the mental maths was confusing because you had to think a lot about what you were doing and the last one was good. A lot of fun still working”

“The maths calculations and the jigsaw puzzle was helpful. Cannot see what it has to do with joinery. Did not enjoy the car activity, it was boring and childish”

“It was easy. Jigsaw puzzle was rubbish, car activity was rubbish, rectangular puzzle was a little bit of a challenge”

The second cycle included a deliberate error; the reaction from the students was completely different; they were more than happy to point this out, as a group ridiculed me; their comments challenged my ability as a teacher: “You should know better than this”; “You are supposed to be the teacher, you’re supposed to know what you are doing”

In no way was there any behaviour that constituted bad feeling or disrespect; everything was said ‘tongue in cheek’. They completed the learning logs as requested and the following are direct quotes:

“It’s mint! Doing the shapes helped me identify shapes and names of other shapes. Working in a group helps me more and saves me from struggling working calculations outs”

“It was good for improving my maths skills and helps improve working with a partner”

“I think the activities help me with my maths skills” (Lesley, Northumberland College)
Madison and Jack competently discuss the reasons why brain breaks that link in with a variety of multiple intelligences enhance their learning. They talk about ‘stretching their brains’ and clearly find the element of competition motivating! (Packmoor Primary School)

Learners identify the ways in which they prefer to learn and then move forwards from that place of strength. The distinction between Learning to Learn students and students who have been exposed to facile understandings of learning styles (Hall and Moseley 2005) is that L2L learners use their self-knowledge as a way to set themselves challenges and to know how to make use of tools or partners:

“I learn best when I’m taking away, when I’m using my times tables or when it’s quiet and I’m by myself. I like to learn in pairs when it starts to get hard or when we’re doing something that is fun.” (Year 4 pupil, High Street Primary School)

This is not just about a particular way of performing or being in the classroom: L2L learners are not all confident, talkative cookie-cutter versions of one another. Learners are finding ways to make the strategies work for their own personalities.

“I think the assessment faces help because if you’re shy and you don’t want to tell your teacher you could put it down and then your teacher knows what to teach you.” (Key stage 2 pupil, Weaverham Primary School)

I think (L2L) means that every person needs to know how to learn. That way, they can know and understand how to use the information that they are given. Some people use one way to learn and some use another. Even if people know how to retain information, they also need to set
targets for them to understand it properly. By combining targets and preference together a person can learn more efficiently. (Jason, Lewisham College)

As students explore themselves, they need to engage not just with strengths and preferences but also with motivation and self-regulation:

“It is hard work. I want another easy sort of work”. (Year 6 pupil, Fleecefield Primary School)

“At first I didn’t use my independent time, in Year 12 it is just too much freedom. I did feel responsible as I had to work with my partner and divide up the task and complete it. We tried to make it better than other pairs.” Year 12 student Duchess’ High School
“Matt and Maisie talk knowledgeably about how working together can help build learning power! They both talk about this strategy in terms of it benefiting them and also in terms of their role in supporting others, viewing themselves as ‘lead learners’. “ (Packmoor Primary School)

As time goes on in L2L classrooms, learners begin to develop their holistic understanding of what learning is for them, for others and how it changes.

When asked to write a short piece of writing, independently entitled ‘Learning is … ’, the children drew on our previous discussions and came up with answers like:

“Learning is an experience that is unique to every person.”

“Learning is different for everyone.”

“Learning for me is listening but my friend thinks learning is taking part and having fun.”

What makes a good learner? Every group agreed that being happy was important. As one child said:

“When I am not happy, inside my head feels funny and then the learning stuff can’t go in.”” (Lavender Primary School)
Our learners are very much in favour of independence and do not feel that they normally have a lot of that in school, as the graphs from the Learning Space Challenge week indicate (above). Although learners value their autonomy it is clear that there needs to be a lot of talk in schools about how that will work: students at Fallibroome wanted enough structure for Wild Tasks and the discussion around transition from Tytherington shows that learners recognise the need for scaffolding.

The students made some very insightful comments about their L2L course and L2L in general, in terms of their lessons and homework, and motivation. For instance, Student B makes comments regarding transition from primary school:

Student B: “[when I came here I] was unsure I wanted to try my best but I wasn’t at a high standard of wanting to learn.”

Interviewer: “So do you think that there was a dip at the start of the year?”

Student B: “Yeah a little one but it was hard to concentrate because you had to get used to the surroundings again.”

Transition is a major upheaval for students. Student C is also aware of the changes that took place at transition, but makes an interesting comment about the way that Year 7 panned out:

Student C: “about a third of the way through yr 7 it got a bit boring and we had the same teachers and the same knowledge behind all the words.” (Tytherington High School)

The growing sense from looking at the learner perspective is that responsibility is the key disposition: not simply responsibility for one’s own learning but a relational understanding of one’s own needs and the needs of others, a procedural understanding of how school is ‘done’ and why this is necessary if sometimes boring or irritating. L2L learners balance their desire to be stimulated and challenged by their teachers with a realism about how often learning can be ‘fun’ or personally tailored to their preferences. In this respect, their voices may turn out to be the most reasonable in the personalisation agenda debate:

“I feel much more involved in school than I did before. It feels as if we are all in this together, rather than, like, teachers just doing teaching at us” (Year 11 female student, Camborne Science and Community College)
Appendix 11: Staff Perspectives recorded in the case studies

This section reports on comments in the case studies from other teachers, teaching assistants and supply teachers about what they have observed when working with Learning to Learn students. In Year One of the Schools Project five key themes emerged from this data:

- Students’ enthusiasm and motivation.
- Students’ independence as learners
- Students’ relationships with their peers
- Challenges to ideas about teacher role
- Differential impacts of L2L on different students

As we looked at the data from Year Two and Cycle 1 of the FE Project we became aware that perspectives from teachers fell in to similar categories in terms of content and it would have been possible to code this year’s data using the existing themes. However, we chose not to do this because we felt that the tone and the emphasis had changed. Students’ characteristics were being viewed more holistically and there was less surprise at what they could do and more attempts to analyse their behaviour in relation to L2L, leading to the new category **students actively engaged in their own learning**.

Teachers’ roles were being examined but there was a sense that schools had moved on from the productive dissonance of learners’ unexpected behaviour or challenges to staff to a more proactive role. Whole staff development was more often the focus of L2L initiatives in Year Two, focusing on teachers and teaching assistants themselves, so we have a new category: **reflecting on professional roles**. Finally, there were more reflections from teachers on wider perspectives, moving from the ‘critical incident’ or ‘episode’ (Leat et al. 2009) level of reporting change to one where teachers are reflecting on how this fits in to their wider view of pedagogy and curriculum: leading to the development of our final category, Learning to Learn **as part of the wider culture**.

**Students actively engaged in their own learning**

Learning to Learn students as described by their own teachers over six years of case studies and as noted by other staff and Ofsted inspectors tend to display high levels of intrinsic and personal motivation to complete and to contextualise the tasks they are set in school. From a very early age they become aware that they have the ability to improve their own work, creating a positive motivational cycle.

“Children are able to see improvements in their learning, children are excited when they improve and strive to improve.” (Hallwood Primary School)

Teachers comment on the learners as becoming proficient in the use of Learning to Learn vocabulary and internalising a personalised awareness of what learning dispositions and the 5R framework means for them:

“Talking through my own learning experiences at school really helped me realise I hadn’t been such a failure after all”. Whilst participant J when evaluating reflection wrote “It made me aware that ‘reflection’ is a skill which needs practice but is so important in order to improve, or make sure the learning is embedded”. (Theresa, Northumberland College)

The emphasis on talk and process in Learning to Learn links with the work of Allal (2002) and the idea of a portfolio of dispositions which can be formatively assessed by teaching staff to support the students’ awareness and facilitate their move forwards. It means that children tend not to get hung up on having to provide the ‘right answer’ and are much more confident to speak out.
“...nobody is afraid to put up their hand on the carpet afterwards because everyone has something they can contribute.” (Winsford High Street Primary School)

L2L students make good use of the tools provided in classrooms and demonstrate their ability to use a range of strategies to get the job done.

“(Asking about her progress) seemed like a prompt as she immediately brought out her sheets to show how she was getting on” (Jason, Lewisham College)

They make use of their peers and use focused talk to clarify their thinking both with other learners and when questioning or responding to teachers.

“Children value each other on the tools that they bring rather than their ability (i.e. ‘I like working which x as they are a good partner’ rather than ‘I like working with x as they are great at maths’)” (Hipsburn First School)

This self awareness is being scaffolded by the judicious use of peer and self assessment with the result that learners feel confident to manage their own learning regardless of their ability:

“One child in particularly who struggled with literacy and numeracy stood out and shone. She stated “I had never seen him so animated; he became the leader of his pair and initiated many great ideas.” (Treloweth Primary School)

“By checking their own work and others’, it gives them a responsibility and also they can discuss for themselves how they could improve.” (Packmoor Primary School)

“Sharing the learning intentions and outcomes with the children supported them in focussing on their learning. I was able to differentiate this for ability groups, so that the more able children were being challenged and the less able weren’t too overwhelmed. Children were able to confidently talk about what they would be learning in lessons and explain how they would know they had been successful.” (Packmoor Primary School)

In some schools, learners are being given the sense of their own expertise by encouraging them to lead the learning:

“This was extremely successful in my tutor group. I had great fun and the kids were very responsive! In fact one of the ideas created by some of the girls was so good that I asked if I could borrow it. They then got very excited and asked if they could help teach it! I am now planning to get these students to come and deliver their lesson as pupil leaders” (Liskeard Secondary School)

“By asking children to write their own questions “gave complete ownership of the lesson to the children”. There was far more enthusiasm when they were investigating something they wanted to find out rather than something they had been told they must investigate. She also commented on the impact innovative teaching had on behaviour, noting that in particular some disruptive boys in her class were on task for the entire length of the task. They were enthusiastic and participated in some quality talk. The teacher commented: “I overheard one of the children say they wanted to become a scientist because it was really fun and you got to find stuff out!”” (Treloweth Primary School)

It should be noted, however, that the groups of reflective, strategic, high performing students may not be in a majority even in schools where L2L has been in place for a considerable time:

“It has been extremely refreshing, inspirational even, to work with such a group of student researchers. The quality of their discussions of school, teaching and learning is often astounding and remarkably full of insight. This has reminded me never to underestimate the students with whom we work, and frustrated me that this level of understanding L2L still remains restricted to a relatively few students. This, therefore, must be the next target of the project”. (Camborne Science and Community School)

Reflecting on professional roles

“The impact has been pretty dramatic! The approaches to teaching and learning that I have seen have inspired and motivated me to re-train as a teacher.” (Hipsburn First School)
Being part of the L2L project gives teachers the all-important ‘working space’ (Leat 2006) that enables them to reflect upon what their enquiry questions are and how they develop evidence which has sufficient warrant for action in their own context. Our focus on teacher autonomy is instrumental in giving them the permission to set their own standards and take ownership of their projects.

“I devised my research question after attending the INSET day given by the Newcastle team in October 2008 and was full of inspiration, enthusiasm and energy. The Learning to Learn training sessions are characterised by the focus on learning and teaching within contexts that are recognisable. I highlighted one quotation from the enquiry learning conversations that said, “Would I have done anything differently? Probably not…it feels organic, which is unusual because there is no really hard evidence yet…but I am happy with the process really.”” (Fleecefield Primary School)

Some teachers, particularly those on management roles, have passed the L2L baton onto colleagues, recognising the vital element of support for experimentation at school level.

“I have been involved in Learning to Learn for six years and was eager to introduce it to my new school. There is no doubt about the impact of action research on classroom practice and school ethos. I would love to have continued to be directly involved but wanted to inspire other staff to understand the benefits of working in this way. In our school we are lucky to have such a rich outdoor learning environment and I was pleased that the profile of this was raised through the project. I hope this continues and motivates other staff to use this approach. It might appear that the philosophy behind Learning to Learn is implicit in the whole project; however, it is important to make this explicit and this is the place to do that.” (Perranporth Primary School)

In other schools, the management teams have been very impressed with the impact of L2L on the attitudes and motivation of their staff:

“The Head teacher noted that the school improvement work had had a positive impact on teachers, stating that: “Teachers at Treloweth are more confident and knowledgeable when teaching science, there is a healthy buzz when science teaching is discussed. They are more confident and willing to have a go at making learning exciting for the children in their class.”” (Treloweth Primary School)

Several schools had the explicit focus of developing staff understandings of Learning to Learn as their intervention project for this year. Where there is a mix of experience and expertise, Learning to Learn techniques have been used to frame and support collaborative learning, so that staff can be introduced to new techniques, or revive old ones.

Written feedback from the staff training day was very positive. The outcomes from staff experiences during Twilight 1 appeared revelatory, as there was a gradual re-engagement with the learning process at a personal level and a realisation that perhaps their own delivery needed to revisit what they have already known, but had ‘forgotten’ about what made effective learning.

“Lots of things were revisited, often ones which I used to do, but have forgotten” (Lanner Primary School)

This has often been tied tightly to specific objectives, such as questioning to support mathematical understanding, but there is evidence of transfer both in the practitioners’ reflection on what they have learned and on their use of the strategies across their practice. In some cases, this takes them beyond the proficient use of the tool to a more complex understanding of the tool, themselves and their relationships:

“It made me address the way I ask questions – rephrasing them and using different methods, e.g. open questions.” (Teaching Assistants) (Oakthorpe Primary School)

“It gave us tools to enable us to scaffold learning, so not give the answer, but support the children in getting to the answer.” (Teaching Assistants) (Oakthorpe Primary School)
“Working with my form on Learning Logs was an insight into their learning methods, and I found that I learnt a lot as well. That continued even afterwards, as I actually kept incorporating ideas I’d got from the Logs into my teaching. You can see the positive attitude in that year group – they are a bright, motivated year who are actually keen to learn. I don’t know if that’s down to the Learning Logs, or a strong form tutor team, or a mixture of both, but it’s really made a difference to them and to us as teachers.” (Tytherington High School)

In many cases, this emphasis on the relational aspects of practitioners’ work has been the primary focus of the Learning to Learn project, as these quotes from support staff exemplify

“This has already had an impact on my role as I can help learners become more aware of their own learning – how / when it takes place”. (Theresa, Northumberland College)

“The morning period can get quite hectic, as apart from assisting them with purchases the students want to talk to you… it is a good time to chat to them because if they have a problem, maybe it can be resolved before going to class”. (Theresa, Northumberland College)

“The job is very much about supporting students as individuals and at all times, helping them to adjust to a college environment”. She also explains that support staff “act as a bridge/link between student and teaching staff”. (Theresa, Northumberland College)

Learning to Learn as part of the wider culture

For some teachers, reflecting on the messages of Learning to Learn have enabled them to engage with wider agendas for the organisation of learning and the training of teachers.

“I have nothing in my head that can be put in a box but my idea is along the lines of repositioning lecturers, not as deliverers but as enablers. Their role is to enable learners to move through learning through the process of monitoring and target setting. This would essentially take out the notion of a ‘class’. In this way experience would gain importance over information and targets would be method focussed rather than subject focussed. There are profound implications for teacher trainers with in this concept.” (Jason, Lewisham College)

Teachers have reflected on how Learning to Learn fits in the trajectory of their own learning career, adding weight to our hypothesis that Learning to Learn enables enquiring practitioners to continue and extend work that they are naturally drawn to.

“As a young teacher involved in the Nuffield Maths project, Language for Literacy and Collaborative Learning, I had an enthusiastic interest in supporting children’s learning. So, I was delighted to represent Hipsburn at the opening of the Campaign for Learning. Our understanding about the brain and how children learn has underpinned and fired our teaching since. What is really exciting is the children’s involvement in the research process. Forget ‘lollipop partners’ on a Monday morning at your peril. Their evaluation of the tools used was astute - a good partner was in fact the best!” (Hipsburn First School)

The tools within Learning to Learn are not, in themselves, necessarily that revolutionary and we have as a project, resisted the notion of ‘toolkits’ since over the years teachers have impressed upon us how important context and process are. It is cheering, therefore to note that newcomers to the project immediately come to similar conclusions.

“I’ve heard extraordinary claims about the impact of Learning to Learn, mainly from Dylan Wiliam. He claims and has evidence that people can learn in an accelerated way using these strategies. The surprising thing is that the strategies themselves are not that extraordinary. They are the kind of things that we would do normally.” (Azumah, Lewisham College)

This connects with teachers’ beliefs about what is right for their own school and the ways in which they pragmatically manage the demands of standards, research and their own school development.

“We measure any decision against our school aim – ‘to think for ourselves and care for others’. This level of research supports our aims. The benefits come from classroom research, guided and supported by academics who have the time and enthusiasm to ensure rigour. A project keeps us
on track when things are busy and offers structures to keep things simple”. (Hipsburn First School)

“Perhaps teachers have unrealistic idealised expectations about what and how they wanted their delivery to be, so anything short of that feels like ‘failure’. “We should...go for the moon not the stars”.” (Lanner Primary School)
Appendix 12: Parent, carer and governor perspectives

Motivation and engagement

“I was really inspired when I came into your classroom (I wanted to stay and play too!). There is a great atmosphere in the class of busy, motivated and enthused children. This was backed up when I spoke to the children on the island.” (Chair of Governors, Marlborough)

The overwhelming response from parents whose views were canvassed was that involvement with Learning to Learn had had a significant impact on the pleasure their children took in learning at school and at home.

“Happy to learn more and excited when it is homework time.”

“Much more settled and asking a lot more questions. Getting ready in the mornings (enthusiasm), excited about certain subjects.”

(Hallwood Primary)

For some, it seems, the experience provided a welcome relief from the pressure of preparation for statutory tests under which teachers and children sometimes labour, allowing students to catch their breath and re-gather their enthusiasm for learning.

Not entirely sure how the learning will help her back in school, especially once SATs mania sets in, but I have no doubt it has been a valuable experience in terms of her self confidence & self motivation. “(Learning Space)

Aside from the effect on motivation, some parents also noted a knock on effect in terms of their children’s growing confidence and self-belief in themselves as learners. In one instance, this was felt strongly enough for a parent to write in and make the point.

“We would just like to express our sincere thanks for all that you have helped (Name) to achieve this year. She has done extremely well but more importantly her confidence is at an all time high. Everything that you have done is really appreciated. Best wishes, Mr And Mrs (Name).”

(Packmoor Primary)

More talk about learning at home

A further side effect of involvement in Learning to Learn was that children were more predisposed to talk about and discuss their learning at home. In part this reflects the desire of children to share their successes but, more importantly perhaps, they seem to have developed the language and vocabulary needed to put their experiences at school into words.

If I asked what he had done at school, I would usually get a ’I dunno!’ - but not after the Summer Challenge! (Learning Space)

She has really enjoyed the role play areas and the topics this year. She talks about what she has done at school nearly every evening – a marked difference from last year. (Name)’s confidence has increased and he talks about his achievements more, which is fab! He is beginning to realise his potential. (Marlborough Primary)

Knowledge about teaching and learning

Some schools used participation in the project as a means of forging closer links with parents. As a result of this and the greater tendency for children to talk about their learning at home, parents’ understanding of learning and how it might be supported outside the school gates has been enhanced.
As a parent volunteer, I have seen three interesting concepts that help children to learn: Lollipop Partners, Brain Gym and Wake and Shake. As a parent, I like and support all three concepts. (Hipsburn First)

I knew that my child was involved in the Learning to Learn project because my child came home and spoke about it. He was excited about going out all the time. I also was reminded about it in weekly Newsletters and could become involved myself because I was invited to join the class on their visits. Being involved allowed me to see how the school encourage Outdoor Learning and gave me some ideas about how to make going out with my child more fun. (Perranporth Primary)
Appendix 13: Ofsted perspectives

L2L in the shadow of Ofsted?

In last year’s report we reflected on the relentless ‘churn’ of change in education: policy, curriculum specification, pedagogical expectations, targets and assessment. For schools, their assessment is based on their attainment as judged by public test results and by their performance in Ofsted inspections. Many schools and teachers live in a state of heightened anxiety, fearing the arrival of the inspectors, editing and limiting their capacity to experiment and to tailor the curriculum to the needs of their learners in case this might be seen as ‘not doing it properly’. However, in Phase 3 we began to be aware that in Learning to Learn the attitude to inspections was subtly different. Inspections themselves still elicited nerves and tension but they did not, on the whole shape the normal practice of our teachers, who display a degree of resilience in the face of feedback. This mastery orientation is shown in the way in which inspection reports tended to be a resource for identifying formative jumping off points for new enquiry projects or reflected upon as a welcome but not necessary validation of successful interventions. Therefore we have analysed across the Year Two and Cycle One case studies, looking for where Ofsted is mentioned and have generated the following categories:

- Stimulated to act by Ofsted
- L2L approach praised by Ofsted
- School recognised as successful by Ofsted
- Ofsted inspections as a barrier to teacher enquiry

Stimulated to act by Ofsted

For some of our teachers, the impact of an inspection report that highlighted deficiencies in basic skills as a result of their population was a starting point for their enquiry project:

> *Our children enter school with a very low level of attainment. In July 2007 OFSTED wrote that, “Pupils’ entry level is exceptionally low with many having poor social, speech and communication skills.” In anecdotal notes an inspector also commented that the social, speech and communication skills were the poorest he had observed in 15 years of inner city inspections.* (Treloweth)

> *It was noted by the Ofsted inspector that the school has an issue with the behaviour of a small but evident group of boys in each class who are “restless and fidgety in lessons and do not always listen as well as they should.” For three and half years we have worked hard as a school team to put in place a skills based curriculum which would reinvigorate children’s learning. “The rapid development and expansion of the curriculum provision is beginning to make a strong impact on helping improve standards and achievement through pupils’ increased levels of motivation and interest in what they are doing.” Ofsted Nov 2007 (Marlborough Primary Paula)*

> *Ofsted (2007) noted that “the children’s starting points in the Nursery are below those expected and particularly so in communication, language and literacy skills”. Ofsted inspections where philosophy is an extra-curricular subject have been positive. The 2001 report on Colby Primary School in Norfolk, said: “In (philosophy) lessons, pupils learn to listen, consider and respond in a mature way to the ideas of others. The work is taken to a high level and gives them confidence to speak and discuss ideas.” (Ritchie, 2009, St Meriadoc)*

In some cases, more specific criticisms of pedagogy were highlighted by an inspection team, leading to targeted interventions:

> *During SLT observations it was noted that too many children were not actively involved in learning, and were spending too much time sitting and listening, rather than being engaged.*
Ofsted had also noted this during their inspection. A D&T focused subject inspection led by Ofsted in June 2008 gave us food for thought in terms of further necessary curriculum development. This was mainly because there were lots of areas for development identified in the school development plan and staff felt they did not want to take too much on. (Packmoor)

**L2L approach praised by Ofsted**

Some schools have been inspected during the L2L project and in many cases; the inspectors have singled out the projects for praise in their report:

As Ofsted (June 2009) commented “in some lessons, good use is made of “talk partners” to enhance the use of new vocabulary” (Hexham East First)

“Leaders promote cohesion well. Their success is typically summarised by a pupil who when asked about the benefit of working with a ‘lollipop partner’ replied, “It’s good to mix and you learn much about each other”. (Hipsburn First)

Our last Ofsted report (September 2008) graded the school as ‘outstanding’. The inspectors found that the school ‘provides an excellent learning environment’ and that ‘many students progress well due to the excellent personalised learning opportunities provided... (King Edward VI High)

The report went on to say that “in the best teaching found there is an insistence that the students think more deeply” and as a result of the student survey, the report found that “students say that they learn best when they are active participants and where their ideas and contributions are valued.” (Liskeard Secondary)

“Oakthorpe’s quality is recognised in its status as a training school for many new teachers. The students are deployed very beneficially, along with the large number of teaching assistants, so that pupils often receive small group tuition, which ensures that pupils are matched very well to their needs. This contributes significantly to the pupils’ excellent progress.” (Oakthorpe Primary)

In the Summer Term, we had an Ofsted inspection. I was able to discuss Outdoor Learning and its impact on enjoyment and achievement with the inspector. This was then reflected upon in the report. The majority of pupils enjoy their learning and achieve well because they are well served by the curriculum. A whole-school focus on developing a more creative approach to planning the curriculum using the local environment has been successful. For example, a recent topic on Victorians led pupils to discover that their village once possessed a railway and station (Ofsted Inspection Report July 2009). (Perranporth Primary)

For the school, the OFSTED report noted the measures taken and the team were impressed by them; the maths team were pleased with the progress made; standards were raised beyond levels that we had dared to hope for and learning appeared to accelerate quite impressively. The KS1 staff were vindicated in their earlier KS1 SAT assessments which they had always strenuously defended. (Weaverham Primary)

**School recognised as successful by Ofsted**

Arguably, some of the schools in Learning to Learn may feel able to innovate and enquire simply because they have the Ofsted ‘good conduct sticker’ already. Some schools reported that they are building on a foundation of previous success:

Following an Ofsted inspection in December 2006, the school was judged to require special measures because it was failing to give its pupils an acceptable standard of education. The present Head took up his post in January 2007 and following two monitoring visits and a re-inspection in February 2008 H MI took the view that the school no longer required special measures. From being a failing school Cloughwood had become, “a calm, purposeful place in which pupils and students achieve well educationally and personally and where teachers teach effectively” (Cloughwood School)

The school has a stable staff and Ofsted identified in their July 2007 report that within the school, ‘Good teamwork is seen as paramount and staff share the excellent head teacher’s vision for
continued improvement’ and ‘All aspects of the school’s work are monitored very closely and areas identified as needing improvement are tackled rigorously.’ (Eastfield Primary)

The Ofsted report in November 2006 described Fallibroome as ‘an outstanding school’ and particularly praised our commitment to innovation in teaching and learning. (Fallibroome High)

The school achieved Thinking School Status in April 2009 and received an outstanding Ofsted inspection in October 2007. (Hallwood Primary)

In its last full inspection, Ofsted commented that, “a rigorous lesson observation system informs staff developmental needs.” In addition, “the strong focus on improving teaching and learning has created a highly professional culture which values critical reflection and sharing of practice”. (Lewisham College, Jayne)

**Ofsted inspections as a barrier to teacher enquiry**

In a small number of schools, the threat of an inspection or the unexpected arrival of the inspectors has had a negative effect on the amount of data that teachers were able to collect. It is important to note, however, that even in cases where Ofsted have had the most impact, the teachers have still undertaken an enquiry and pursued Learning to Learn approaches in their classrooms.

_During the course of the project the school was awaiting its Ofsted inspection, which we did not have until June 2009. The majority of the evidence therefore was collected at the end of the year so I feel that this project would have benefited further evidence and observations._ (Hexham East First)

_The project was to run for the Autumn term. However, this did not happen. The school received an OFSTED inspection at the start of the year and as a result, the school priorities changed and Gifted and Talented education was put on the back burner for the year. This meant that I and Chris did not have the data needed to carry out our research._ (Lavender Primary)
Appendix 14: Cross case study thinking about learning

The case study structure continues to be designed in such a way that we can explore elements of the teachers understandings of learning to learn. This includes a section that asks the teachers to reflect upon the role that Learning to Learn has played in their project and a section which asks about the way in which the research process supports this understanding (Groundwater-Smith and Mockler 2007). The completion of these sections allows us to examine developments over time and to ascertain if the themes of these reflections remain constant or if they are slowly evolving. This year we are also able to include the reflections of the teachers working in the FE colleges, which will allow us to consider cross sector similarities and differences regarding the role of Learning to Learn.

The Role of Learning to Learn

Continuing themes from Phase 3 and Phase 4 (Year One)

The case studies produced in 2009 reveal a continuation of the central themes highlighted both in Phase 3 and during the first year of the Phase 4 cycle: the centrality of process; the need for a common language and the development of relationships between teachers and students as co-learners.

Centrality of process: In the case studies this year relatively few teachers describe the role of Learning to Learn as a practical process focusing on the adoption of strategies and structures:

“it would appear that using specific strategies has helped to develop greater peer interaction, deeper and more trusting social interaction and a positive classroom learning experience based on responsibility and reflectiveness.” (Duchess’ Community High School)

“Being involved in the L2L project has encouraged and enabled me to use a different method and approach to my work. I have used more practical activities to deliver numeracy skills within the lesson.” (Northumberland College)

In the majority of the case studies a more holistic, emotional process is described which focuses on the development of the students’ potential as life-long learners through increasing their understanding of how and why they learn:

“Speaking and listening clearly has the potential to have a major impact across the curriculum and we need to find and develop ways to be equally creative with this in all areas if we are to provide our pupils with the skills they need to become effective life-long learners.” (Treloweth Primary School)

“The L2L enhancement I was hoping to bring to the participants was an understanding of the diverse nature of learning with a strong focus on the emotions and feelings involved in the learning process which usually act as barriers to learning.” (Lewisham College)

The need for a common language: The importance of developing language to talk about learning continues to be a feature of the role of Learning to Learn that is identified. This is highlighted explicitly in many of the case studies:

“But if you do not have the language of learning, if you cannot explain how your mind is working in order to learn, or understand when others talk to you about the learning process, this does put you at a disadvantage because you cannot move onto the next step.” (Fleecefield primary)

“They were engaging in a conversation on learning and it does not get much better that that!” (Northumberland College)

The development of relationships between teachers and students as co-learners: There also continues to be an emphasis on the importance of teachers and students being co-learners- learning together and from one another:
“Working with my form on Learning Logs was an insight into their learning methods, and I found that I learnt a lot as well.” (Tytherington High School)

“Sharing the learning intentions and outcomes with the children supported them in focussing on their learning.” (Packmoor Primary)

**New themes for Phase 4 (Year Two)**

**Developing independent learners:** In the case studies this year, the need to create independent learners i.e. where “responsibility for learning transfers from the teacher to the learner” (Lanner) is identified by many teachers as being an essential role of Learning to Learn. This is apparent across sectors, age ranges and ability groups:

“Being part of the project last year made me aware of how important it is to develop independent learners and this is an approach I have continued to develop with this year’s cohort of children.” (Hexham East First School)

“L2L provided an excellent vehicle to highlight our concerns about many of our pupils’ inability to work independently at even the most basic level.” (Cloughwood School)

“In my context, L2L has been to encourage the learners to think and become more independent learners. They are ‘actively’ taking responsibility for their own learning and not relying on the teacher to provide them with the answers.” (Northumberland College)

**Organisational culture change:**

**Schools:** The case studies reveal that the teachers in schools have moved from reflecting predominantly on individual innovative practice, to reflecting on how Learning to Learn has impacted upon the whole school community:

*The L2L philosophies are embedded within the school ethos through our use of Co-operative Learning, AfL and Wild Tasks. An increasing proportion of our staff are involved with Action Research.* (Fallibroome High School)

“Learning to Learn means that everyone involved in the educational process (teachers, parents, children and support assistants) gain the power and expertise to assess the learning, recognise that it is a journey that everyone is on, at whatever stage, that specific strategies will help support the learning and that everyone can move onto the next stage.” (Fleecefield Primary)

**FE Colleges:** Whilst the teaching staff in the FE colleges (only in their first year in the project) have focused primarily on Learning to Learn in terms of the process within individual classrooms, there is already evidence that they see the potential for its development across their organisations:

“If more staff are aware of the benefits of Learning to Learn will it have an impact on their department as a whole and their effectiveness with learners? I have passed the information to my colleagues that I have gained due to this research with L2L and will do so with each new member of staff that enters my department.” (Northumberland College)

In fact for one teacher, the involvement of his college in *Learning to Learn* represents

“a paradigm shift in education. It is a change at the level of belief or even identity.” (Lewisham College)

**Learning through research**

**Learning about practice**

Many of the case studies focused on an aspect of teaching practice and investigated how this impacted on learners and learning within a school or college. In this sense, engaging in research yielded insights into practice in the context of a specific cohort of students or a particular subject...
area. There is evidence to show, however, that learning about pedagogy extends beyond the scope and timeframe of the case study itself and, for some, becomes an integral part of daily practice.

My role as a form tutor has certainly been informed by the research process, and even this year, when Learning Logs did not feature in our weekly form time routine, I still found ways to integrate L2L-style activities and therefore keep their skills intact. (Tytherington High)

In one instance, a key effect of the enquiry process has been to install a cycle of action, feedback and reflection into practice, whereby teaching is continually matched against and tuned into the observed learning in the classroom.

The process of research continues to impact on my own learning as I never stop wondering how we can develop and improve teaching and learning. Each year you are teaching and learning alongside a whole new set of individuals and, as a teacher, I am concerned to get it right for each and every one. (Packmoor Primary)

**Learning about learning**

Engagement in research by some teachers involved in Learning to Learn has signalled to others to the importance of learning as a subject for inquiry and reflection in its own right. In the view of one teacher the impact of their case study and its construction has extended beyond the immediate focus on specific year groups, stimulating a dialogue about learning across the school.

It focused the approaches used and made staff really consider what the needs of the pupils and the school were and ways in which we could tackle problems. The final document is a good starting point for further discussion in school about the successes or otherwise over the year and possible starting points for the next project. (Weaverham Primary)

It is clear, in this case, that the findings of individual teachers has had an effect of how the school views itself as a learning organisation and that, therefore, practitioner enquiry is not simply a launch pad for learning journeys on a personal level, but is also a means by which an institution can adapt and evolve over time. In this sense, learning through research is geared not just at informing and improving existing management systems but turning them into conduits of learning in their own right.

This research has extended our focus on internal inspection beyond an instrument for quality assurance towards a tool for learning. (Jayne, Lewisham College)

In some schools, there is evidence that participation in the Learning to Learn network has broadened the scope of professional learning further still in that it now encompasses the combined knowledge and experience of a community that extends beyond the school gates and its immediate concerns and agendas.

Finding out about projects other L2L schools are involved in has also been useful. Many staff are keen to try some philosophy with their classes and I was able to talk about the work done at St. Meriadoc Infant School. (Perranporth Primary)

**Self awareness**

As the comment below suggests, the process of enquiry can ‘rub off’ on learners in that it signals the importance of being explicit about how learning occurs in order that it be reflected upon and improved.

The exploration with the children as to what ‘reflecting on learning’ actually demanded of them resulted in my teaching becoming clearer. I devised a process for them to use to structure their reflections. This became a step-by-step process they could use to support their thought processes: (Fleecefield Primary)

As also suggested by the above quote, some practitioners not only learnt more about their professional practice and the students they teach but also learnt much about themselves as learners.
and were better able to reflect on their own identity and how they learn within a school or college environment.

*It has allowed me to research aspects of my career that I feel passionate about and has helped me map out a better understanding of myself not only as a teacher but also as a researcher.*  
*(Carterhatch Primary)*

Once again, there is evidence to suggest that the learning that accrues from a teacher’s enquiry, in this case metacognitive knowledge, has the potential to extend beyond an individual case study and motivate a school to renew its efforts to reflect on and specify how it, as an organisation, goes about the process of innovation and development.

*Learning is full of reflections starting with “I wonder”; research allows us to evaluate considered risks. We have a short document, ‘Learning at Hipsburn School – a Head’s Perspective’, prepared some years ago for a L2L presentation. This summarises our approach to learning and keeps us focussed.*  
*(Hipsburn First)*
Appendix 15: Attainment data as reported in the case studies

Different forms of attainment data have been reported in seven of the school case studies, which is fewer than in last years’ reports. The overwhelming focus on motivation, engagement and language for learning in the projects may go some way towards explaining this change in emphasis in the reporting. Where the data have been included, they continue to support our belief that L2L approaches do support learners’ attainment, sometimes co-occurring with significant gains, as in Weaverham. References to attainment were made in three out of the nine FE case studies, representing a similar proportion reporting this data as for the schools this year. These case studies report teacher assessment and college-level attainment data, as opposed to external assessments.

Table 32: Summary of attainment data included in the case studies

<table>
<thead>
<tr>
<th>Type of attainment measure used</th>
<th>School</th>
<th>Year group</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher assessment</td>
<td>Hallwood</td>
<td>4/5</td>
<td>Numeracy and literacy completion rates increased and boys’ motivation to write increased.</td>
</tr>
<tr>
<td></td>
<td>Fleecefield</td>
<td>6</td>
<td>Numeracy tracking:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8% made no progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>33% made 1 sub-level progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>58% made 2 or more sub-levels progress</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>21% made 3, 4 or 5 sub-levels progress</td>
</tr>
<tr>
<td></td>
<td>Kevin (Northumberland College)</td>
<td>Adult</td>
<td>Mathematics homework completion rates increased and marks improved slightly</td>
</tr>
<tr>
<td>National Curriculum level data</td>
<td>Weaverham</td>
<td>4</td>
<td>Percentage of children achieving above expected levels increased on 2008 levels by 19% (reading) 17% (writing) and 29% (maths)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Maths: 41% exceeded D score projection from KS1 SAT levels</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reading: 41% exceeded D score</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Writing: 85% exceeded D score projection</td>
</tr>
<tr>
<td>SATs data</td>
<td>Perranporth</td>
<td>2</td>
<td>All children achieved their targets or more.</td>
</tr>
<tr>
<td></td>
<td>St Meriadoc</td>
<td>2</td>
<td>Children’s knowledge of Numbers and the Number System and Data Handling were tackled well by the students, with 75-80% of children answering these types of question correctly</td>
</tr>
<tr>
<td></td>
<td>Treloweth</td>
<td>6</td>
<td>76% of children achieving level 4 and above (up 6% on 2008)</td>
</tr>
<tr>
<td></td>
<td>Fleecefield</td>
<td>6</td>
<td>1 gained a 5A (4%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5 gained a 5B (21%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8 gained a 5C (33%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 gained a 4A (25%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4 gained a 4B (17%)</td>
</tr>
<tr>
<td>Grades set by schools / colleges</td>
<td>Duchess’</td>
<td>12</td>
<td>All boys achieved a final grade higher than or equal to their predicted base line grades</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>All girls achieved a final grade higher than their predicted base line grades</td>
</tr>
<tr>
<td></td>
<td>Michelle (Northumberland)</td>
<td>14+</td>
<td>The independent ICT learners received better grades in online tests and more distinctions for their final grade</td>
</tr>
<tr>
<td></td>
<td>Azumah (Lewisham)</td>
<td>16-18 Adult</td>
<td>More learners stayed on course and achieved their learning aims overall. This resulted in a slight fall in the percentage of learners who gained the qualifications prescribed for a particular course.</td>
</tr>
</tbody>
</table>
Appendix 16: School level use of the SDQ

‘Before L2L’ and ‘after L2L’ comparisons

In some of the schools and colleges, teachers administered the SDQ towards the beginning and end of the school year to a group of learners involved in the project. This allows a comparison to be made, testing whether L2L is associated with increased (or reduced) levels of self concept for these students. It must be remembered, however, that other changes will have happened in the lives of these children over this time, making it difficult to link outcomes conclusively with L2L. The tendency for self concept to decline with age further complicates judgements about any changes observed over time.

Houndsfield

In this school, the L2L teacher worked with a small, ‘nurture group’ of Y3 learners. Six students completed the SDQ towards the beginning of the school year (in February 2009) and four of them completed it again at the end (in July 2009). For the four children (two boys and two girls) who had completed the SDQ in February and again in July, their responses on the two occasions were compared. The following bar chart shows how the mean responses for these two occasions compare:

As can be seen, these students’ ratings of themselves have changed considerably during the year. The means have increased for most of the elements of self concept, even where the students’ original rating was fairly high (e.g. MA). The bar chart for these children contrasts with the tendency, revealed by the L2L data as a whole, for self concept to decline with age. Paired sample t-tests reveal that the difference in mean response for general self (GE) over the two occasions is statistically significant (p=0.011), though the other differences do not reach statistical significance. It must be noted of course that this is a very small sample of learners. Also, they were members of a particular grouping of children chosen for this intervention and there are some unusual features of their measured self concept: in particular their rating of their relationship to peers (PE) was lower than their ratings for other aspects. Interestingly, this is the only aspect that has actually decreased between February and July, though only fractionally.
Fleecefield

In this school, the Y6 learners involved in L2L completed the SDQ near the beginning of the school year (in October 2008) and again towards the end (in June 2009). The following table shows the number of respondents on the two occasions.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Oct 2008</th>
<th>June 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>14</td>
</tr>
</tbody>
</table>

For the fourteen children who had completed the SDQ in October and again in June, their responses on the two occasions were compared. The following bar chart shows how the mean responses for these two occasions compare:

As can be seen, these students’ ratings of themselves have not changed very much during the year. The bar chart suggests the tendency, revealed by the L2L data as a whole, for self concept to decline with age. It is also interesting to consider the elements of self concept where this decline has not happened and there has been a slight increase in mean response. This has happened for relationship to peers (PE), skill and interest in school work (SS) and general attitude to self (GE). The teacher noted that all three elements relate to intended outcomes of her L2L project, which centred on allocating time at the start of each lesson to thinking about previous learning. However, paired sample t-tests reveal that there are no statistically significant differences in response over the two occasions.

Northumberland College support staff

In this project, the teacher worked with two members of learning support staff to facilitate reflection about learning. The SDQII (a version of the SDQ intended for adults) was completed by the participants at the beginning and end of the eight week course. The self esteem, as measured by the SDQ, of both participants rose after taking part in the study (see chart below). This increase was more pronounced for participant J. Interestingly, for both participants, their verbal self confidence
increased, while their maths self concept remained the same, which the L2L teacher considered was perhaps due to the nature of the course since it centred on interaction and communication.

Within school ‘L2L’ and ‘non-L2L’ comparisons

In some schools, the SDQ was administered to classes of children who were not directly involved in L2L. This potentially allows comparisons to be made of the measured self concept of learners after a L2L intervention with a group of similar children who have not experienced the intervention. A difficulty of interpretation may arise, however, since the influence of L2L may extend beyond those directly involved.

Duchess

In this school the L2L project involved one Y9 class. The students in this class, together with those in seven other Y9 classes, completed the SDQ in autumn 2008 and summer 2009 (in total nine other classes were involved, but two only completed the SDQ at the beginning of the year while two only completed it at the end). The following table shows the number of learners, L2L and non-L2L, who completed the SDQ in the autumn 2008 and in the summer 2009.

<table>
<thead>
<tr>
<th></th>
<th>Autumn 2008</th>
<th>Summer 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2L</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>non-L2L</td>
<td>185</td>
<td>178</td>
</tr>
<tr>
<td>Total</td>
<td>212</td>
<td>206</td>
</tr>
</tbody>
</table>

In autumn 2008, there was some variation between the classes, but this did not imply that the L2L class were particularly exceptional. Considering the L2L class in comparison to all the other students similarly revealed that none of the differences on any of the SDQ subscales were statistically significant. Considering mean responses of the L2L students and for the other Y9s to the SDQ in the summer revealed that there are no statistically significant differences between the responses at the end of the year either.

Comparing mean responses to the SDQ in the autumn and summer for the L2L students and for the other Y9s revealed that there are no statistically significant differences between the responses at the
beginning and end of the year for either group. The self concepts of the L2L learners did not change and nor did those of the other Y9 students. The following bar chart shows the pattern in mean responses for each element of the SDQ for the L2L learners and the other Y9s at the beginning and end of the year:

![Figure 58: Mean SDQ responses for L2L and other students at the beginning and end of the year (School D)](image)

**Lavender**

At this school, children from the Y4 class involved in L2L completed the SDQ at the end of April 2009. Since this class (Ito) took the SDQ after two terms of L2L, it seems reasonable to consider them to be a L2L class and compare their self concept responses with those from children not involved in L2L. Over the course of the year, the SDQ has been administered to three Y4 classes who were not involved in L2L. One of these Y4 classes was at School L and two were in another school from this LA involved in L2L. The table below shows the number of boys and girls considered in this comparison. There is no appreciable difference between the two groups in the proportions of boys and girls.

<table>
<thead>
<tr>
<th>gender</th>
<th>total</th>
<th>male</th>
<th>female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y4L2L</td>
<td>other Y4</td>
<td>37</td>
<td>49</td>
</tr>
<tr>
<td>L2L (Ito)</td>
<td>9</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>46</td>
<td>64</td>
</tr>
</tbody>
</table>

The following chart shows the mean responses across the SDQ subscales for Ito class and these other Y4 learners:
As can be seen, there are some differences, with the responses of the L2L class tending to be more positive. The difference between means for relations with parents (PA) is only marginally statistically significant, but the difference between means for reading self concept (RE) is more pronounced and statistically significant (p=0.003). Thus there is some suggestion that L2L might have resulted in improved self concepts in this class, although without responses from the beginning of the year it is not possible to rule out the alternative explanation that children in this class were already more positive.

Characteristics of L2L learners

In many cases, the SDQ was only administered to learners on one occasion. As was noted last year, this allows some interesting information to be fed back to the schools and colleges, which teachers often include in their case studies. In some schools, this year, the single completion of the SDQ occurred towards the end of the school year, allowing links to be suggested between patterns of response and the nature of the L2L innovation, although for these to be more than suggestions would require initial baseline data for these learners.

Hexham Middle School

The 23 Y5 students (11 boys and 12 girls) involved in a L2L project centring on learning in mathematics completed the SDQ at the end of 2008-09. Since, this year, this group were the only respondents from this age group, it was not possible to compare their responses with other Y5 learners involved in the project this year. Comparisons of the mean responses for these students and those of the same age from the L2L data set from last year (2007-08) suggested broadly similar levels of self concept. It was observed from these data, however, that these learners at this point in the year clearly had a tendency to be more confident in reading compared to maths.

The pattern of responses grouped by gender (see chart below) showed less difference between the boys and girls than is typical for L2L learners. These students’ responses show essentially no tendency for gender differences on most aspects of self concept: boys tend to rate themselves as somewhat more physically capable and confident (PH; though even this difference is not statistically significant), but the girls and boys have similarly positive concepts of themselves mathematically and as readers (MA and RE). This finding of girls being similarly confident in mathematics might be linked to the L2L approach taken by the teacher in mathematics with these children. During interviews
conducted with these children, a number (both boys and girls) commented on how working on the mathematics ‘projects’ had increased their confidence in mathematics.

Figure 60: Mean SDQ responses for L2L students by gender (School HM)

St Meriadoc’s Infant School

At this school, the class of Y2 students (eight boys and 17 girls) had been involved throughout the year in a L2L project centring on a ‘Philosophy for Children’ type of approach to some aspects of mathematics. This focused on developing children’s mathematical language. They completed the SDQ at the end of the school year. The following graph shows how the mean responses for these students compare with those of the same age from the L2L baseline data set for 2008-09:

Figure 61: Mean SDQ responses compared to project baseline norms (School M)

As can be seen, these students’ ratings of themselves were slightly below those of the L2L Y2 learners. Since these responses were collected at the end of the school year, this very slight difference could reflect the tendency, revealed by the L2L data as a whole, for self concept to decline with age. Interestingly, though, there are two aspects of self concept where this pattern is not found: confidence in reading (RE) and peer relations (PE). This could reflect the relatively high
proportion of girls in the class, but might also have been affected by the collaborative and conversational L2L approach, emphasising mathematical vocabulary.
CONCEPTUALISING L2L

Seven key themes have become apparent while analysing the data and speaking to teachers across the two projects. These seven themes are represented in the diagram and are fundamental to our definition of Learning to Learn.

The two concentric circles indicate the core aspects and the facilitatory features we believe to be essential in developing a Learning to Learn approach (the inner and outer circles respectively). The three aspects in the centre circle have an active relationship with each other and we believe that each has to be present for L2L to take place in a meaningful way.

In italics are aspects of these seven aspects that we think are different in this project to other L2L approaches on the market.

**CORE ASPECTS**

**Metacognition:** a privileging of reflective and strategic thinking about learning that supports content knowledge and skills development;

**Enquiry:** a standpoint which looks outwards and inwards, questioning and contextualising perceived understandings of learning and teaching; and

**Community:** a focus on the role of a democratic network where the learning from enquiry can be made public; knowledge and processes are criticised, validated or extended by all participants.

**FACILITATORY FEATURES**

**Pedagogy:** the process of importing, customising and evaluating new approaches to teaching. A focus on learning that includes the teacher as learner; emphasising democracy and privileging authentic learning conversations, facilitating motivation and engagement and improving the quality of experience and outcomes for all learners;

**Tools:** support and challenge pedagogy through the enquiry process. They are approaches and techniques that change the way in which learning is experienced and understood by students and teachers. They offer opportunities for new ways to extend, assess, focus on or talk about learning and in the process they provoke new questions;

**Learner action:** developing learners’ capacity to be self-aware, to understand their own learning process and then encouraging them to use this understanding by being both proactive and reactive in different situations. Emphasising the role of the learner: to be engaged, to have a say and to be responsible for their own and others’ learning; and

**Professional learning:** making explicit and giving importance to teacher’s knowledge of what works in learning, expecting rigour and validity from all educational research and policy, weaving together formal and informal ways of knowing, making use of collaborative and individual experience to change classroom and school cultures.

We are convinced that these seven elements can be applied to all learners in the project whether they are adult or child, and affiliated with a school or college, the Campaign for Learning or the university team.
This report gives the interim findings for two projects coordinated by the Campaign for Learning: Year Two of the Learning to Learn in Schools Phase 4 and Cycle One of the Learning to Learn in Further Education Project. These projects were facilitated by a research team from Newcastle, Durham and Glasgow Universities.

The Schools Project includes primary, secondary and special schools across Cheshire, Cornwall, Enfield and Northumberland representing a wide range of social economic contexts.

Two Further Education Colleges are involved, Northumberland and Lewisham Colleges. These colleges are equal in size, but differ in the way they are organised and the demographics of the population they serve.

The Learning to Learn in Schools Phase 4 continues to emphasise sustainability and replicability of the L2L model; exploring trajectories of students, schools and teachers who have participated in Learning to Learn approaches and the potential impact.

Transferability of the L2L model is important in the Learning to Learn in Further Education Project: the project is exploring ideas relating to what learning looks like in the FE sector and the extent to which there are differences and similarities in the experiences of individuals learning there.

The project’s current working definition of Learning to Learn is:

Learning to Learn is an approach that focuses on what happens when we learn and how we can learn more effectively. Being involved in L2L means being part of a community of enquiry that aims for a better understanding of the learning process. An L2L approach provides all learners with opportunities and tools for reflective and strategic thinking that generate talk and collaboration. This helps individuals develop skills and dispositions for successful lifelong learning that can build their motivation and enable them to take effective action to fulfil their learning goals.

For information see [www.campaignforlearning.org.uk](http://www.campaignforlearning.org.uk) or contact Rebecca Goodbourn: RGoodbourn@cflearning.org.uk
WOOLER FIRST, NORTHUMBERLAND
A project focusing on the language of learning to Learn at Wooler First School in Northumberland used creative methods, including mind-mapping and creating metaphorical animal characters, to encourage the children to embed their understanding of metacognitive and dispositional terms. Victoria Symons and Deborah Curran conclude that “if we want the children to recognise, discuss and begin to transfer their learning we have to provide them with regular opportunities to stop and reflect”.

CLOUGHWOOD SCHOOL, CHESHIRE
Creating independent learners is a key goal across education sectors. Alan Sherwood at Cloughwood Community Special School aimed to reduce pupils’ reliance on staff by the introduction of a simple self-help strategy: Five Before Me. With 5 clear resources to go to before a staff member, students began to develop an understanding of the role they and their peers could play in the learning process. After using the strategy, it was apparent pupils were more aware of when they asked for help and were more resourceful.

NORTHUMBERLAND COLLEGE
Research projects led by Michelle Tait and Kevin Warren at Northumberland Further Education College demonstrate that developing core competences in ICT and mathematics have a significant impact on learners’ motivation to learn and the extent to which they are prepared to take responsibility for their learning. The role of the teacher in scaffolding learners’ awareness of their strengths and the best ‘next steps’ has also been highlighted in this work with adult and vocational learners.

FURTHER EDUCATION
Two Further Education projects show the importance of personalising the L2L intervention to take account of local context and learning needs. Helen Handside’s adult learners at Northumberland College highlighted the diversity of their experience of prior learning and of her classes. In Lewisham College, a team from the School of Health Care and Early Years found that their focus on metacognition had to be explicitly tailored for Level 2 and Level 3 learners.

HAZELBURY INFANTS’, ENFIELD
In the early years it is difficult to combine active learning and the development of core literacy skills. In settings where physical provision is rich and diverse children can find it difficult to focus. Hazelbury Infant School in Enfield focused on learners’ choices and engagement. Led by Tanya McDonald and Melanie Scull, it suggests the role of the teacher is key in helping learners to make decisions and targeted materials can follow children in to popular areas, rather than the other way around.

LANNER PRIMARY, CORNWALL
At Lanner Primary the whole staff undertook training to focus on shared goals. The project aimed to transform how the curriculum was delivered to enhance effective learning. An ongoing conversation, highlighted several key messages: “Learning is personal and begins from within. Even for staff who understand how they learn best, transferring this to their practice and making this impact in the classroom is hard”; “Learning outcomes are not always what we anticipated or planned, but still have value”.

ST MERIADOC INFANTS’, CORNWALL
Building on previous case studies in which children’s vocabulary scores increased significantly, Linda Stephens and Clare Walsh at St Meriadoc Infant School have developed the use of Philosophy for Children to focus specifically on mathematical language and concepts. The developmentally sensitive and open-ended nature of discussions has enabled children to engage both with the tools for learning mathematics and with their growing sense of themselves as mathematicians.

FLEECEFIELD PRIMARY, ENFIELD
Independent learners connect with their metacognitive skills in periods of reflection before moving on to new learning. Gerry Wright at Fleecefield Primary School in Enfield introduced targeted time for reflection with Year 6 pupils, only to find that reflection needs a range of embedded skills and vocabulary. A year long, organic development project ensued during which both teacher and pupils came to a more robust and useful understanding of what it means to reflect.

LISKEARD SCHOOL, CORNWALL
At Liskeard School and Community College, a Humanities teachers have led a campaign against negative attitudes to learning across the whole school. They have developed lesson plans and resources for use in fortnightly tutor periods. The shift in perceptions and understanding of what learning means has been significant and is not limited to students: staff have taken the ideas put forward and transferred them into specialist subject areas to improve teaching and student engagement.

LEWISHAM COLLEGE
Considerable resource is invested in internal inspection and the outcomes of lesson observation are critical evidence for self-assessment. However, does the process of internal inspection help to raise standards? A project led by Jayne Morgan has explored whether the process of lesson observation, as part of formal internal inspection, leads to improvement. Concluding that, as with students, clear and collaborative target-setting and resilience of the learner are crucial.
IMPACT
The majority of learners were seen to have positive, complex understanding of learning as spanning all aspects of life. There is evidence of L2L approaches changing understandings of learning, facilitating the development of metacognition and improving academic self concept.

Attainment outcomes were mixed. In L2L secondary schools just less than half gained higher than predicted GCSE pass rates (this was similar to the matched schools); however the majority of secondary schools involved since Phase 3 attained above predicted levels indicating that a sustained commitment to an approach like L2L will reap dividends. In primary schools, the data was also varied. No parallel trend relating time in the project to attainment data increases was found; however the L2L primary schools outperformed the matched sample.

The academic self concept of students involved in both project have been evidenced as increasing, particularly in relation to academic factors and especially reading. There were some gender differences which suggest that emphasis is needed on learning skills for boys, whereas girls need focus on self concept.

Learners in schools described a complex, non-linear progression to learning that relied on reflective and strategic thinking to achieve short and long term goals: reflection was seen as important for supporting awareness of learning, but too much reflection and not enough action was seen as counterproductive.

College students were not as confident in their dispositions towards learning. At this stage in the FE Project they were seen to hold understandings that were relatively simple and passive in orientation. However this could be due to the relatively early stage of the L2L project in the FE context and certainly hints at potential to narrow the gap between FE and school students in the future.

Learners’ metacognition, which has been shown to be a good indicator of academic gains, was seen to be high in Key Stage 1 and 2 (younger than expected), but tailed off significantly in secondary schools. There were no simple relationships between age and gender, but the reduction in reflective and strategic thinking in Key Stage 3 and 4 seems to indicate some structural and situation factors which are detrimental.

Teachers in the project see themselves as learners and have expressed enthusiasm in thinking differently about their professional role and being reflective and strategic while enquiring into what works in their context. Direct parallels between skills and dispositions fostered in students by the L2L approach and those they need to develop and challenge in their own learning. In FE Colleges this has been particularly liberating for participant teachers.

Being part of a community of practice that spans different geographical areas and education sectors has been an important aspect of professional learning for the teachers. The dissonance created by talking about and sharing experiences with practitioners who have a range of perspectives has been highly productive in moving thinking about learning forwards.

Organisations in the project are more joined up in their strategic thinking. They are seeing and acting on potential in formal structures to facilitate cultural change.

CASE STUDIES
27 case studies have been submitted in Year Two of Learning to Learn in Schools Phase 4. This includes examples from primary, secondary, special and local authority level provision.

Ten case studies have been submitted from the L2L in Further Education Colleges. Departments represented include Foundation and Key Skills, Hair and Beauty and Education and Quality Assurance.

Case studies across schools and colleges have great similarities. We can conclude that L2L transfers well from schools into vocational and community education. Although practice has little variation across different age phases the rationales given by teachers do differ and are closely related to perceived needs of students and purpose of the sector.