Learning to Achieve

A Handbook of Strategies for Increasing Learning Power

compiled and written by

Tim Small

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A Handbook of Strategies for Increasing Learning Power

Working with ELLI

(The Effective Lifelong Learning Inventory)

The Graduate School of Education
University of Bristol

Drawing on evidence from a programme of Research and Development from January 2004 to July 2010
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The eighteen students at the three Bedfordshire schools, who made and shared with us some profound journeys towards a new confidence in learning.

Their fellow learners in the wider sample and all the learners, leaders, teachers and tutors whose stories, ideas and expertise enrich these pages, from the following organisations in particular:

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St John’s Marlborough
Worle Community School
Westbury Park Primary School
Stoke Bishop Primary School
Christchurch Primary School
Christ the King Primary School
KYUEM, Malaysia
Bath & N.E. Somerset Training
Westlands School
NorthumberLand Core Academy
Victoria Park Junior School
Victoria Park Infants School
Ilminster Avenue Nursery School
University of Bedfordshire
University of Gloucestershire
University of Manchester
University of Newcastle
University of Northumbria
University of Sunderland
Roadwood School
Bahrain Polytechnic
University of Worcester
Parkview School, Cumbria
Matthew Moss High School
Singleton High School, NSW
Batchelor High School, NT
Kormilda College, NT
Palmerston High School, NT
Campbeltown College, NSW
Stewart House, NSW
Harris Girls’ Academy
Glen Ellyn District, Chicago
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Foreword

Those who have become involved in the overall ELLI project: what have they in common? What has motivated schools, colleges and individuals – teachers, students – to take time to become immersed in the ideas and essential culture of the project? Starkly, it is exactly for the same reasons that led to the ELLI project being conceived in the first instance; read “the story begins” in the early pages of this handbook. If you are involved in the project, you will find yourself smiling as you recognise your own drivers into the project and the importance ELLI now has for you as an educationalist. This handbook is for you, to help your continuing involvement. If you are not involved - even if you had never heard of ELLI previously - but you still feel a sense of educational and emotional belonging as you read – then this handbook is also for you. It could well be very important indeed for you.

For all of us directly involved, ELLI means no less than facilitating better learning. Crucially within ELLI, this comes firstly from within the learner and secondly by an improved empathetic relationship between teacher and taught. Both strike directly at the heart of the learning process.

Personally, I can still recall clearly the sense of excitement when I first read through the basic principles of the project. At Bedford, we had used conventional value-added techniques for some time, including our own less conventional “internal” value-added approach, to identify underachievers not only within our own school but also, more finely, within our classroom-centred peer groups. But, what were we to do once we had identified those underachievers? Were we lamely to report on them and move into “must try harder” mode in our comments on them? Or was there something more focussed, more appropriate, more effective? This is where ELLI came in. The excitement I felt then was shared by the Headmaster of Bedford Preparatory School, Mr Chris Godwin, and I owe a considerable debt to him (as indeed does the Bedford project) for his support, drive and expertise; this ensured the success of the project and the important addition it has made to the ELLI literature. As with all projects described in this handbook, others will benefit as more and more teachers and learners work with the central idea of “learning power”.

Read this handbook carefully; but also read it from the viewpoint of what it could do for you as teacher and learner, for the two - as ELLI emphasises – are inextricably linked. Reflect on the ideas here; understand why they work; and become involved in a growing community!

Dr Philip Evans, OBE
former Head Master
Bedford School 1990-2008

Monthélie
Côte d’Or
France
May 2010
Introduction: Who this handbook is for and how to use it

There were several reasons for putting this Handbook together. In some schools busy teachers, whose students had responded enthusiastically to their ELLI profiles and wanted to improve on them, were asking for more help to devise activities and strategies to give them. In the Bedfordshire Project (see Chapter 2), which used ELLI to investigate and address underachievement with remarkable success, the interventions had been managed by the research team and the schools wanted guidance to do this for themselves. Now, as interest in ELLI spreads across the world, it is ViTaL’s responsibility to communicate the principles and effective practice that go to make up the evolving ‘know-how’ of ELLI, building on its theoretical foundation. This Handbook is intended to help with all those things.

The most important of these principles is about co-creation of new knowledge. ELLI is used to explore, investigate and inspire change and not simply to ‘bring it about’. The ideas and strategies in this Handbook have been inspired by the ‘coming together’ of ELLI and receptive contexts for it, through enquiries managed in partnership with creative practitioners. These professionals have applied this principle in their own learning relationships, understanding the role of the teacher, team leader, coach or mentor to be an enabling one: creating the conditions for individuals to take responsibility and for their learning to flourish.

So this Handbook is dedicated to creative leaders and professionals who believe in empowering people to learn and change. It is not a manual or ‘how-to-do-it guide’. There are no lesson plans or step-by-step instructions. Nothing is ‘handed down from on-high’. It is a mixture of description, reflection and analysis of what we have learned together in six years of research and development. It contains plenty of ideas and suggestions, but if these are to go on stimulating the profound positive change reported on here, it will be because they have been adapted and applied creatively to each new setting in which they are used.

The best way to use this Handbook, then, is to dip into it and keep it to hand as a resource for inspiration and ideas, whenever you are planning how to intervene in order to facilitate learning and change. The first three Chapters are about how you might bring ELLI to bear on this challenge. Chapters 4 to 8 describe the different levels of impact that people have experienced using ELLI: from the individual, through the ‘curriculum’ to organisational culture. Each new level of impact reflects more systemic interventions, from simply ‘giving someone an ELLI profile’, to inspiring change through coaching and mentoring, managing learning differently, re-designing the curriculum and, ultimately, embedding the principles of powerful learning into the way everything is organised.

The last Chapter looks forward to where this learning might go next. However and wherever you decide to make use of these ideas, we hope you will continue the story by contributing your own findings and join the growing, global learning community developing and using Learning Power in a changing world.
Chapter 1

What ELLI Is and What it Does

The Effective Lifelong Learning Inventory is basically a learning evaluation tool. Through most of the last decade, however, ELLI has ‘walked’ into schools and classrooms, universities and work settings and changed the way people think and feel and behave. We think one reason for this is because ELLI is actually three things: a theory of learning, an instrument for self-assessing learning and a set of strategies for developing learning capacity. Another reason why ELLI has attracted such strong interest may be because of its underlying values and their relevance to the times we are in. This Chapter will expand a little on all these aspects of ELLI and explain briefly how the tool is made available to educational and other organisations so that its impact can be optimised. Later Chapters will go into more detail about the strategies for developing learning power, which are the principal theme of this Handbook.
1.1 The story begins

The story goes that two University of Bristol professors had a conversation over lunch one day, towards the end of the last Millennium. One was Professor Patricia Broadfoot, widely known for her work on assessment and her role in the Assessment Reform Group. The other was Professor Guy Claxton, who had moved into education from a science background and was already a leading influence on a growing, international community of interest in ‘learning to learn’.

Apparently, the conversation went something like this: ‘Wouldn’t it be interesting if we could find out what it is about some people that makes them exceptionally effective lifelong learners? Then, if we could identify the characteristics of this quality of ‘learning power’, we could find a way of measuring or assessing them. In our assessment-driven culture, this would give them value and we could go on to develop ways of helping people get better at them.’

So, the ELLI Research Programme was conceived. Funding was generously provided by the Lifelong Learning Foundation and Dr Ruth Deakin Crick was appointed as Research Fellow at the Graduate School of Education at Bristol to develop the research.

![Dr Ruth Deakin Crick](image)

Fig 1.1: Dr Ruth Deakin Crick

1.2 The original ELLI Research: Seven Dimensions of Learning Power

Through an exhaustive investigation of all the literature on learning and what impacts upon it, followed by an extensive consultation with academic experts, learners and practitioners, the ELLI research team at Bristol generated a huge amount of verbal data on what impacts on learning. This included impact ‘from within’, in terms of the psychology of the individual, and ‘from without’, in terms of social psychology, management of learning environments, pedagogical theory and practical experience of lifelong learning contexts.

Seven dimensions of 'Learning Power' emerged, via factor analysis, each with elements of ‘thinking, feeling and doing’, making the ELLI Inventory more holistic than some psychometric taxonomies which focus on only cognitive or behavioural factors. The Seven Dimensions are briefly summarized in Table 1.1 though, in fact, six ‘positive’ factors had emerged from the study and one ‘negative’ one: Fragility and Dependence. Since the purpose was to identify the principal elements of Learning Power it made sense to give all the seven concepts ‘contrast poles’ and call this one ‘Resilience’. The contrast poles of all the others are shown in the right hand column of Table 1.1 below and the Fragility and Dependence Dimension is shown in reverse form as well as its technically accurate form:
Once these seven factors were established and statistically validated, a seventy-two item questionnaire was created and also validated through further research. Available online, this instantly produces a profile of each learner, in the form of a 7-spoked spider diagram. A frequency chart is also produced for the whole class. This feedback then becomes the starting point for coaching or mentoring conversations and strategies for developing learning power, individually and collectively, which is what the rest of this Handbook is about. One of the most widely reported benefits is of learners and teachers becoming confident with a whole new language for learning. Many find their profiles motivate them to improve their learning. When managed effectively across a Year Group, significant gains have been achieved in learning power. Individuals can achieve particularly significant improvement in the dimensions they target and work on. If a second survey is taken, it superimposes a new profile on the original, so any gains made can be seen graphically, as shown in Fig 1.2.

<table>
<thead>
<tr>
<th>The Seven Dimensions</th>
<th>With the characteristics of:</th>
<th>As opposed to being:</th>
</tr>
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<tbody>
<tr>
<td>changing and learning</td>
<td>having a sense of myself as someone who learns and changes over time</td>
<td>stuck and static</td>
</tr>
<tr>
<td>critical curiosity</td>
<td>having an orientation to want to ‘get beneath the surface’</td>
<td>passive</td>
</tr>
<tr>
<td>meaning making</td>
<td>making connections and seeing that learning ‘matters to me’</td>
<td>a collector of data fragments</td>
</tr>
<tr>
<td>Creativity</td>
<td>risk-taking, playfulness, imagination and intuition</td>
<td>rule-bound</td>
</tr>
<tr>
<td>Resilience</td>
<td>readiness to persevere in the development of my own learning power</td>
<td>fragile and dependent/</td>
</tr>
<tr>
<td>or, technically:</td>
<td>giving up easily when the going gets tough</td>
<td>resilient</td>
</tr>
<tr>
<td>fragility and</td>
<td>being aware of my thoughts, feelings and actions as a learner and able to use that awareness to manage learning processes</td>
<td>robotic</td>
</tr>
<tr>
<td>dependence</td>
<td>learning with and from others and also being able to manage without them</td>
<td>either isolated or dependent on others</td>
</tr>
</tbody>
</table>

Table 1.1: The Seven Dimensions of Learning Power and their contrast poles
1.3 The Values and Purposes of ELLI

The Values of ELLI are seen in why and how it is used. Well-deployed, ELLI is about emancipation and empowerment: enhancing life through more effective learning, for individuals, organisations and communities.

As we have noted above, ELLI in practice is three things:
- a well-researched set of ideas about how people learn most effectively
- a self-assessment instrument to aid self-analysis, diagnosis and strategy
- a tool to empower people to bring about change, individually and together

1.4 The ideas about how we learn

One feature that distinguishes ELLI from many other metric tools and audits is that the thinking behind it is holistic and relational, about integrating and connecting, not just splitting things up for the sake of analysis.

By way of illustration, the ideas and concepts:
- are about us as ‘whole people’ – thinking, feeling, doing, not just about cognition or behaviour;
- seek to balance attention to both the ‘person’ of the learner and the ‘curriculum’ of learning and see them as inseparably linked;
- (i.e. the Seven Dimensions) are inter-connected aspects of a complex but single concept (learning power) – in other words, you can use the ones you’re strongest in to help strengthen the others;
- include things like ‘meaning making’ and ‘learning relationships’ that depend on linking up and relating to other people and things;
- are developmental: seeing learners as ‘on a learning journey’, not defining or ‘fixing’ them for the sake of analysis or assessment;
- are drawn from research that consulted widely, amongst learners and practitioners as well as experts and research literature;
- are still being tested and developed empirically and through further research, e.g. making findings about:
  - the kind of teaching and learning associated with higher levels of learning power
  - how to communicate about learning through metaphor and story
  - relationships between:
    - learning power and achievement (and underachievement)
    - learning power and the emotional literacy of organisations
    - particular learning power profiles and behaviour

1.5 ELLI the self-assessment instrument:

One of the most important things to remember about the ELLI online instrument is that it is a ‘self-report’ inventory: in other words, it reorganises what learners say about themselves into a profile on Seven Dimensions.

What this means is that the data produced by the tool, whether for an individual or an organisation, is contextual: its outcomes will be affected by the learner’s perception of herself at a point of time, in relation to a learning context (or contexts) in mind at that time. You might call it a ‘snap-shot’. This means, in turn, that the tool can be repeated to reflect and report on change in a learner’s self-perception and/or changes in the learning context. Since teachers, tutors and team leaders generally have a degree of responsibility for the learning
context, this means they are in a position to intervene in ways that have a good chance of affecting Learning Power.

Other important aspects of the instrument that have become evident through Research and Development are that it:

- appears to have high ‘face validity’ – learners tend to agree with it
- has been tested and validated in its main, school-based context
- should be capable of adaptation to any age group or culture, subject to re-validation
- creates numerical raw ‘scores’ invisible to the individual learner but stored in a database that makes the aggregated data available for interrogation and analysis with appropriate permissions (over 30,000 cases already)
- can therefore contribute usefully to institutional self-evaluation

### 1.6 ELLI the empowerment tool

It was anticipated from the start that ELLI’s efficacy as an agent of empowerment and change was likely to vary according to how, when, where and by whom it is used. This has been borne out by evidence across the sectors in which ELLI has been tested so far and underlies the care taken by ViTaL Partnerships to ensure quality in the training for and delivery of ELLI in practice.

There are several factors involved, including that its effective application and impact:

- depends upon ‘buy-in’ to the validity of the Seven Dimensions;
- requires learners and change agents to understand how to apply them in their own contexts;
- works best when used to inspire creative, personal, tailored, local solutions and strategies, not ‘off-the-shelf’ ones;
- can inform and inspire change but depends upon existing change management strategies to impact across institutional boundaries;
- is reported as having high positive impact by many learners and teachers;
- has inspired a large and growing number of highly imaginative and effective learning strategies and teaching ideas;
- appears to play a significant part in helping people to:
  - communicate meaningfully about their learning
  - decide on change strategies
  - recognise, monitor and report on change;
- appears to be able to work on an individual, class/group, institution or whole system level, subject to ‘buy-in’ as above;
- is the most difficult aspect of ELLI to evaluate, because:
  - change can usually be attributed to a variety of factors
  - the principle of empowerment militates against prescription, leading to a reluctance to publish ‘how-to-do-it’ guides and ‘one-size-fits-all’ solutions.

Despite variations in how – and how powerfully – these ideas have been taken up and put into practice, the evidence is now becoming almost overwhelming that using ELLI stimulates profound personal change, through enhancing self-awareness and making learning and change seem achievable. This has been as true of hitherto disaffected and under-achieving learners as it has of high
achievers, mature students and work-based learners. The next chapter describes some of the ways in which evidence of this has been collected and validated over the last eight years or so.

1.7 Getting to use ELLI

Organisations generally need at least two people to attend an ‘ELLI Champions’ workshop, run by a provider accredited by ViTaL Partnerships. The workshop, over two days, equips them to ‘champion the ideas and practice’ in their organisation: understand the concepts and why they are powerful; manage the online registrations and surveys; interpret individual and class profiles; plan strategies, or ‘interventions’ to build learning power across the organisation, team, Year Group or department for which they are responsible. This includes equipping them to brief and train students, parents and colleagues.

The training asks participants to ‘wear three hats’: first, as learners in their own right; second, as ELLI Practitioners; third, as prospective project leaders. It is facilitated, interactive and intensive and engages participants in creative, collaborative activity, using metaphor and story to bring concepts to life.

1.8 What does an ‘ELLI Project’ entail?

There are several components to an ELLI Project. Some are essential, like the initial two-day ‘Champions Workshop’ which ensures that there are at least two members of staff to lead the project and ‘champion’ the ideas. The most important pre-condition is commitment by project leaders, both to the ELLI values and to adequate resourcing of people’s time to ‘do it properly’.

The training equips the ELLI Champions to brief and train other staff, arrange for learners (aged from 8 to 88!) to access the ELLI inventory (see more below), explain the Seven Dimensions to them and support them in understanding and responding to their ELLI profiles. Champions also know how to scrutinise and analyse the Learning Power Profiles of selected groups of learners. All the staff involved can then use ELLI as a diagnostic tool, working with individuals and groups on strategies to build learning power in the dimensions they identify as most needed. After this programme of ‘interventions’ led by the Champions, it can be arranged for the learners to do the questionnaire again, receive their second profile and see what difference they have made to their learning power.

Fig 1.3: An ELLI Champion explaining the profiles and Seven Dimensions using his own ‘wild bird’ iconography, to a meeting of his Indigenous Community in Gapawiak, Northern Territory, Australia

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Optional extras apply for those interested in using ELLI as an action research tool for organisational enquiry or self-evaluation (see Chapter 2). Some ELLI Consultants are able to support action research with advice and guidance, gather qualitative evidence (such as by running focus groups and semi-structured interviews) and commission and report on data analysis from the research team at the University of Bristol. This can yield valuable evidence for institutional self-evaluation. The ‘Rolls Royce’ is a bespoke ELLI ‘R&D Project’ with its own Research Questions, designed with you, managed by ViTaL Partnerships, culminating in a full written report, printed and on disk.

1.9 Accessing the online inventory

The ELLI online inventory is housed in the ‘Learning Warehouse’, a web-enabled platform hosting powerful, research-validated assessment tools and resources to support personal and professional learning and organisational change. Access to it is given via bespoke ‘portals’ created for each institution, which hold all the personal and demographic and identifiable data. All the ELLI assessment data is made anonymous and stored in the Learning Warehouse database, where it can be made available to accredited researchers, subject to appropriate data protection safeguards.

**ELLI : Guidance for preparing for the survey**

Before doing the ELLI survey, it is worth knowing:

- About the general idea of ‘Learning Power’: ‘the things about us that help us to be effective as learners’
- Researchers have found a way of showing the differences between people in their approaches to learning: where the balance lies between our strengths and weaknesses
- They have created a questionnaire/survey that can help us to know ourselves better as learners

Remember:

- There are NO RIGHT ANSWERS – It is not important to score highly, but to be as accurate or true about yourself as possible in your answers – then you will be more likely to agree with the results and use them to help you in your learning – don’t be ‘soft’ or ‘hard’ on yourself, but ‘just right’
- This is quite a long questionnaire – 72 questions
- The questions all ask you to read a simple statement about how you might or might not respond to a learning situation and say if this statement is
  - Very like you
  - Quite like you
  - A little like you
  - Not like you
- Be careful to check that you have read the question properly (some questions are repeated, but in slightly different forms – this is how research questionnaires work)
- Once you know you have understood the question, choose the answer that seems to fit you best, without dwelling for too long – work through the survey at a steady pace if you can
- In answering the questions, think of yourself as you are now, in the situations you tend to learn in, both in and out of school
- Ask for help if you do not understand a question or if you are having difficulty completing the survey in the time allowed

Table 1.1: Guidance to prepare learners for the ELLI Inventory

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An important part of the Champions Workshop is about preparing to take learners online and support them responding to the ELLI questionnaire so that their profiles are as likely as possible to be accurate and valid. A copy of the guidance sheet is shown in Table 1.2. and the same guidance is offered at the start of the online questionnaire, though most people tend to skip straight to the first question when they have a mouse in their hands!

As soon as a learner has completed the questionnaire, unless the project leader has switched this function off, he or she can ask to view the completed profile, which will remain there, viewable with the same log-in access for as long as the person requires or until the Learning Warehouse switches that learner’s account to a second assessment, when they will be re-directed to the questionnaire and find a second profile superimposed on the first one.

It is worth mentioning that there are different versions of the ELLI Inventory in the Learning Warehouse for different ages and sectors: school, Higher Education (HE) and Adult versions, which are of different lengths and complexity. They have all been validated. For some projects, additional items are added – and have to be validated again – to elicit particular research data. In one of the schools’ versions, for example, some extra items have been added to investigate levels of ‘engagement with school’ in relation to levels of Learning Power. The HE version used in the Middle East was adapted so that the wording was less colloquial and more accessible to students of that culture. Translated versions are in the pipeline, too.
As well as being the outcome of a high quality, grant-funded research project about how people learn, the ELLI inventory is a powerful generator of data for further research, pure and applied. *Quantitative* data about self-reported levels of Learning Power on Seven Dimensions, from learners of different kinds in different contexts, is collected automatically by the online instrument. *Qualitative* data is collectable from all involved in using it and, because it is about learning journeys and stimulates change, *narrative* data also flows from its use: stories about how individuals, organisations and communities learn, change and grow. *This Chapter* briefly refers to some of the projects in the ELLI Research and Development Programme, from 2003 to 2010, showing how their research designs have led us to findings and implications, placing ELLI in the context of a global research network concerned with values and learning.
2.1 Illuminating a wide range of issues

The most interesting context for using ELLI is an action enquiry, when a school, department or organisation identifies a change issue that needs illuminating as well as working on. The ELLI inventory is remarkably versatile in serving such enquiries.

Across one networked learning community of primary schools, for example, ELLI has been used to investigate the values and attitudes of students and staff to themselves, their learning and each other. Fifteen particularly innovative secondary schools are using ELLI to measure the impact of their innovations in teaching and learning, hoping to create a ‘toolkit’ to share ‘what works’ across the country. Relationships between Learning Power profiles, teachers’ learner-centred practices, emotional intelligence and attainment have been researched and one school has linked Learning Power with mental and emotional health and well-being. The Bedfordshire project, run by the University of Bristol, which set out to research the underlying causes of underachievement, identified a predominant pattern in the Learning Power profiles of underachieving students; Stage 2 investigated the impact of interventions specifically designed to address their needs – described later in this Handbook.

In a Young Offenders Institution, ELLI was used to investigate the differences in values and practices between teaching and care staff – and how they might be better integrated. In fourteen universities, it was used to explore how Personal Development Planning could be structured to improve academic achievement. Some of those institutions have gone on to conduct a three-year, grant-funded research project investigating the relationship between Learning Power and student retention. In the world of work, two major UK employers are now planning to use ELLI to address the learning culture of their organisations, including issues of motivation, creativity, receptiveness to training and job satisfaction in the workforce. A Middle-East Polytechnic’s enquiry, not far removed, is looking at how Learning Power relates to employability in a global market.

One school, St John’s Marlborough, became an early partner in a Research and Development project because it had already pioneered a radical alternative approach to curriculum design, placing the learning needs of individual students, preparing for life in the twenty-first century, at the heart of everything it did. One of the Research Questions in their enquiry was:

*What part can the dynamic assessment of learning power play in a radical shift of emphasis in curriculum design and delivery, in which*

  * o the position of the student changes from that of a receptor to that of an active agent?*
  * o an emphasis on knowledge, skills and understanding is counter-balanced by a primary focus on the process of learning itself?*

2.2 Project design and management

That Research Question was one component of a proposal that was co-created by the Research and Development Team and the school project leader. All ELLI Research and Development Projects have something similar, using a basic template similar to the one in the panel to the right. This is the contents page from the Project Initiation Document, or ‘PID’ as they are known, for the Polytechnic in the Middle East.
The first purpose for creating such a document is to underpin the integrity of the enquiry by ensuring that the Research Questions have a methodology to match. The second purpose is to define the contract and specify the ‘deliverables’, timeframe and costs. The third purpose is to create a ‘project guide’ which everyone involved can refer to throughout the duration of the work, whether their role is to manage activity in the institution, deliver the external inputs or monitor progress and keep activity on track.

You will see in the Research Design and Methodology section elements such as data collection and analysis and presentation of findings which distinguish this as an action enquiry from a simpler ‘development project’ that might use ELLI simply to measure or develop something.
The PID also contains a detailed schedule of all the activities involved, with dates and durations, which can be used as a ‘tracking sheet’ for monitoring progress as well as a planning guide, to make sure everything is ready for each stage. Here is an extract from one such activity schedule, for a school in the North of England:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Purpose</th>
<th>Timing</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Year 7 &amp; 8 and rest of sample students for LW</td>
<td>To enable online access in preparation for 1st online surveys for Yr 7 and 8 and selected groups</td>
<td>By mid-Oct</td>
<td></td>
</tr>
<tr>
<td>First ELLI surveys for Year 7 &amp; 8 and selected groups</td>
<td>Self-assess Learning Power and create profiles and baseline data for all students involved</td>
<td>Week bg 19th October</td>
<td>Over 2 weeks max</td>
</tr>
<tr>
<td>Strategic interventions with individuals and whole classes</td>
<td>To increase Learning Power in identified dimensions, in the context of ‘My World and other programmes</td>
<td>From November onwards</td>
<td>7 months min.</td>
</tr>
<tr>
<td>ViTaL Project mgmt &amp; admin support (0.5 days per month)</td>
<td>To liaise with MM and ViTaL Ops team and monitor and report progress with PID activity</td>
<td>Nov-Dec</td>
<td>1 day</td>
</tr>
<tr>
<td>Focus Groups and semi-structured interviews of student and staff sample</td>
<td>Qualitative and narrative evidence gathering and initial impact assessment (after 1st surveys and introduction of ELLI to students)</td>
<td>Mid-January</td>
<td>1 day</td>
</tr>
</tbody>
</table>

Table 2.2: extract from Activity Schedule in a Project Initiation Document

### 2.3 Quantitative Data Analysis

The analysis of quantitative data generated by the ELLI inventory is normally done by post-graduate researchers at the University of Bristol, using SPSS software to interrogate the data in relation to the Research Questions. Cronbach Alpha Reliability tests are conducted regularly to validate the data generated by the survey. Table 2.1 shows an example of a reliabilities table for the Learning Power scores of nearly 10,500 learners in formal education.

<table>
<thead>
<tr>
<th></th>
<th>KS2</th>
<th>KS3</th>
<th>KS4</th>
<th>KS5</th>
<th>Adult</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing &amp; learning</td>
<td>.69</td>
<td>.77</td>
<td>.75</td>
<td>.72</td>
<td>.76</td>
<td>.75</td>
</tr>
<tr>
<td>Critical Curiosity</td>
<td>.69</td>
<td>.76</td>
<td>.74</td>
<td>.78</td>
<td>.77</td>
<td>.76</td>
</tr>
<tr>
<td>Meaning making</td>
<td>.69</td>
<td>.74</td>
<td>.73</td>
<td>.71</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td>.75</td>
<td>.78</td>
<td>.79</td>
<td>.81</td>
<td>.84</td>
<td>.79</td>
</tr>
<tr>
<td>Strategic awareness</td>
<td>.82</td>
<td>.85</td>
<td>.84</td>
<td>.86</td>
<td>.84</td>
<td>.85</td>
</tr>
<tr>
<td>Learning relationships</td>
<td>.67</td>
<td>.72</td>
<td>.73</td>
<td>.74</td>
<td>.81</td>
<td>.72</td>
</tr>
<tr>
<td>Fragility and dependence</td>
<td>.81</td>
<td>.83</td>
<td>.82</td>
<td>.81</td>
<td>.81</td>
<td>.82</td>
</tr>
</tbody>
</table>

Table 2.3 Cronbach Alpha Co-efficients by age group n= 10496
Deakin Crick, R & Guoxing Yu (2008)
Case Study 1: Learning Power and Underachievement in Bedfordshire Schools

a) Quantitative data

Two maintained and three independent schools
N = 823 (students aged 14-15)

Underachievers were found to be characterised by:
- Passivity in learning dispositions
- Accepting things at face value
- Lacking strategic awareness – of thinking, feeling and planning/doing
- Not looking for meaning and sense making in their learning
- Being ‘stuck and static’ in their sense of themselves as learners.
- Being unable to ‘tell their story’

Project Findings (from quantitative data)

The analysis (of their ELLI data) revealed a statistically significant difference between the underachievers and both other groups in four dimensions - strategic awareness, changing and learning, critical curiosity and meaning making.

The cohort of underachieving students reported themselves (through the ELLI survey) to be more static in their view of their capacity to change and learn over time, less critically curious and less likely to make meaning from their learning than both their achieving and overachieving counterparts. They also reported less strategic awareness than their ‘over achieving’ colleagues.

It was apparent that students who are underachieving have less awareness and self regulation of their own learning processes and are more likely to be passive receivers of information, than actively curious and engaged makers of meaning. They are also likely to be less confident in their capacity to learn and achieve. They were also likely to have had less success in school validated work.

The ELLI data of these three groups could then be analysed comparatively to ascertain that four of the seven dimensions were significantly weaker in the underachieving sample: Changing and Learning, Critical Curiosity, Meaning Making and Strategic Awareness. The learning power characteristics of underachieving students had been identified and interventions could be designed to address them.

The ELLI instrument provides some group data instantly, in the form of frequency tables showing the numbers reporting themselves high, medium and low in each dimension, with red, yellow and green to make them clear at a glance. These can be displayed for all the groups that have been registered online. One obvious use of this facility is for a teacher to look at the distribution of strengths and weaknesses across his or her class in terms of the Learning Power Dimensions.
A business leader might do the same for his or her team. Once these become visible, strategies can be put in place to build on the strengths and use them to develop the weaker dimensions.

The data analysis provided by the research team can provide more finely graded feedback, comparing the mean Learning Power scores of different groups within a sample, such as by gender, age or any other category, using ‘analysis of variance’ (ANOVA) or ‘paired T-tests’. In the Higher Education project across fourteen universities, for example, with a total of over 1800 students aged from 18 up to 70, the analysis found that it was the traditional, full-time, 18-22 year-old students who reported the lowest levels of learning power. The highest levels were amongst the mature, part-time students in their mid-thirties on work-related courses, who were in a position to relate their formal university learning to real-life, every-day, practical learning in the workplace.

2.4 Measuring changes in Learning Power

In most Research and Development projects conducted so far, ELLI has been used to produce ‘pre-intervention’ and ‘post-intervention’ scores, enabling the ‘design experiment’ model of research to report any findings of change in levels of self-reported learning power over the course of a project. The data analysts use ‘Paired T-tests’ to produce pre- post- comparisons, from which statistically significant changes can be identified, or, in other words, changes that cannot be accounted for by chance alone.

In a project with a high-performing Sixth Form College in Malaysia, for example, over the course of an academic year, a whole year group of 284 students made significant gains in means scores in six out of the seven dimensions. Resilience, significantly weaker that the others in the baseline assessment, was the exception. The following year, when more of the tutors had been trained and the ELLI work was becoming embedded in the practice of the College, gains in Learning Power with a second cohort of 173 were doubled on average and extended to all seven dimensions: the weakness in Resilience, which had seemed intractable, had been addressed. The gain in Critical Curiosity, shown in Figure 2.2, was broadly typical of all seven dimensions.
In the Bedfordshire project, the principal intervention entailed a series of up to nine mentoring conversations with a sub-sample of eighteen of the underachieving students, using their ELLI profiles as a starting point (you can read more about this in Chapter 5). The post-intervention ELLI profile data indicated that these students had improved their learning power significantly in the four dimensions associated with under-achievement. An additional, unpredicted finding was that they had also made significant gains in Creativity; they seemed to have developed the confidence to do things their way, rather than be limited by 'set ways' of learning.

2.5 Interpreting findings and reaching conclusions

One of the most important things to remember about using ELLI to generate research data is that it changes what it measures. This means several things: firstly, if a ‘baseline’ measure of learning power is required, it should be taken before any interventions have been introduced. Taking the survey needs in itself to be the first intervention and any explanation of the Seven Dimensions, using imagery, metaphor, stories or simply explanation, should follow the survey, not precede it. Since we are talking about social science research, not pure science, and as many of these projects are action enquiries involving their subjects as co-researchers, we need to be suitably tentative in reporting our findings, remembering that we are not expecting to prove causal relationships, as might be possible in medical and pharmaceutical research with randomised controlled trials.

2.6 Qualitative and narrative data

What helps to off-set this proper caution in how we interpret and report findings is that we are also able to look at how far the quantitative data are supported and illuminated by qualitative and narrative data. These, too, have to be collected scrupulously using valid research methods as far as is achievable in the context.

These include ensuring that focus groups are as representative as possible of the sample we are reporting on, using open questions rather than leading ones and recording data faithfully for analysis, in the form of digital audio or video files for transcription, or taking verbatim notes, all with permission of respondents and following the British Educational Research Association (BERA) ethical guidelines.

The panel on page 22 below is an extract from the schedule used for collection of qualitative data from tutors working with ELLI in the fourteen universities of the HE project. From some of these questions, data came back that was particularly relevant to the Research Questions, for which the questions had been framed. Unpredicted data also emerged, including stories about the unexpected difference that ELLI had made to people’s lives and work.
Here are some examples of the kinds of question used to interview the tutors:

### Tutors interview schedule (HE Project)

1. What particular questions or issues were you using ELLI to investigate or address?
2. Can you summarise the outcomes/results so far? (If you have any report or documentation available, please attach a summary, or abstract if written.)
3. How has this project had an impact on your practice, strategy, policy (e.g. in relation to PDP, pedagogy, student support etc)?
4. What difference has this made to students and why?
5. What has been the single most important element of the project?
6. Have staff or student attitudes and/or relationships been affected by working with ELLI?
7. How has it contributed to your own or colleagues’ professional learning?
8. Has the project made any difference to your strategic plans? If so, what are you thinking will be different in future as a result of the project?
9. Is there anything else you would like to tell us about the impact of ELLI on students, tutors and the school or university? How would you summarise your response to applying the ELLI ideas to your setting?

Fig 2.3: Tutors’ interview schedule (HE)

One senior member of the administrative staff in a University had recently changed position and benefited from working with a line manager who gave him more responsibility and supported him in decision making. Previously, he had been unhappy and feeling that he had reached the end of the line as far as career progression was concerned. Now, with a change of perspective coupled with insights he had gained from doing his ELLI profile, it was as if he had found a ‘new lease of life’. Here is an extract from his interview:

**The ELLI ideas have changed how I react to a knock back: to take it as a challenge. I am learning to see problems as opportunities, mistakes as things that can be put right. My curiosity is coming out in the quality of proposals I put to my line-manager and she says ‘let’s do it’.

Before, I felt I’d reached the peak of my potential. Now, my outlook has changed completely. It’s like ‘kick-starting’ my life again… Before, curiosity was something I just didn’t have time for. I have moved into a completely different gear which previously I didn’t have the motivation to use.

My new role and ELLI have enhanced my motivation. To some extent, it has re-built my belief in myself!**

Fig 2.4: Narrative data from 'Learning and Self-awareness: an enquiry into Personal Development in Higher Education', the report of the ELLI in HE Project
This story was one item of a collection of narrative data and qualitative feedback from students and tutors in these Higher Education institutions.

One of the findings, for which this and about a dozen other pieces of verbal data contributed evidence, was that:

**Some participants reported significant personal change in terms of confidence, focus, personal/professional development and approach to learning.**

Interviewing students independently of their tutors allows the data to be compared and ‘triangulated’: to see how far students’ and tutors’ qualitative data echo and support each other and how far they are then supported by the quantitative data.

Here are some of the questions used with the students:

<table>
<thead>
<tr>
<th>Students interview schedule (HE Project)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tell me what you remember about using the ‘ELLI’ learning profile?</td>
</tr>
<tr>
<td>2. Have the ideas made any difference to the way you see yourself and your learning? If so how?</td>
</tr>
<tr>
<td>3. Have you changed as a learner over this academic year?</td>
</tr>
<tr>
<td>4. If so, what experiences and influences have contributed to this?</td>
</tr>
<tr>
<td>5. What matters most to you about your learning at University?</td>
</tr>
<tr>
<td>6. What do you remember best about working with ELLI?</td>
</tr>
</tbody>
</table>

Fascinating personal anecdotes often emerge, giving a sense of how the ELLI profiling tool helps people to ‘get beneath the surface’ and find ‘deeper meaning’ in their learning and lives. Answering the second question, for example, a Nigerian student taking an MSc in Human Resource Management in the Business School of a North-eastern university talked about how he had started to reflect on himself in a way that was rare in his culture. He summed up what he remembered best about working with ELLI by saying:

**‘The main thing is, my self-awareness has improved considerably.’**

**Finding: A significant feature of a number of responses was a reported enhancement of ‘consciousness’, awareness and/or understanding of self and/or others as learners and their educational environment**

Evidence included:

*It’s been an additional tool to highlight student awareness of their learning and need for development. It is used as a development tool. ... For those who took advice, it led to a most constructive set of dialogues about ‘what is learning and what does it mean for me?’ *(An AG&C Tutor)*

Fig: 2.5: Students’ interview schedule (HE Project)

Fig: 2.6: Extract from ‘Learning and Self-awareness: an enquiry into Personal Development in Higher Education’, the report of the ELLI in HE Project
This and other feedback echoed what tutors said about how difficult they had always found it to engage students in reflection and how helpful the ELLI tool was to that end.

2.7 Combining quantitative, qualitative and narrative data

Perhaps the most exciting aspect of ELLI as a mixed methods research tool and when used for illuminating action enquiries in this way, is how the different kinds of data combine to make a powerful case, which neither the statistics alone nor the anecdotal evidence would be able to do.

In the Higher Education project, for example, the quantitative data for two university cohorts, totalling 248 students who went on to do the post-intervention profiling. Both showed statistically significant gains in Strategic Awareness. This added weight and value to the very points made by the tutors and students in their interviews, about self-awareness and learning development. One of these universities, which had focussed in particular on the role of ELLI in Personal Development Planning, also showed significant gains in Learning Relationships, which was echoed in the qualitative feedback. The other, which included the Business School just mentioned, also showed significant gains in Changing and Learning, Creativity and Critical Curiosity, which supported the finding about ‘significant personal change in terms of confidence, focus, personal/professional development and approach to learning’.

The Bedfordshire project should have the last word. Not only had quantitative data helped to identify the cohort of underachievers, it had been able to characterise them in terms of their learning power dimensions and track their gains in the very dimensions indicated. This enabled interventions to be designed which not only addressed the dimensions concerned but also generated a large amount of qualitative feedback and narrative data. Together, they make a significant contribution to the literature on underachievement and improve our confidence in addressing it (Ren, K 2010).

---

**Case Study 1: Learning Power and Underachievement in Bedfordshire Schools**

**b) Qualitative data illuminating the quantitative data**

Mentoring sessions with the underachieving students, using their ELLI profiles as a starting point, produced in a number of cases the following outcome:

1. Students reported change and benefit including improved self awareness and confidence, higher aspirations, improved questioning, a better understanding, improved relationships with teachers, improvements in planning and organisation and better use of learning techniques and skills.
2. Improvement in the level of academic achievement both in terms of course work and examinations. Also in a number of cases there was considerable added value in relation to previous levels of achievement.
3. Positive changes in the individual ELLI profiles with significant development in the weaker dimensions, with students finding the language of ELLI very helpful in talking about their learning.
Chapter 3

Getting across the concepts: using metaphor, story and iconography

Something that teachers and ELLI workshop facilitators have had to think hard about, when introducing ELLI to a group of learners, is how to ‘teach’ them about the Seven Dimensions of Learning Power. The concepts are abstract. The language is specialised. It is important to stimulate higher order thinking and introduce new language, but it needs to be managed carefully, so as to avoid parroting the top-down, didactic transmission of knowledge that turns some people off.

In the early stages of the ELLI research, feedback from creative practitioners underlined how important for developing learning power were metaphor and story: tools of creative teachers through the ages. This Chapter is about how such teachers have found ways of getting the abstract concepts of the Seven Dimensions across to learners of all ages, engaging them in what they mean and what they can do for their learning.
Some of the first schools to develop strategies for learning power in classrooms were the primary schools in Bristol, who were early movers in the development of a more creative curriculum. One class were doing a topic on Africa at the time when their teacher first came across the ELLI Dimensions. The class played a game to decide which African animal should represent each Dimension, so ‘Gerald the Giraffe’ became Critical Curiosity, ‘Marvin the Monkey’ became Creativity, and so on. More imaginative still, the teacher then had glove puppets made and allowed the animals to do some of his teaching for him.

Some children who had encountered these puppets when they first arrived at the school, were interviewed years later when they were in Year 5. They remembered the puppets vividly and recalled how influenced they were by the characters who personified the seven dimensions:

*In Reception, you think the puppets are amazing, so you do everything they say!*

### 3.1 The ELLI Animals

When ELLI was first being made ready for wider distribution, training materials needed to be written and the question arose how best to communicate about ELLI and the Seven Dimensions of Learning Power in a way that was accessible to everyone, from youngest learners up.

The starting point was someone saying ‘What about ELLI the Elephant?’ so the idea of animal metaphors began with ELLI herself. Then the others emerged, as you can see in the table overleaf.

A story was written about ELLI and the Bear. The Bear wanted to find a cave in the mountains to be his new home and ELLI agreed to help him by accompanying him on ‘A Learning Journey’, which turned out to have lots of obstacles and difficulties along the way. Of course, ELLI introduced Bear to all of her friends, the learning power animals, one by one. The animals gave Bear and ELLI their gifts: the Owl gave them the ability to see and plan ahead and foresee problems and opportunities; the Unicorn gave them her creativity and imagination, to think of new ideas; the spider helped them to link all the ideas together into a web of meaning; the Cat gave the curiosity to ask questions and get to the bottom of problems; the Tortoise gave them the courage and persistence to keep going when the journey got tough; finally the bees showed them how to achieve the impossible by working together and pooling strengths.
In almost all the schools and places where these animal metaphors were used to get the seven learning power dimensions across, children and adults seemed to love them and the ideas caught on very quickly. Corridors and classrooms became menageries of stuffed animals populating magnificent displays, surrounding young learners with reminders of the seven concepts. Drama worked particularly well to support the imagery. One team of teachers decided to dramatise the ‘Learning Journey’ story for their students.

In another school, professional actors were hired through a social enterprise called ‘Creative Partnerships’ and briefed to represent these seven characters, their gifts and strengths and ways of behaving. In both cases, the theatrical personifications of the concepts had a remarkable impact on the students who remembered the occasion and the meaning and value of each of the Seven Dimensions with complete accuracy weeks later.
3.2 Inventing new images and icons

When they were working on their project at the time of Brunel’s bi-centenary, the six Bristol primary schools invented a whole new set of icons to represent the Seven Dimensions of learning power, to focus and simplify the way they planned new learning activities. With Brunel’s life and work providing the content and the principles of ELLI providing the processes, they devised an enormous compendium of learning resources for all the subjects of the primary curriculum, in animated Power-point slides, made available on a public website celebrating the bi-centenary on behalf of Bristol.

<table>
<thead>
<tr>
<th>Chamy the Chameleon</th>
<th>&quot;I see learning as something I can get better at, and myself as an improving learner. This often reflects a more general interest in 'self-improvement', and faith that this is possible. I have a sense of history and of hope. I tend to take ownership of my own learning, and like to be responsible for what I'm learning and how I go about it. I'm usually quite ready to 'sign up' to learning tasks that are presented to me&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changing and learning versus being stuck &amp; static</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Charlie the Cat</th>
<th>&quot;I like to get below the surface of things and see what is really going on. I like to work things out for myself, and to ask my own questions. I tend to go looking for things to understand better, rather than just responding to problems that come my way. I am usually excited by the prospect of learning, and have a good deal of energy for learning tasks and situations. In general, I'm attracted to learning and enjoy a challenge. I value getting at the truth.&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical curiosity versus passivity</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sammy the Spider</th>
<th>&quot;I tend to look for patterns, connections and coherence in what I am learning, and to seek links between new situations and what I already know or am interested in. I'm on the look-out for 'horizontal meaning' I like to make sense of new things in terms of my own experience, and I like learning about what matters to me.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning making versus data accumulation</td>
<td></td>
</tr>
<tr>
<td>Animal</td>
<td>Trait</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td><strong>Jasper the Unicorn</strong></td>
<td>Creativity versus being rule bound</td>
</tr>
<tr>
<td><strong>Topol the Tortoise</strong></td>
<td>Resilience versus fragility and dependence</td>
</tr>
<tr>
<td><strong>Ollie the Owl</strong></td>
<td>Strategic awareness versus being robotic</td>
</tr>
<tr>
<td><strong>Bessy the Bee</strong></td>
<td>Positive learning relationships versus isolation or dependence</td>
</tr>
</tbody>
</table>

Table 3.1: The 'English' ELLI Animals
Here is an example, for science:

## Subject: Science / D.T.

<table>
<thead>
<tr>
<th>Focus Question</th>
<th>Connecting Activity</th>
<th>Whole Class Teaching</th>
<th>Elli Based Activity</th>
<th>Plenary / Assessment</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you able to design a bridge using engineering principles and a bridge building design package?</td>
<td>Look at images of some of Brunelli’s bridges – the Clifton Suspension Bridge and the New Albert Bridge (the Brunelli Information PowerPoint). What patterns can you see in the construction? What materials have been used? Ask for each group to read a question on a post-it note or if they could ask the group a question what would it be?</td>
<td>Design force work and revisit the website below to look at the advantages / disadvantages of different materials and shapes. <a href="http://www.bsp.org.uk/bridges.html">www.bsp.org.uk/bridges.html</a>.</td>
<td>Downloadable programme from the web and run without internet access. Children attempt the challenge in pairs. Do you need for ‘book-ability’ at regular points in the activity.</td>
<td>How successful were you? At each stage when the design was tested and evaluated what did you learn? How useful was this evaluation process to your learning? Did you learn something even if you didn’t complete the unit? All of the other lessons in life and the idea ‘What would you do differently next time?’</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work through the introductory information of the West Point Bridge contest.</td>
<td></td>
<td></td>
<td>Computers 1.2 Photos Web link Display posters if available Brunelli Information PowerPoint</td>
</tr>
</tbody>
</table>

![Fig 3.4](Image) A ‘Brunelli’ Science Unit

When the project involving NEET learners and young offenders was being planned, it was important to make sure that they did not feel patronised or underestimated in any way so, instead of using the ELLI animals to introduce the Seven Dimensions, another new set were put together using ‘Simpsons’ characters. A presentation was created called ‘The Simpsons Guide to Life’, starting with the questions ‘What’s the point of learning?’ and ‘What makes a good learner?’

![Fig 3.5](Image) A slide used to introduce ELLI to NEET learners

Some new language was used to develop and sharpen the ideas, too: what came to be known as the ‘zone language’. More useful than how well (or not) the Simpsons’ family and friends personified the seven dimensions, zone language opened up the idea that anyone can ‘step into the zone’ of creativity, curiosity, resilience and so on. A zone is something we can enter as ‘whole people’, not just with our minds and intellects, so the language was symbolising something important, that our young, originally quite disaffected learners seemed to take on board with remarkable ease.
<table>
<thead>
<tr>
<th>Changing and Learning</th>
<th>The ‘morphing zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Building ‘learning muscles’</td>
</tr>
<tr>
<td></td>
<td>■ Realizing you can get better at learning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Critical Curiosity</th>
<th>The ‘detective zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Asking questions and getting under the surface of things.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Meaning Making</th>
<th>The ‘jigsaw zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Fitting things together to make a bigger picture</td>
</tr>
<tr>
<td></td>
<td>■ Working out what it all means to YOU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creativity</th>
<th>The ‘springboard zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Thinking around things</td>
</tr>
<tr>
<td></td>
<td>■ Coming up with new ideas, sometimes a bit crazy!</td>
</tr>
<tr>
<td></td>
<td>■ Trusting your hunches</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resilience</th>
<th>The ‘gritty zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Not giving up, even if it’s tough</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Awareness</th>
<th>The ‘pilot zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Making ‘battle plans’</td>
</tr>
<tr>
<td></td>
<td>■ Thinking about how you are going to do something</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Learning Relationships</th>
<th>The ‘team zone’</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>■ Being able to work well by yourself, or with other people</td>
</tr>
</tbody>
</table>

Table 3.2: The Simpsons Zones
3.3 The Australian Animals

Perhaps the most inventive and unusual work to create a narrative 'bridge' to these concepts is embodied by the story 'Taronga Zoo Breakout', starring a new set of Australian bush animals. It was created by a group of indigenous students at Singleton High School, New South Wales, Australia, working with their teachers, an indigenous tutor from Newcastle University, New South Wales and a member of the ELLI Research and Development team. A former indigenous student of the school, now a graphic artist, added life to the animals through vivid images. They had heard the 'Learning Journey' story, with the Bear, ELLI and her seven 'friends' and responded to the ideas, but they wanted a story with animals of their own, reflecting the deep connection of their indigenous culture with the land and symbolic meaning. This story, ultimately ratified and adopted by the elders of their community, became the focal point of the research project based at their school, which was entitled 'Learning, Place and Identity'. It assumed an almost spiritual power, in the setting for which it was intended and in which it was conceived, moving some adults to tears when they heard it read aloud.

The most important message here for users of ELLI is about the power of involving learners in creative exploration and narrative re-working of the Seven Dimensions, which can lead them and their meaningfulness to become deeply embedded in the lives and learning of a learning community.

Play a game:

Think of some metaphors of your own to represent the Seven Dimensions of Learning Power.

Try it with your class, once you have introduced them to the concepts using some of the metaphors in this chapter, as a way of deepening their understanding of the ELLI ideas.

'Taronga Zoo Breakout' is reprinted here, with acknowledgement and thanks to the Wonnaruh Community, its elders and the students and teachers at Singleton High School.

Fig 3.6: Indigenous students at Singleton High School in their traditional gear
Taronga Zoo Break Out

This is a story about some animals that lived in a zoo called Taronga which is in Guringai country. Most of these animals came from different nations that were all over the land that is now called Australia. All the animals would dream about the time when they could return to their own country, hear the stories from the elders, learn the laws, know the ways of their land. At night when all the people were gone they would gather in their language groups and talk about the old ways, the good ways, when there were no fences and captivity. One group of animals were from the Wonnaruah nation and had their own names in the language. A willy wag tail or didijiri, the emu or kungkurung, the snake or tanipa tang, the eagle or ka-wul, the echidna or kuntji kukan, the platypus or pikan and some ants or yunrring that were nearly always too busy to stop and talk. Always the talk would turn to their dreams and of the country that they all wished to return to.

All of them thought about escaping from time to time. The same idea would come to each of them sooner or later: 'The trouble is, I'm just not getting anywhere, stuck in here! I'd really like to make something of my life, do something different, see something different, experience something different... learn something new... sometime. My dream is to return home and make a difference to my people, to show them how to achieve their goals and live out their dreams.'

Some of them would mumble these thoughts aloud to themselves, but every time that happened the wind would get up and whistle and snap through the telegraph wires and sing a sad note, which always seemed to be saying, "In your dreams, my old buddy, in your dreams...dreams...dreams..."

One cold winter's night Willy Wagtail was sitting on the fallen gum tree near the pond, talking to Snake about what he could imagine was beyond the zoo gate. He could imagine what home must be like and would tell them stories of what he thought they would all be doing.

He was full of dreams, was Willy Wagtail. He was always coming up with new ideas. He sort of kept himself happy by just telling the others what imagining was like, what it would be like outside, flying free and feeling the wind beneath his wings, taking him wherever he wanted to go. He could talk, that bird, make up stories, think of things... and he had never, ever, in his whole life, said the same thing twice!
Willy’s chatter about his wild ideas made the snake think all the more about how he wished he could get out and return to his home. The Snake’s mum had told him, when he was no more than a tiny twister, not to worry about anything, because if he was ever in a tight corner he would learn to wriggle out of it and shed his skin. That way he would grow bigger and stronger and one day he would return home and be able to eat things so big......... all in one gulp. That was how Snake sort of kept himself happy: not thinking about the biggest lunch in the world, but by believing that he would always grow and change and learn so that, one day, he would find a way out of this place.

He watched with a sigh as the last children left the enclosure, the new warden turned his key in the lock and the floodlights went out, one by one.

“What’s the matter, eh?

The Emu was looking at Snake, all curled up in his corner. Emu just needed to know what was going on in his head. ‘No! Don’t just curl up! What’s the matter with you? Why are you looking so sad? Tell me!’

Once Emu had asked a question – and, boy did he ask questions! – he just wouldn’t let it drop till he knew the answer. It was unusual for someone to ask so many questions. Snake didn’t know anyone else quite so curious. He slid his beak under Snake’s head and lifted him up until he was looking right into his eyes. Snake thought this was quite rude. You shouldn’t look at people straight in the eyes, well that is how he was taught.

“Well? What’s going on?” asked Emu again.

Snake told Emu about Willy Wagtail’s dreams and how they made him think of his own country about what his mother had told him about his land, about how sure he was he would grow and learn and everything would change, one day, but he didn’t know how. He didn’t tell him about wanting to swallow the biggest thing he could find for his lunch.

Emu listened intently. He was always fascinated, by everything, but he wanted answers. ‘What do you mean, you don’t know how?’ He peered, wonderingly into Snake’s eyes. ‘We gotta find out how. That’s how!’
'Yes.' Snake nodded slowly, then stopped. 'But how?'
'What d'ya mean, “How”?'
'How do you find out how?'

Suddenly, Snake found himself asking questions, just like Emu.

Emu looked at Snake with the sort of look that made Snake feel he must have missed something stupidly obvious. “Well, you start by asking questions, just like you started to do then” replied the Emu. “That’s what I do! You don’t find out things unless you ask questions! It’s OK to ask questions sometimes, especially when you are learning and want to find out something that you don’t know. That’s when it is OK to ask questions.”

Snake saw the point. He thought he could have a go at that, but he needed a bit of help to get started. ‘OK then so I will ask a question like “How do I get out of this place?”’

He looked at Emu for a reply, but Emu was just staring back at him in silence until, after several seconds, he just said, ‘Go on!’
‘Go on where?’
‘OK!’ said Emu with a quick sigh. ‘Listen to me.’
‘OK!’ said Snake.
‘Do you want to get out of this place?’
‘You know I do! I’ve told you that!’
‘Why?’
‘So I can grow and learn and see new things and grow and change and expand my mind and help my mob find food and water when it is scarce, be a good leader if I am chosen.’
‘Why?’ interrupted Emu.
‘Because that’s what I do. That’s what I’m good at, but there’s not much chance of it in here.’
‘Who can help you?’ said Emu.
‘What?’ said Snake.
‘Has anyone got out before?’
‘I dunno…’
‘How did they do it? What tools do you need? What do you need to know? Who can you ask? When would be the best time of day? What’s the security like? When does it change? What’s the weak point? What do you need to take with you? Does anyone else want to come? What can they bring to the party?’

“Goodness!” said Snake admiringly. “What a lot of questions, I wish I could do that sometimes when I don’t know an answer.”

‘The answer’s “Yes!” by the way.
‘What?’
‘The answer’s “Yes!” There is a fella wants to come too. Me!’

‘Make that two!’ came a quiet, squeaky voice from just behind them that made Emu jump.
‘Ouch!’ shouted Emu. He had landed on Echidna.
One by one many of the animals started to draw nearer. As the animals rearranged themselves beside the fallen gum tree so that they could go on talking without being pricked by Echidna, Snake looked up for a moment and saw that the Eagle, high on a perch above, was watching them with her piercing eye and seemed to be listening to everything they were saying. At that very moment, she glanced up at the full moon and nodded to one of her companions, who dropped off the perch and glided away out of sight.

‘I can help you to achieve your dream,’ Echidna started speaking, slowly and firmly. ‘Follow my example and you’ll get there in the end. Lots of people fail because they give up before they’ve even begun. They allow themselves to think that they are not good enough, or clever enough, or brave enough to make their dream come true. They do not realise that their mentors, the ones they look up to, were no different from them when they set out.’

She shuffled herself a little deeper into the red dirt and went on. ‘When the going gets tough, that’s just how I like it. Nothing knocks me off my path. If I’m in danger, I can dig myself down into the ground and put my spikes up so that’s all they can see of me. And they always run out of patience before I do. Patience is my second name! I do patience! So I always get there in the end’.

For the first time since Willy Wagtail told him about his dreams, Snake felt a stirring of excitement wriggle all the way down his coils. He was beginning to get it. He started to feel himself grow and change. He was already learning to ask questions and be curious, like Emu. Now he was learning how important it is to be patient and stick at things, like Echidna. His skin felt tight, all of a sudden.

At the same moment, there was a slap on the water beside them and Platypus came to the surface, flicked the water off her beak and opened her eyes. ‘I had a feeling that something was going on,’ she said. ‘I sensed it in my beak!’

‘That’s clever of you!’ said Snake.

‘Typical!’ said Echidna.

‘How?’ said Emu.

‘Oh, I just put two and two together, if you see what I mean,’ the Platypus replied, airily. ‘I pick things up, here and there, you know. I have a nose for meaning.’

‘You mean a beak!’ chipped in Emu, but Platypus ignored him.

‘I understand what happens when you listen to Willy Wagtail and his dreams and I know it matters. Imagination is like a window to another world. It sets you off, like a tunnel to the outside. Once you are moving, you just follow your beak.

‘Then Emu, with his busy, enquiring little mind gets going and you, Echidna: you and your determination! It’s not difficult to put all that together and make sense of it. Change is coming! I can see it a mile off. Just look at your skin, Snake! You’re ready to grow out of this place, aren’t you?’
'You hear that?' chirped Willy Wagtail, who was fluttering back and forth. 'Snake’s got a new motto: “Growing Places!”'

'Nice one, Willy!' Platypus went on. 'I’ll come with you, if you’ll have me. I’ll help you to make sense of all this. I connect everything up in my head, you see, like I do with my tunnels.’ She rubbed her beak, briefly. 'What’s going on inside, what’s going on outside... it’s all connected. Once you understand that, you understand everything!'

Snake looked at her with amazement. What a clever, knowing animal she was. He wondered if he could learn this ability to relate everything to everything else so it all made sense.

'I think you’ll find that’s why Eagle has sent the ants to join us,’ Platypus nodded in the direction of the red mound over by the glass wall and, sure enough, two scout ants appeared along the bank and scurried up and on to the silver bark of the gum tree, which had now become a very special meeting point.

'Hi, everyone!' the first ant whispered, so all the animals moved a little closer. Willy Wagtail hopped down on to a lower branch and used a curled up gum tree leaf as an ear-trumpet so he would not miss a single word.

'We are calling all the animals together at Eagle’s command,’ the ants said together. 'We know how important teamwork is. We know how to work on our own and together for the good of our colony. That is why Eagle asked us to gather you. Every one of you has a special gift and each of you will have your own part to play which is special and only you can do it. But we’ve also got to work together, listen, learn from each other, contribute our own ideas and draw strength from the power of the group.’

Snake looked around and became aware of the presence of all the animals in the zoo, like shadows, encircling the fallen gum tree by the man made pond.

A shape flashed across the light of the moon and its shadow fell momentarily on the scene. All the animals fell silent. The Eagle landed, a little higher up the leaning gum tree, spread her wings magnificently and folded them away with a shake of her feathers. No one spoke. They were all eager to hear what the Eagle was going to say.

'The moment has arrived. We have anticipated it. Now, everything is in place. Under the full moon, I have called you together to combine your strengths,
summon the power of all your learning and fulfil your dream of returning home to your country. I have planned for this night. I see everything, from the smallest ant to the whole zoo, the city and the vast bush, stretching out West as far as the eye can see. ‘I see each moment: how it arrived on the wings of the past and how it will launch into the great sky of the future. Learn from me as you have learned from each other. I give you your purpose, your direction, your focus and, most important of all, your readiness to accept your responsibility to yourself to achieve your dream.’

All the animals breathed a deep breath of the midnight air and solemnly vowed to accept their responsibility to themselves and the group. It was a bit hard to understand what eagle was exactly saying but once they had thought about it for a little while and talked quietly to each other about what eagle meant, they knew that, before the night was over, if they all played their part, they would be free.

In one hour, the plan was hatched and the break out from Taronga had begun. They marvelled at the way everything came together through their combined gifts: Willy Wagtail’s creativity, when he came up with new and surprising ideas; Emu’s curiosity, to question every detail and check it out; Platypus’s meaning making, to make sure that every part of the plan fitted together and made sense and Echidna’s resilience, to keep them going even though it was late and most of them were tempted at least once or twice just to let their eyes close and nod off to sleep. The ants moved amongst them, encouraging them all to listen and learn together. The Eagle spoke only occasionally: her planning had brought them together in the first place, but her few contributions were perfectly judged to keep the animals focussed on the task ahead of them. And Snake? Well he just swelled with pride and grinned at everyone, giving them the confidence they needed, to know they were definitely heading along the right path to home.

The story of the break out from Taronga Zoo became famous throughout the animal world, to be told and retold for generations to come: how the Eagle had foreseen that, one day, a new warden would arrive and make a fatal mistake; how she had spotted that warden’s keys and money placed on the table by the open window every night and decided she could afford to wait for the full moon; how Emu, whose job was to grab the keys in his beak, had nearly blown the whole plan when he saw his reflection in a fifty cents piece and attracted the warden’s attention by insisting on an explanation (‘Does that mean I’ll already be famous when we get out?’ was the fatal line), before clamping his beak shut just before it was too late; how Eagle had used her razor sharp claws to make a hole in the bird cage netting, and her beak to snap the warden’s telephone wires (at Willy Wagtail’s suggestion); how the ants had marched up the gum tree and (also at Willy’s suggestion) continued all along Snake to get to the other side of the glass wall, where they started to mine a hole under the main fence; how the Platypus had finished their work, making a permanent connection between the inside and the outside and, gloriously and finally, how Echidna, being the slowest and last to leave, had hidden in the dirt of the road outside and punctured the tyres of the warden’s bicycle as he pedalled for help.

No one really knows how long the animals took to make it back to Wonnarauh country but when they arrived they began to get busy and learnt how to live out their dreams, by following the knowledge that was there waiting for them, as old as the land itself. They understood that to achieve your goals you must become strong in your culture and bring it into your learning so that you can make sense of the path to success. They understood that they must encourage one another to be successful and live out new dreams.
One day, they got together again and agreed that they should leave the bush. One dream had been fulfilled. The city children had been sad to lose them. The bush would always be there when they needed to go back to it. They had learned how to travel. They had all survived crossing the F3 the busiest road in their world, to get back to country. It had taken skill, determination and courage to do it but together they had made it, and had learnt together how to do it. Now, they knew they would go on learning for the rest of their lives. They would never go back to the zoo. They had returned home to the Hunter Valley, home to the Wonnaruah people, their home. Today the animals are working around the schools of the Singleton area, helping children and students to grow and change by passing on their truths and being everlasting symbols of what they discovered on their adventure.

On a winter’s night, in the light of a full moon, a silver snake skin lay glistening on the ground, near a billabong beside a fallen gum tree. The wind gets up and whistles and snaps through the telegraph wires, singing a brave note in Wonnaruah language which seems to be saying, “Follow your dreams, buddy! Follow your dreams... dreams... dreams”
Chapter 4

The first level of impact: the individual learner

The evidence gathered through these enquiries has included many fascinating insights into the impact that ELLI has on individuals, groups and whole organisations. This impact is seen to work at five levels, starting with the most important: impact on the individual learner.

This Chapter focuses mainly on that individual response, which is at the heart of what ELLI is seeking to inspire: people choosing change. Four further levels of impact are described in detail in the following four chapters: the impact of coaching or mentoring, adapting teaching and learning, curriculum design and systemic change.
4.1:  A personal response to an ELLI profile

At the school in Cumbria, on the first qualitative data collection visit, this small item of feedback was reported by the researcher:

One student stated that she had changed, simply in response to receiving her profile, by doing her homework the day after it was set, rather than leaving it to the last minute. She said it had been stressful before.

This illustrates the power of the spider diagram, the ELLI Profile, when received and interpreted by a learner. The eleven year-old student in this story had seen the Seven Dimensions personified by the professional actors and had a good understanding of what they were about. Then she saw, graphically illustrated by her profile, that her Strategic Awareness was significantly weaker than her other learning dimensions. She probably thought to herself, ‘Yes, I do miss deadlines. I often forget to think and plan ahead. I get into trouble for not having things with me and forgetting to do my homework. I need to be more organised!’ So she made a start and decided to change, without even needing the benefit of a conversation. One result was a less stressful existence!

This is what ELLI is really all about: recognising that the desire to change and improve is already there in all of us. Teachers all over the world are expert at directing, chivvying and persuading pupils to follow guidance and instructions in order to get their levels and grades. What we are trying to do with these interventions, though, is not make people behave differently but encourage, inform and support their natural desire to change and improve.

Another project which demonstrated this well was the one in a Malaysian Sixth Form College, where the students were mostly ‘A-graders’ already. The teaching was excellent, if largely traditional and subject based. There was a lot of listening to the teacher, note-taking and diligent solitary study by very able students. Teachers often had to work quite hard to provoke discussion and questioning in class. There, it was the personal tutors, responsible for the students’ welfare and progress, who took on the work of introducing ELLI to their own groups and supporting them in interpreting their profiles. After a year, when a whole year group of 284 students had increased their mean scores on all seven dimensions quite significantly, they were asked to what they attributed the changes. A majority of the students reported that their own decisions to change the way they learned had led to the gains they had achieved in their learning power profiles (See Case Study 2 below).
This was a powerful illustration of the power of ELLI to support learners in taking responsibility for their learning. They already had the motivation and the ability to improve and achieve. Their ELLI profiles had given them a sense of direction and a reason for choosing to change.

A point made often in the training given to people intending to lead an ELLI project is that the survey is a self-report inventory. It is not like a measure of cognitive or other ‘fixed’, innate ability, nor of personality type. The resulting spider diagram is simply a rearrangement of information that the learner has provided about how she tends to think, or feel, or act in every day learning situations at this point in her development. It is ‘owned’ by the learner and is therefore principally for acting on by the learner, not by someone else on her behalf.

The extent of this first level of impact, the power of the spider diagram in the mind of its owner, depends on what researchers call ‘face validity’: in other words, learners tend to agree with their ELLI profiles and find them useful, taking them ‘at face value’.

Rather than taking for granted that this would be so, it was part of the research and development task to keep checking it out. This specific aspect has therefore been tested in some of the studies, particularly where the inventory
was used for the first time in a new kind of setting. The project involving fourteen universities in the UK was a case in point and one of the findings was that the face validity appeared to be strong, as illustrated by the comments in Case Study 2 below.

**Case Study 3: In a project involving fourteen universities and other Higher Education Institutions in England, the face validity of the ELLI survey and profile was found to be strong. Participants commented on the ease of the process, the positive, 'intriguing' or visual impact of the profile and the usefulness of the Seven Dimensions.**

**Learners said things like:***

My profile confirmed what I knew about myself and how I learned

It shows you what you are, the profile. You ask 'What does that... and that mean?'... then think, 'That's true!'

The profile was very interesting as far as I am concerned. ... The result from my first time was very accurate

**and their tutors said thinks like:**

I think the most important single element was actually the students receiving the first profile: the impact was significant

The face validity was high

Keep in mind the story of the student who responded to the impact of her own profile by choosing to change and remember the stories of the Malaysian sixth formers who deliberately changed their own way of studying, as we now turn to the second level of impact: the impact of mentoring conversations, which is what the following chapter is about.
Chapter 5

The second level of impact: coaching or mentoring - one of the most powerful interventions of all

In most cases, personal tutors and others who coach or mentor learners on their ELLI journeys have already completed the ELLI questionnaire and remember what it feels like to see ‘my own profile’ for the first time and start to interpret it. That is why it is important to remember the stories in Chapter 4 about the personal desire and decision to change. The role of the mentor is to help each individual learner to find and use her capacity to turn self-diagnosis into a strategy for change. When adults are in the learner role it may make more sense to call it ‘coaching’, as the term ‘mentor’ implies a wise, perhaps older guide rather than peers working side-by-side. This chapter will explain why mentoring (which for our purposes here includes coaching) has been found one of the most powerful interventions of all.
5.1 Turning self-diagnosis into a strategy for change

In a project with 199 students in their first year at a secondary comprehensive school, St John's, Marlborough, in the South of England, the school decided to invest in adult mentoring time as one of their key interventions. The ELLI Tips for learners (since published as flashcards in Deakin Crick, R. 2006) were made into laminated bookmarks using the ELLI animal icons to distinguish them and make them attractive. (They are re-printed at the end of this Chapter, with acknowledgement to Sage Publications.) The mentoring conversations, of about fifteen minutes, were to happen every five-to-six weeks for each student.

In the first of these conversations, the learner’s ELLI profile would be used as the reference point. This was what they were there to talk about: a picture representing what the learner had said about herself in terms of her learning power. This principle of self-report and learner ownership is emphasised strongly in the ELLI Workshops at the start of any project. The first meetings followed three principles, shown in the box on the right, to make sure that learners did not see ELLI as ‘just another test’, or something that the schools know about their students better than students know about themselves, like ‘Cognitive Ability’ or ‘Value Added’.

The purpose of the mentoring is first, to empower, second, to build confidence and, third, to help learners connect up and make sense of the learning power dimensions in relation to their own experience and aspirations. This is how a kind of ‘alchemy’ is made possible: where self diagnosis is turned into strategy.

Before the first conversations ended, learners had mostly agreed with their profiles, had understood that they could use their strong dimensions to work on weaker ones and had chosen, with the help of the mentor, both one or two dimensions to work on and one or two strategies, from the bookmarks, for each. The principle of the learner making these choices is paramount. They finished by ‘contracting’ to try out the chosen strategies and report back, bringing evidence if appropriate to the next conversation, which would be scheduled there and then in diaries and planners. The following meetings would then have a clear purpose and structure, about reviewing progress, recounting experiences, exploring feelings, trying out ideas and more suggestions.
When feedback was collected from the students and staff, the mentoring was reported almost universally as the single most powerful intervention, with tutors saying such things as ‘Mentoring is key!’ or ‘Crucial!’ and many students saying how helpful they had found it to have someone to ‘set targets’ with and report back to (See Case Study 4)

Guidance for mentors: supporting students with interpreting their profiles

**Principle 1: EMPOWERING**
(students need to own their own profiles and strategies)

- start with: “What do you think about your profile?”
- “How well do you agree with it?”
- listen actively; let the student lead as much as possible
- ask open questions to be helpful – ‘How could you/we follow this up?’ ‘What do you want to focus on first?’

**Principle 2: BUILDING CONFIDENCE**

- start with the strengths
- strong dimensions can be used to build the others
- use your judgement to match the level of challenge to each student’s level of confidence/need for support
- use positive language: ‘areas for development’, not weaknesses – ‘opportunities’, not threats

**Principle 3: CONNECTING UP**

- ask students to remember examples from their experience to appreciate how their profile reflects themselves as learners
- point out the links between the seven dimensions – how they interconnect and support each other
- ELLI profiles are about whole people and whole lives: what we think and feel and do in our learning, for life.

Table: 5.1: Some principles for ELLI coaching or mentoring

Fig: 5.3: An ELLI coaching conversation at the University of Worcester

When feedback was collected from the students and staff, the mentoring was reported almost universally as the single most powerful intervention, with tutors saying such things as ‘Mentoring is key!’ or ‘Crucial!’ and many students saying how helpful they had found it to have someone to ‘set targets’ with and report back to (See Case Study 4)
An important proviso given by these tutors was about sustainability. They realised that the success of the mentoring sessions depended upon the promptness and enthusiasm with which the conversations were remembered and picked up on next time round. One of them summed it up:

‘If I didn’t keep this alive, it would die. Sustainability is a key idea.’

### 5.2 Tackling underachievement: mentoring in Bedfordshire schools

This approach to mentoring, using the ELLI profiles as a framework for the conversations and selecting ‘action targets’ from the ‘ELLI tips for learners’, turned out to be an important strategy for helping under-achieving students in three schools in Bedfordshire.

This was a research project run by the University of Bristol, using the ELLI inventory to investigate why some learners appear to achieve at a lower level...
than they are capable of. A sample of about 105 fifteen year-old students from the three schools were identified as ‘underachieving’, many of whom were doing quite well, but significantly below the levels indicated by their previous results and their ‘cognitive abilities’. The data from ELLI inventory suggested that underachievement is associated with weakness in four out of the Seven Learning Power Dimensions: Changing & Learning, Critical Curiosity, Meaning Making and Strategic Awareness.

From the sample of underachieving students, eighteen in all, six in each school, were offered intensive mentoring support by the research team, focussing on strategies related to these four critical dimensions.

The mentoring sessions were mostly conducted by two researchers, meeting each student in turn for about fifteen or twenty minutes on average every three weeks. One researcher took the lead whilst the other observed, recorded and chipped in with questions from time to time. The early sessions were all about a shared understanding of the purpose of the meetings and winning the trust of the students. They developed like this:

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<thead>
<tr>
<th>Session 1</th>
<th>Introducing ourselves and the ELLI work:</th>
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<tbody>
<tr>
<td></td>
<td>• explaining the project looking at students’ ELLI profiles with them;</td>
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<td></td>
<td>• explaining the Seven Dimensions again if asked to;</td>
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<td></td>
<td>• helping students to relate the profiles to their own experience, especially looking at their ‘stronger’ dimensions;</td>
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<td></td>
<td>• supporting them in choosing dimensions to ‘work on’;</td>
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<td>• offering copies of the ELLI Tips for students and agreeing one or two strategies to try out between now and next time.</td>
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<th>Session 2</th>
<th>Renewing acquaintance:</th>
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<td></td>
<td>• asking how school was going; whether the student had been able to make any progress with the strategies chosen;</td>
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<td>• either sympathetically exploring the reasons why not or hearing about what the student had done differently, how it felt, who helped or hindered them, how easy or difficult it had been to do;</td>
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<td>• reflecting on the purpose and potential value of the changes in terms of the dimensions being worked on.</td>
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<th>Session 3</th>
<th>As trust builds up:</th>
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<td></td>
<td>• noting and enjoying personal reflections on school, particular lessons, home, relationships, obstacles, successes;</td>
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<td></td>
<td>• hearing accounts or looking together at evidence brought to the meetings of changes made: mind-maps, task lists, planners being used, learning areas created at home, questions asked in class;</td>
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<td></td>
<td>• asking for the stories behind the changes, reflecting back any difference they are making to the quality of life at school and home.</td>
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As the sessions went on and relationships became stronger, it became possible to challenge the students about their decision making and get them to engage with the whole idea of taking responsibility for their own lives. A common example involved working on **Critical Curiosity**: several of them (at first reluctantly) agreed to put their hands up in class and tell their teachers when they did not understand something. As time went on, they reported that their relationships with their teachers improved, they were less often stuck when it came to homework and were getting more interested in lessons. **Case Study 5** below shows how the same kind of challenge was introduced into conversations with students who had chosen to work on their **Strategic Awareness**:

Soon, the students started bringing diaries or planners to the mentoring sessions. Some would show scruffy task lists on post-it stickers, ready to be discarded. Some had charts for each week, setting out their homework timetables and other commitments. One explained why he had used a pencil so he could erase and change his plan when the unexpected happened. He said how much easier he found it to adapt like this because he had a plan in the first place. Several of the students described quite chaotic environments at home, with younger siblings demanding attention and nowhere quiet to sit and do homework. They had used the mentoring sessions to help them negotiate changes with their parents and carers, creating uncluttered spaces in their own rooms, free from distractions and interruptions, with all the relevant information to hand.

In every case, these changes had been decided on by the students themselves, responding to suggestions and ideas but knowing that they were free to accept or reject them. The mentoring principle of empowerment was practised scrupulously: offering support, encouragement, interest, ideas... but very little judgement and no disapproval when they chose not to try something or failed to bring evidence they had promised next time. The mentor’s first responsibility was to ensure that these students really were in charge of their own decisions, not just ‘doing as they were told’ or trying to please. It was interesting that one of their teachers said, ‘We’ve been telling them to use their planners ever since they came to the school two years ago. Why has it worked this time?’ The answer surely has something to do with the students at last seeing the sense in it for themselves, in the light of their own ‘learning story’.

Towards the end of the project, exams were approaching and the mentoring sessions included looking strategically at revision planning. Most of the students decided to use a system of record cards, organised by headings that they had created with a mind-map. Each card contained one key fact or idea, with up to three bullet points of commentary. They could then be used like playing cards, dealt in a different order in response to each specimen exam question, so as to rehearse the decision making and Meaning Making skills that would be needed under pressure of time in the examination room. They were also a handy last minute ‘refresher’ to review all the material at a glance.

The most rewarding stage of these conversations was reflecting back after several months on what had happened to these fifteen year-olds, who had experienced significant, positive change through their own decision making. It was a common theme amongst them that their lives had become less stressful.
They said they enjoyed their leisure time better; they felt much ‘lighter’ about coming to school; they were not getting into trouble as much; their teachers were taking them more seriously. When asked, they admitted to feeling a whole lot better about themselves and their future because they had experienced, first hand, what it was like to take some measure of control over their own lives.

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**Case Study 5:** Mentoring conversations with underachieving students in Bedfordshire focussed on four critical dimensions: *Changing & Learning, Critical Curiosity, Meaning Making and Strategic Awareness.*

**Strategic Awareness**

Mentor: From what you say about your average day at school, you sound as if you are a bit like a truck driver driving in a tunnel with a blindfold on! Your life is a whole series of collisions:

‘Have you got your homework, Sam?’

‘Oh! No! Sorry, Miss, I forgot it!’

‘Where’s your text book, Sam?’

‘Sorry, Miss, I left it at home.’

‘Didn’t you have a Careers Interview today, Sam?’

Crikey! I’m late for it! See you later!

Does that sound familiar?

Do you think you might try taking the blindfold off? Try looking where you’re going? It might make all the difference. That’s what Strategic Awareness is all about – having a sense of where you are heading and why, looking forward and being intentional about how you use your time, instead of always just living in the moment and waiting for someone or something to press your buttons.

Let’s have a look at some of these tips for students. See whether you fancy trying any of them out for yourself.

- Make planning charts for yourself, in three formats: weekly plans for the time you control; termly plans with assignment deadlines and main events; a yearly plan, with holiday dates, major tests, exams and coursework deadlines and big events you are involved in, like performances or trips

- Make practical lists: daily to-do lists; lists of equipment needed; questions to ask others; bright ideas that pop into your head at odd times; shopping lists of what you need to buy or ask for. Use post-it stickers that can move between your work area and your diary/planner and be thrown away when all items are crossed off

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They said they enjoyed their leisure time better; they felt much ‘lighter’ about coming to school; they were not getting into trouble as much; their teachers were taking them more seriously. When asked, they admitted to feeling a whole lot better about themselves and their future because they had experienced, first hand, what it was like to take some measure of control over their own lives.
5.2 How important is mentoring?

The findings from these projects impressed upon the ELLI research team what a powerful and important factor mentoring is in using ELLI to stimulate personal change and growth. One of the settings in which it was applied in the Higher Education project was even more illuminating about the relevance and sensitivity of the ELLI inventory in a mentoring context.

A group of part-time, mature students were doing a degree course in Advice, Guidance and Counselling and were introduced to ELLI during a module on mentoring. The third year students were preparing to act as mentors to first year students and used the ELLI survey as a framework for investigating and preparing for the role. One of the findings from this group was how people commonly home in on their weaknesses in response to receiving their ELLI profile for the first time. In some cases, there was a pronounced, negative reaction, a feeling of ‘I’m not very good!’ and vulnerability to self-judgement. What accompanied this finding, however, was that in those who had the benefit of a mentoring conversation, this negativity was generally quite quickly transformed into a positive determination to improve and become ‘rounder’ as a learner. The initial sensitivity concerning the weaker aspects of the profile was eased by the mentor’s skill in focussing on the positive and emphasising the ‘plasticity’ of the person’s self-report. The message that: ‘This is something to build on… this gives you an agenda for personal development…’ was taken positively and welcomed by students who experienced their ELLI profile in the context of a positive, supportive mentoring relationship.

Look through the ‘Learning Power Ideas’ on the following pages and see how many of them you might try out yourself, or recommend to someone whom you are helping with coaching or mentoring conversations.
Changing & Learning

This dimension is about your sense of yourself as someone who can and will change and learn and get better over time. It is having a positive learning story or journey to reflect upon. This gives you a layer of confidence, helping you to cope with obstacles and difficulties by putting them in perspective. Learners without much of this are likely to feel ‘stuck and static’ instead of having a ‘trajectory’: a sense of having ‘come a long way’ and of being able to ‘go places’ with their learning.

Things to try, which might increase your awareness of yourself as changing and learning:

- Think of yourself as a Learner – the best thing to be, all life long!
- Think about how your body gets stronger and fitter with exercise and start an exercise regime for your mind and brain
- When learning is difficult – your brain ‘hurts’ – remember it is making your ‘learning muscles’ stronger
- Look out some of your old exercise books and assignments and compare what you were doing a year or more ago with what you are capable of doing now
- Keep a learning journal: record your hopes, plans, successes, failures and other milestones each week
- Think of your progress as a ‘learning journey’
- Draw a time-line of your learning so far, starting as early as you can remember: put in some ‘landmark moments’ which changed how you see yourself and the world
- Make an imaginary map of your learning journey ahead, including the challenges. Reward yourself whenever you climb ‘little mountains’
- Ask your teachers to help you to notice the new things you are learning to achieve
- Remember, there are no such things as ‘mistakes’: only lessons to learn! Every experience moves you forward, if you want it to
- Read biographies of people you are interested in and think about how your own life might look when you have achieved your dreams
- Talk to people of an older generation, such as grand parents. Ask them about the journey they have taken, how they have changed over time and what they have learned.

**Critical Curiosity**

This dimension is about your desire to delve into topics and get beneath the surface, find things out and ask questions, especially ‘Why?’ If you are a critically curious learner, you will be unlikely simply to accept what you are told without the reasoning behind it. You might challenge what a teacher says, rather than take it at face value. Learners who lack Critical Curiosity might generally turn up and expect to be taught, rather than expect to do the work themselves, seeing themselves as passive recipients of their learning, rather than active agents in it.

**Things to try, which might exercise and build your Critical Curiosity:**

- Think of yourself as a ‘learning detective’: not only interested in answers but clues, patterns and incongruities
- Look for opportunities to:
  - ask questions at school, of fellow learners first if it’s easier, then your teacher(s)
  - say, respectfully, “I’m not sure I agree with that” and challenge people to explain and justify their opinions
- Tell your teacher what you’re up to and ask for encouragement
- Practise climbing the ‘Why?’ Ladder:
  - Think of a question – e.g. “Why do I have to go to school?”
  - Think of an answer – e.g. “It’s the law!”
  - Ask “Why is it the law?”
  - Think of an answer... and so on!
  - See how far you get. Write it down if you like.
- Keep a dictionary nearby and pounce on words you don’t understand – so you do now! Make a collection.
- Play ‘Twenty Questions’ with a friend: one of you thinks of a person, animal or object, alive or dead. The other asks questions that can be answered ‘Yes!’ ‘No!’ or ‘Irrelevant!’ and tries to narrow the possibilities down to one in less than twenty goes.
- Welcome the feeling of being perplexed or puzzled and use it to drive your learning forward, like a quest for the light!
- Find out about the kind of questions a surgeon asks someone admitted to hospital with a serious pain in their side, in order to decide whether to operate or not.
- Play a game with ‘What if...’ scenarios, as big businesses have to do in ‘future planning’
- Find out about Bloom’s Taxonomy (starting with Google if you like)
- Ask your teacher to help you create a risk-friendly climate – e.g. no criticism allowed – so that you are able to speculate, try out ‘whacky’ ideas on each other and ask ‘What if...?’ and ‘Why?’ questions with confidence.

Learning Power Ideas

Meaning Making

This dimension is about your ability to make sense of everything by ‘relating’ to it: relating to facts and ideas, linking them up, seeing patterns and connections and constructing a ‘map’ of your learning, so you can see how it all fits together and ‘know your way around’. The personal nature of Meaning Making is important: it includes feeling that ‘learning matters to you and ‘connects with your story’ and so helps you to become engaged, linking new ideas to more familiar ones, connecting the present with the past and the here-and-now to more remote ideas and experiences. Without this, everything seems fragmented and nothing really makes sense.

Things to try, which might improve your ability to make meaning:

- Choose a topic you know quite a bit about and create a mind-map for it. Use your ‘map’ to connect up:
  - Why it matters to you – your feelings and connection with it
  - Facts and figures
  - History and development
  - Current state of play
  - People associated with the topic

- Use mind-mapping to start you off with any assignment in which you have to organise and present knowledge

- Take an everyday object – e.g. the first manufactured thing you used today – and think about everything that had to happen for that object to be there for you

- Play a game with a friend: each of you think of an object, animal, person or idea. Try connecting up the two things you have thought of in some way (example ‘flowers’ and ‘winning the world cup’: answer – petals showered over the open-top bus in the victory parade)

- Ask your teacher if your class could create a ‘mega mind-map’ on the wall for each topic you do – so everyone can add new connections whenever they see them

- For every new piece of learning you come across, think about how it relates, or could relate, to something you remember experiencing or hearing about

- Ask your teacher to stop the lesson from time to time and ask the class, ‘What does this remind you of?’

- Find key-words in the topic you are doing and play word-association games to see how they connect with the web of thought and language you already possess

- For every new topic, complete the sentence, ‘What matters to me about this is…’ and then write down three ways in which the ideas and learning in this topic will make a difference to your life

### Creativity

This dimension is about being able to learn differently sometimes, by using your imagination and intuition rather than just logic and reasoning; being playful and ‘dreaming’, rather than just ‘racking your brains’ or looking things up; going ‘off the beaten track’ and exploring ideas that might seem ‘wacky’ at first, trusting that they will lead to an unexpected train of thought that starts to resolve the problem for you. It recognises that learning is sometimes about surprise, wonder, inspiration, ‘dawning moments’, and not just about following rules, routines and procedures.

### Things to try, which might increase your creativity as a learner:

- Try guessing at solutions before working them out; see how good your guess was
- Play games with routine tasks like revision, rote learning and writing up notes: e.g. timing yourself; inventing a board game; playing ‘any questions?’ or swapping quizzes with a friend
- Make up characters and situations in which the concepts, ideas and facts in your learning come to life for you: write or imagine scripts and scenes
- Use colour and draw pictures, diagrams, funny faces, symbols, to illustrate your notes
- Make mind-maps with labels or draw ‘trees’ with ‘meaning branches’ to show how possibilities multiply when you think about alternative scenarios
- Use a different kind of writing to present your work: e.g. a stream of consciousness, diary, a cartoon, a news article; try a story book with illustrations, to explain the topic to a much younger learner
- Think about the rules you tend to follow in your learning and see if you can break them constructively by doing something differently
- Let your mind ‘float free’ when you are stuck or puzzled; see if your ‘dreams’ come up with a way forward
- Trust your subconscious mind as much as you do your thinking ability: notice how you sometimes come up with an answer or see something thing more clearly by ‘sleeping on it’.

Resilience

This dimension is about keeping going when things get tough. When you have this ‘inner strength’ to draw on, you are less likely to give up; you know that obstacles can be overcome with persistence, help, creativity, steadiness of purpose... You have the self-belief you need to cope with feelings of failure or uselessness and you know from experience that these feelings are temporary and also a natural part of the learning journey. Learners who lack this quality are fragile and dependent, whether through anxiety about maintaining high standards or by having had their self-concept damaged by negativity, especially in close relationships such as with their parents.

Things to try, which might help to make you a more resilient learner:

- When you are really struggling to understand something, remind yourself that uncomfortable feelings are an important part of learning: all effective learners have them!
- Just as your body needs exercise, so does your brain. Don't give up when it starts to hurt: that's when it's getting fitter!
- Instead of waiting till you've 'sorted' a problem before writing anything, try describing your initial uncertainties, doubts, and confusions: they may turn out to be part of the answer.
- Fear makes the thinking brain shut down. Being afraid of failure can cause it to happen. Adopt a new motto for your learning, like: ‘What the heck...?’ ‘Give it a go!’ ‘Do or die!’ ‘Who dares, wins!’ ‘Feel the fear and do it anyway!’
- Encourage yourself to take risks: try out hunches, new ideas, ways of approaching or presenting your work. Tell your teacher you will put a sticker in the margin whenever you do this, so it can be welcomed, whether it ‘comes off’ or not
- Ask your teacher in advance for the criteria by which your work will be judged. Try assessing your own work before it is marked, so you become gradually less dependent on external judgements
- Create your own ‘private’ assessment system, based on how well you have tried, risked, failed and tried again. Use it to reward yourself in small ways.
- Ask one or two friends to help you create a self-help check-list, “What to do when I don't know what to do!” E.g. 1) Brainstorm possible ways forward and choose the best 2) Look in dictionary, encyclopaedia or internet 3) phone a friend...etc
- Create a sign out of cardboard for your table or work group, saying ‘Working without the teacher's help’ and display it when you are practising your independence
- When you’ve done everything you can and a task still seems impossible, put it down and do something completely different. Come back to it when you are fresh.

Strategic Awareness

This dimension is about your readiness and capacity to take responsibility for your learning, manage yourself and the processes involved, have a sense of purpose and direction, plan ahead and accomplish your intentions. It is about seeing how this task in front of you - and this moment - fit into a bigger picture. It will help you to fulfil your potential and develop the self-belief and responsibility you need to survive changes in your life and learning, such as moving school or going to university, where there is less structure, support and guidance. Learners with very little of this can be a bit like robots, living in the moment and ‘waiting till their buttons are pressed’ before they decide anything.

Things to try, which might help you to develop your strategic awareness:

- Remember that assessing and plotting your progress with the seven learning power dimensions is in itself an example of strategic awareness. Try to do this at least once a month, for your learning as a whole across all areas

- Make planning charts for yourself, in three formats: weekly plans for the time you control; termly plans with assignment deadlines and main events; a yearly plan, with holiday dates, major tests, exams and coursework deadlines and big events you are involved in, like performances or trips

- Make practical lists: daily to-do lists; lists of equipment needed; questions to ask others; bright ideas that pop into your head at odd times; shopping lists of what you need to buy or ask for. Use post-it stickers that can move between your work area and your diary/planner and be thrown away when all items are crossed off

- Create a ‘learning cockpit’ in your private study area, where all your current lists and plans can be seen at a glance

- Allocate your time in advance, so that all subjects have their fair share, your know how much you can give to each new assignment and you can see deadline clashes coming

- Use ‘time-out’ in the middle of a concentrated piece of work, to check whether you are still on track and following the guidance you were given

- Keep a ‘learning log’ to record difficulties, frustrations, worries, boredom, as well as ‘Eureka!’ moments and feelings of satisfaction and ask your teacher for the chance to air these feelings from time to time

- Make two lists: ‘What helps me learn’ and ‘What hinders me’ and compare them with your friends

- When you are starting a major piece of work, create a mind-map to help you see the whole picture and then make a flow-chart to help you plan a step-by-step approach that will work
Learning Relationships

This dimension is about how you develop and use your relationships, or the ‘social resources’ available to support your learning, whether in the family, in school, at work or at play. It involves learning from and with others, collaborating well and being a good ‘team player’, but also managing without them when necessary, rather than being either dependent, or withdrawn and isolated. If you are strong in this dimension you can move easily between the group situation and learning on your own.

Things to try, which might help you to work well with others:

- Make a list of people who can help you learn: at home, at school and further afield. Next to each one, write down what they are good at: ways they can help; topics they can help with. This is your ‘Learning Team Sheet’.

- Imagine whose team sheet you might be on and what they’d say you are best at.

- Think of those who help you learn as part of your ‘learning resource kit’: use them to help you think through problems, play learning games, check your work and test your learning power together. Remember, you are helping them too.

- When you are struggling with a topic, imagine you are playing ‘Who wants to be a millionaire?’ At home, you can ‘phone a friend’; in class, you can ‘ask the audience’. You just have to decide on the question.

- When you are working in pairs or small groups, remember to: ask questions; listen carefully; say things like, ‘Well done!’ or ‘That’s good!’; admit what you don’t know and contribute what you do know, when it’s relevant. You don’t have to say a lot to be a good team player.

Things to try, which might help you to manage on your own when you need to:

- When you are given an assignment or homework task to take away, don’t leave before you have: asked all the questions you need, to understand it; found out roughly how long you are expected to spend on it; checked you have all the resources – equipment, notes, access to knowledge – needed to complete the task

- Create a learning environment for yourself in your private area: clear space to set out your work; all you need within easy reach; no interruptions or distractions; an atmosphere of welcome and concentration that you look forward to being in

- Establish a routine to get the best out of your private study time, so it becomes a habit to work when you are still fresh, with a mind cleared for business. Ask your family and friends to support you in this.

- Keep a pad to write down questions to ask others when they are available

- Reward yourself every hour or so with a five minute break and something healthy and good to eat or drink. It will help to clear your mind again

Chapter 6

The third level of impact: adapting learning and teaching in the existing curriculum

Imagine what it is like for a student who has started to work on her Critical Curiosity, or her Strategic Awareness, to find her teacher in a science lesson, or geography, or maths, or English, saying ‘We are all going to work on our Critical Curiosity in the way we approach the next task’, or ‘For the next six weeks, I am asking you to work in teams on a major assignment that you are going to plan together today, using your Strategic Awareness’.

This Chapter starts with the themes that emerged from the research about what makes effective teaching for learning power, then goes on to explore different ways in which creative teachers have introduced the principles, language and ideas of the Seven Dimensions of Learning Power into their teaching. The aim is for the learning environment of the subject curriculum to reflect and resound with the very concepts and strategies that learners have been thinking and talking about in their mentoring conversations: so they experience learning power in stereo!
6.1 Twelve Key Themes

In the early stages of research putting ELLI into practice, teachers were both observed and questioned, for evidence to characterise the teaching found most effective in developing Learning Power. Twelve key themes emerged from this exercise, which inform this entire handbook and are familiar to many as hallmarks of good teaching down the ages.

Most of these themes are either self-explanatory or already explained elsewhere in this handbook. It is worth unpacking each of them briefly here since they can be a useful way for teachers to structure self-evaluation, thinking about how often and how well they make these themes evident in their classroom practice.

**Teachers’ professional values and commitment:** this was found to be the underlying factor which had the most positive impact on learners’ learning power. The values are about human flourishing and the commitment is to the best for each individual.

**Quality of relationships between learner and teacher and learner and learner:** learners who viewed their teachers as being strong at fostering positive interpersonal relationships were found on the whole to have the highest levels of Learning Power.

**Quality of dialogue:** this is about remembering that learning is a ‘two-way process’ and learners usually learn more by formulating their own ideas, finding their own words for them and trying them out aloud than they do by just listening to the teacher.

**Modeling and imitation:** this is evident from watching very young children learn: they want to copy what they see us do. Example is the most powerful teaching tool we have.

**The language of learning, naming it, use of metaphor:** this theme is one of the most widely recognized benefits of working with ELLI. How can we know something until we can name it? The language of ELLI ‘makes learning learnable’.

**A stimulating, safe learning environment:** this is both about inspiration, through keywords, images, resources, displays and decoration, and also emotional comfort. An environment has to feel safe to be in if people are to take the risk of learning and change.

**Teachers’ professional judgment:** some say that this has been eroded by the prescribed curriculum, guidance and testing: it is about teachers making ‘balancing decisions’ about what is right for each individual in each moment: how much freedom, how much support.

**Development of self awareness & ownership – self-assessment for learning:** this is the underlying philosophy of ELLI, equipping learners to take responsibility by knowing how, why and how well they learn; developing their own sense of purpose and direction.
**Re-sequencing of curriculum content:** developed further below, this theme is about how teachers discovered that information gathering happens through purposeful learning, enquiry, activity and teamwork; content does not provide the best organizing principle for lesson planning.

**Challenge and choice:** recognizing that people love to feel ‘stretched’, make decisions and accomplish difficult things, whatever age or level of attainment they happen to have reached, helps creative teachers to build options and high expectations into their planning.

**Engaging learners in reflection:** is a quality of effective teaching that can be eroded by over-emphasis on pace and structure. Self-awareness is deepened; learning is cemented and made more meaningful; recall and creativity are strengthened, by quiet reflection.

**Strategies & skills:** creative teachers devise and implement clever ways of getting the best learning out of activities and learners. The rest of this chapter is full of examples.

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<th>Teachers’ professional values and commitment</th>
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<td>Engaging learners in reflection</td>
<td>Strategies &amp; skills</td>
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Table 6.1: *A self-evaluation sheet for the twelve key themes*
6.2 Managing learning processes

When designing and planning learning and teaching activities to develop learning power, creative teachers have found it helpful to distinguish content and outcomes from process. Some would say that, especially in the way the National Curriculum has been implemented in English schools, attention has too often been given to content and outcomes at the expense of process. This includes the listing of knowledge, or facts and information, to be remembered, skills to be honed and understanding, to be demonstrated. No one is saying that these things are unimportant, just that, when they are made the main purpose and organising principle for learning, something very important tends to get left out: learners’ awareness of and capacity to manage processes.

In Chapter 3, we saw how six Bristol primary schools had worked together to plan learning activities in a way which illuminated for their pupils how content and process work together. We can see this clearly in the ‘Brunelli’ materials which we noted as examples of iconography of the learning power dimensions. In the History example above, for instance, processes are made clear in the headings and format of the design template as well as in the detail. Focussing, questioning, connecting, time-lining, moving between individual, pair and group activity, summing up and reflecting are all just as important for learning as the knowledge that such processes are used upon. In this Brunelli example, we can see all these processes going on and we can also see that knowledge is collected from a range of sources, including what children know already. The seven Learning Power dimensions (all of which include or at least imply processes) are in the ‘warp and the weft’ of the planning, sometimes used as the means to learning and sometimes cultivated as outcomes of learning.
6.3 Arranging classrooms for learning processes

Moving between individual, pair and group activity is one of the processes that most clearly helps to foster the Learning Relationships dimension. The layout of the classroom is important here. How can it be flexible enough to permit and encourage these different learning processes?

Two kinds of classroom layout lend themselves particularly well to developing learning power and especially Learning Relationships. The first is associated with ‘resource-based learning’, where all the desks or tables are placed around the perimeter of the room and individual chairs tucked into them, facing the wall. Individual work is therefore ‘outward facing’ with an uninterrupted view of displays showing keywords, diagrams, posters and examples. Learners are not facing each other, so the social agenda is ‘played down’ whilst they are focussing, reflecting, reading or writing. In the middle of the room are tables with resources readily available, stationery, books, guidance sheets, anything that learners might need to pick up and use, without needing to ask for help. When a whole class forum is needed, for questioning, presenting or a plenary, all learners need to do is finish working and swivel their chairs to face inwards. The flexibility is perfect for moving between individual and whole class working. Pair work is easy enough too, by ‘neighbours’ simply turning and conferring or working together.

What is not achieved automatically by this layout is a configuration for group or team working. A second suggestion, published in Learning Power in Practice – a guide for teachers – by Ruth Deakin Crick, is a layout designed principally for teamwork, with the convenient options of individual and paired working and the whole class attending to a central ‘presenter’ or the whiteboard. It involves arranging tables in a ‘fan-like’ formation, as shown in the diagram below.

![Diagram of a classroom layout](image)

Fig 6.2: A layout for Learning Relationships with individual, pair and team working plus whole class forum attending to the central information point (whiteboard or presenter)

One classroom layout that seems to go against the principles of learning power is the Victorian one of sitting people all in rows facing the front, where the teacher is symbolised as the ‘fount of all knowledge’ and pupils are identifiable to each other only by the backs of their heads. There may be a good reason for sitting people like this, in examination halls, for example, but testing is not learning and it is an important part of the teacher’s role to organise a classroom to be fit for its purpose.
6.4 Designing learning assignments

Just as with layouts, some assignments and tasks are better suited to the purpose of developing learning power than others. Picking up the theme of managing opportunities for improving Learning Relationships, for example, an assignment designed to be used in the ‘fan-shaped’ classroom and also described in ‘Learning Power in Practice’, was the production of a ‘Teen Leisure Magazine’. A briefing sheet for this assignment is shown here, with permission from its author and acknowledgement to Sage Publications.

The Assignment
to create aTeen Leisure Magazine

Your group (of 6) are both:The Editorial Board and Journalist/Reporters

- Pictures
- Facts and figures
- Stories
- Sport reports
- News reports
- TLM
- Articles
- Contents
- Top tips
- Horoscopes
- Fashion pages
- Puzzles and games
- Advertisements

Create a 15-lesson task+time planner
(role-plays (creativity)
meetings and minutes (strategic awareness)

Page design
- Allocating space (critical curiosity)
- Word counts
- Fonts and sizes (creativity)

research readers’ interests
- Surveys
- Interviews
- E.g.s of magazines (resilience)

How to agree when you disagree?

Lesson 1:- Turn the brainstorm into a mind-map together (meaning making)
- Write in where to target the 7 Learning Power Dimensions in blue
- Start allocating responsibilities (Learning relationships)

Ground Rules
- Hold reporting-back and planning meetings every lesson (strategic awareness)
- Homework tasks to be agreed and recorded – can include ‘think and dream’ time (creativity)
- Focus on teamwork and encouraging each other (Learning relationships)
- Everyone to do fair share of writing, reading, speaking, listening
- No copying/pasting from real magazines: only getting ideas
- Self and team assessment on the 7 LP Dimensions (changing and learning)

Publication deadline: July 11th (in 15 lessons’ time)
The teacher prepared for the project by organising the class into teams of six, each containing its fair share of leaders and enthusiasts and keeping the more ‘challenging’ students apart. She used the ‘fan’ formation of the tables to enable individual, pair and teamwork, with spaces for her to join each group and be seen at the board by everyone. Then she briefed each of the five teams to become ‘editorial boards’ made up of six ‘reporters’ or contributors. The dynamic represented by the bees as symbol of Learning Relationships, foraging alone and returning to the hive for honey making, is perfectly replicated by this way of managing the learning assignment. The ‘Board’ would be responsible for process management: setting deadlines; generating ideas for design and content; organising a schedule and assigning tasks to its members. They would then disperse to research and create content, both written and graphic, by reading, photography, interviewing, noting, collecting, analysing and drafting. They would report back to the team, which would take collective responsibility for proof-reading, editing, correcting and final presentation.

Can you think of any other ‘publishing’ assignments, in subjects across the curriculum, which could utilise this dynamic of moving between individual and team work, with both being integral to success?

It is easy to see how, as well as being designed with Learning Relationships in mind, this kind of assignment offers scope for developing and exercising the other dimensions of Learning Power and especially Strategic Awareness. So enthusiastically did groups engage with this project that the teacher was able to concentrate on enabling, coaching, suggesting, affirming and, most important of all, reflecting back to individuals and teams the skills and qualities they were building and demonstrating in learning to learn together.

6.5 Strategies for fostering the Seven Dimensions

Some imaginative strategies for learning and teaching have been created by teachers who have been inspired by the Seven Dimensions of Learning Power. In one North Bristol Primary School, for example, a teacher who was trying to stimulate Critical Curiosity in her class set them a homework, to talk to their families and friends and gather as many questions as they could find to which they thought no one had an answer. The objective was to exalt the idea of questioning above merely collecting facts and answers: it was an antidote to the standard curriculum and assessment practice which mostly involves young people producing the answers to other people’s questions. The end result was visible on the wall of the classroom as the ‘Wonder Wall’ in figure 6.3.

Fig 6.3: A ‘Wonder Wall’ for Critical Curiosity
A famous strategy for building Creativity and Resilience, and therefore reducing fragility and dependence, was recounted by Guy Claxton from his work with Wiltshire primary schools: getting teams to work together to produce a poster for display entitled ‘What to do when you don’t know what to do!’ It would list up to ten mini-strategies, such as ‘phone a friend’, ‘use Google’ and ‘take a break and see if an answer comes to you later’, all acting as a buffer to the last resort: ‘ask a teacher’.

### What to do when you don’t know what to do!

1. Phone a friend...
2. Stop and think about something else for five minutes...
3. Ask as many questions as you can about what you are doing
4. Google it
5. Just explain the problem to someone, see if it helps!
6. Stop thinking it’s your fault!
7. Draw a picture or diagram
8. Make up a song about what you are trying to do
9. Imagine what it will feel like when you have found the answer
10. ...then, if you still need to... ask your teacher!

The best strategy for Meaning Making, which can also help with Creativity and Strategic Awareness, is ‘mind-mapping’, either at the start of a topic, as a planning tool to anchor the learning in what a group already knows, or as a revision tool, to sum up and inter-connect everything associated with the topic. In the Bristol primary schools, teachers created a laminated ‘ELLI Place Mat’, to guide the initial mind-mapping with the Seven Dimensions: how are we going to use and develop these seven powers in this topic? Every time a new topic was started, the place mat could be wiped and re-used. Here is a picture of it, with the ‘African Animal’ icons.
Someone using ELLI in her research was thinking about the solitary nature of her daily work that is so characteristic of research. She created a thought-map using ‘Inspiration’ software. She thought of all the concepts inspired by the seven ELLI Dimensions that could help her to manage whilst she was working on her own.

Of course, it helped her to feel less dependent on others, which increased her Resilience. It also turned out to be a brilliant way of seeing that the dimensions all support each other: how thinking creatively about one of them can help your thinking and learning to incorporate all the others too. Here it is:

At first sight, perhaps the hardest of the Seven Dimensions to plan for is Changing and Learning. It is, of course, inevitably developed in the course of developing the others. By its very nature, though, this dimension is one that happens over time, so cannot be dealt with in a single lesson or one-off strategy. One answer, though, is fairly straightforward and comes easily to teachers accustomed to ‘Assessment for Learning’: it involves providing regular or on-going opportunities for learners to assess themselves on all the Learning Power dimensions.

Fig 6.6: A ‘Resilience thought-map’
A strategy that works very well for this is using concept lines, since the seven ideas are called Dimensions because they range between two opposite conceptual poles. The concept line simply joins the poles together and represents the journey from one (the weaker) towards the other. Some teachers have made this approach to self-assessment concrete and active, by stringing ‘washing lines’ across the classroom. If they were concentrating on Changing and Learning, the line would stretch from ‘Stuck and Static’ label at one end, to ‘Changing and Learning’ at the other. Another line might stretch from ‘Passivity’ to ‘Critical Curiosity’ and all the learners in the class would move their photographs along on clothes pegs when they believed they were getting stronger in that dimension.

How am I **Changing and Learning**? (morphing zone)

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**Critical Curiosity** (detective zone)

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*Fig 6.7 Concept lines with icons, for self-assessment*

If regular self and peer assessment is one of the best ways of fostering Changing and Learning, another is the use of reflective journaling, which can be structured with the seven dimensions as headings or writing frames, if the teacher judges that a learner needs that degree of structure. Returning to journals at the end of a lively session or intensive assignment can change the tone of a lesson, too, producing a calm and welcome atmosphere of private reflection as learners return to the self-diagnosis and awareness of potential for change that they began with, on first seeing their ELLI profiles.

Rather like the ‘ELLI Tips’, re-printed at the end of the last Chapter, a collection of ideas for teachers and coaches is on the following pages, which you might sift through and choose from, to use in your practice.
1.1 Changing & Learning

This dimension is about a learner’s sense of his or herself as someone who can and will change and learn and get better over time. It is having a positive learning story or journey to reflect upon. This gives a layer of confidence, helping a learner to cope with obstacles and difficulties by putting them in perspective. Without much of it, a learner is likely to appear ‘stuck and static’ instead of having a ‘trajectory’: a sense of having ‘come a long way’ and of being able to ‘go places’ with her learning.

1.2 How can we foster Changing & Learning?

- Encouragement and genuine praise for progress made, however small the steps, helps to foreground the idea of a ‘way forward’ (which might otherwise be lacking) and a sense of moving steadily in that direction

- Assessment advice which accurately identifies specific and achievable next steps for this learner – what Vygotsky called the ‘zone of proximal development’ – also shines light on the path ahead and reduces ‘stuck-ness’

- Keeping a ‘Learning Journal’ can help a learner to reflect more systematically on what has been achieved and also provides a record, makes available a sense of ‘distance travelled’, which may not be discernible from day to day. Many learners need instruction and help to make this habitual and to decide on headings to structure entries. A simple set can be offered, with freedom to select and go beyond it, e.g: (in this subject, or generally)
  - What I learned today
  - What was new?
  - What was difficult?
  - What am I most pleased with?
  - Was there anything I found I could do/understand for the first time?
  - What do I feel (honestly!) about how I am getting on in these lessons?
  - What I am hoping to achieve next?

- Keeping copies – in a portfolio, perhaps - of learners’ previous work makes it easy for a learner to compare his current level with the past and see the difference, the gains made. The teacher can provide a system, storage facilities and opportunities for retrieval and reflection.

- Encouraging learners to assess themselves regularly against their own past performance develops their sense of Changing & Learning. Comparing themselves to each other is more likely to obscure it!

- Regular mentoring conversations have been shown to have a significant impact on learners’ learning power and especially their sense of development and change. Such conversations are particularly effective if self-report evidence (such as the ELLI Learning Profile) is used as a starting point and specific tasks and targets are agreed and reviewed at each session.

© Tim Small
2.1 **Critical Curiosity**

This dimension is about a learner’s desire to delve into topics and get beneath the surface, find things out and ask questions, especially ‘Why?’ A critically curious learner will be unlikely simply to accept propositions without understanding their foundation. She might challenge what a teacher says, rather than take it at face value. Learners who lack Critical Curiosity might generally turn up and expect to be taught, rather than expect to do the work themselves, seeing themselves as passive recipients of their learning, rather than active agents in it.

2.2 **How can we foster Critical Curiosity?**

- Establishing positive interpersonal relationships is an important pre-condition for this dimension, since being critically curious involves taking risks and challenging the teacher needs to happen in a climate of mutual respect. A learner needs to feel safe to ‘put his head above the parapet’ and ask challenging questions; the teacher needs to feel safe to encourage and welcome it.

- It is worth monitoring who asks the majority of questions in a classroom, as a focus for classroom observation, perhaps. In most cases, it is the teacher who asks far more questions than the learners do. This might be an example of good modelling of critical curiosity, especially if done with a genuine fascination for answers not already known; but the balance also needs to be shifted, so learners get to practise being the enquirers.

- Whenever information needs to be taught and assimilated, it is helpful to consider whether the ubiquitous ‘fact sheet’ could be replaced by a briefing note for learners to find the facts out for themselves.

- Investigations and open-ended tasks, where learners have to decide alone or together ‘how to go about it’, are excellent opportunities for fostering Critical Curiosity.

- Coaching of questioning techniques, pointing out the difference between closed and open questions, with opportunities for practising, such as ‘hot-seating’ exercises, can elevate Critical Curiosity to become an explicit part of the curriculum. Some teachers in primary schools have incorporated ‘wonder walls’ into their display work, to harvest questions ‘to which no one knows the answer.’


- Games involving ‘wearing hats’ or roles, like being a detective hunting for clues, can open the way to developing Critical Curiosity by stimulating the imagination (see Creativity), making it fun and bringing new energy into the learning.

- Modelling Critical Curiosity is particularly important, such as by making a virtue of ‘not knowing but wanting to find out’, rather than pretending to be the ‘fount of all knowledge’, which tends to suppress Critical Curiosity by rendering it unnecessary.

- A critically curious teacher is likely to do a lot of listening, being fascinated by what her learners are thinking, feeling and doing and, of course, what they already know from personal experience about the topic in question.

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3.1 Meaning Making

This dimension is about learners’ ability to make sense of everything by ‘relating’: relating to facts and ideas, linking them up, seeing patterns and connections and constructing a ‘map’ of their learning, see how it all fits together and ‘know their way around’. The personal nature of Meaning Making is important: it includes feeling that ‘learning matters to me’ and ‘connects with my story’ and so helps a learner to become engaged, linking new ideas to more familiar ones, connecting the present with the past and the here-and-now to more remote ideas and experiences.

3.2 How can we foster Meaning Making?

- Mind-mapping is an excellent way of making the ‘linking up’ idea in Meaning Making explicit and visual. In one school with a successful Key Stage 3 curriculum designed to develop competencies for learning, teachers use group mind-mapping exercises as the starting point for most topics and assignments. What learners already know is elicited in this way at the outset, which helps them to engage with the new topic.

- Mind-mapping is a technique worth modelling and demonstrating, such as by being a ‘secretary’ to the class, taking feedback from group discussions and investigations and turning them into a ‘super mind-map’ on the white board.

- Giving learners opportunities to air and share experiences and tell their stories helps them to make meaning and relate to each other as well as the learning. Paradoxically, stories that seem to go ‘off the point’ can be the most helpful as they offer a challenge of seeing and the connections that are always there.

- Playing games finding links and connections between apparently unrelated things can build learners’ confidence in the ‘connect-ability of everything’.

- As Meaning Making is something most teachers are strong in, it is usually easy to bring it into the consciousness of a class by pointing out connections with previous learning in the subject and invite learners to see links with learning across and beyond the curriculum, including topical matters in the news and community.

- Tasks which require individuals, pairs or groups to create and present a finished outcome or ‘product’ offer excellent opportunities for learners to reflect – with prompting if needed - on the processes of their learning and explain them to others, fostering their capacity for sense-making and connection.

- In de-briefing sessions, when groups review what they have learned and reflect on original objectives, it might be worth asking occasionally – when appropriate - ‘How did it feel?’ or ‘How do you feel now?’ to give ‘air time’ to feelings and open the way to the feeling that ‘learning matters to me’

- ‘Summing up’ is a key skill for life, whether in meetings, when reporting back or presenting a case to someone with limited time and attention. Instead of teachers always summing up at the ends of lessons, or chairpersons or leaders always summarising meetings, it would build everyone’s capacity for Meaning Making if responsibility for summing up were shared around.

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4.1 Creativity

This dimension is about being able to learn differently sometimes, by using imagination and intuition rather than logic and reasoning; being playful and 'dreaming', rather than just 'racking your brains' or looking things up; going 'off the beaten track' and exploring ideas that might seem 'wacky' at first, trusting that they will lead to an unexpected train of thought that starts to resolve the problem for you. It recognises that learning is sometimes about surprise, wonder, inspiration, 'dawning moments', and not just about following rules, routines and procedures.

4.2 How can we foster Creativity?

- Inviting learners to inhabit a fictional world is a wonderful gift to the imagination. Bedtime stories should be a part of every childhood; the habit of reading or listening to stories and making them up is just as important as we get older, even though less time tends to be given to it.

- There is a close relationship between this dimension and Critical Curiosity (see above): the 'wonder wall' used for harvesting questions can also be a feast for the imagination; the climate of mutual respect and support for risk-taking is just as important for Creativity, for which learners need to know that it is 'OK to be different' and try their odd or wacky ideas out on the class.

- Creativity needs space and freedom from anxiety, which can often be helped by having a complete break and letting your mind 'float free'. Learners may need their teachers to encourage this, rather than only hearing 'must try harder' messages. Learners also respond positively to well-tried and well-taught meditation techniques.

- Humour, as long as it is at no one's expense, usually helps to create a positive emotional environment for Creativity.

- Brainstorming sessions have been used for decades by organisations at the cutting edge of technology, such as NASA (or the Kennedy Space Center). Rules include: (i) accepting and recording every contribution, logical or otherwise, without judgement (ii) encouraging the use of metaphor and fantasy, especially biological ones (such as when the space scientists fantasised about training spiders to fasten the astronauts' tunics and ended up by inventing VELCRO).

- Playing and inventing games offers opportunities for memorable creative learning. Children learn through imagination games: pretending and acting roles in preparation for adult life; experiencing scenarios safely that in real life would be lethal; learning to make up rules and argue to enforce them; deciding what is within the framework of the game and what transgresses it. The quality of learning through play is underestimated. The way it is exploited and managed in drama could be extended to other areas of the curriculum, reviewed to highlight relevance. Learners often remember such lessons for the rest of their lives.

- What rules prevail in a classroom, which are important and which could be broken without harm, is worth discussing. In Shakespeare's time, the festival of Christmas ended with a 'Night of Misrule', when ranks were reversed, servants became the bosses for the night and vice versa (see 'Twelfth Night'). For Creativity to flourish in a school environment, teachers need to be good at handing over control whilst maintaining ultimate responsibility for good order.
5.1 Resilience

This dimension is about keeping going when things get tough. When a learner has this 'inner strength' to draw on, she is less likely to give up and knows that obstacles can be overcome with persistence, help, creativity, steadiness of purpose... She has the self-belief she needs to cope with feelings of failure or uselessness and knows from experience that they are temporary and also a natural part of the learning journey. Learners who lack this quality are fragile and dependent, whether through anxiety about maintaining high standards or by having had their self-concept damaged by negativity, especially in close relationships such as with parents.

5.2 How can we foster Resilience?

- Firstly, it is worth reminding learners that we can use the strengths we have in other dimensions to help us to grow stronger in this one. Learning Relationships can help us through a crisis; Critical Curiosity helps us to seek out solutions; Creativity breaks us out of habits of mind; Strategic Awareness gives us a sense of purpose and perspective so we see a problem as a step on the way... and so on.

- Secondly, it is important to remember the ELLI profile is about how we see ourselves in a particular context. Some learners have begun to feel more resilient just by seeing their ELLI profile and recognising the need to get out of their comfort zone and keep going for a bit longer each time they feel like giving up. Small steps can be recognised and rewarded by teachers to reinforce the gains.

- Stories of heroism and perseverance are often inspiring and can be used to engender a spirit of ‘never say die’ in individuals and groups.

- Group loyalty is often a stronger motivator for perseverance than an emphasis on individual achievement.

- We all have it in us to be resilient when we are motivated. One learner happened to be keen on rowing and found it helpful to think about how he would keep going in that activity even when he was near to exhaustion. He chose to work on his Resilience, so his rowing got even better and he realised he could also choose to stick at other things that he found hard.

- One teacher of a very high performing maths group, who were always getting everything right, decided to set them some problems that were insoluble without telling them. After they had struggled for a while and begun to get upset, he told them what he had done and why and got them to share and explore how it felt, so they knew what failure felt like and accepted it as a natural part of learning.

- Nothing succeeds like success! When people experience going through pain barriers, emotional or physical, and come out the other side – especially if they achieved something they thought was beyond them – they experience a kind of euphoria that can motivate them for life. They may need support, encouragement and reassurance in the first place, though, to make the commitment.

- As with several of the other dimensions, a climate of respect and tolerance and shared responsibility can be essential for people to take the risk of accepting a challenge and confronting the possibility of failure. Good counselling, a sense of ‘not being on my own’ with a problem and knowing that ‘I shall be safe, whatever happens’ can make all the difference, especially to fragile and dependent learners.
Learning Power ideas for tutors and coaches

6.1 Strategic Awareness

This is about a learner’s readiness and capacity to take responsibility for his or her learning, manage herself and the processes involved, have a sense of purpose and direction, plan ahead and accomplish intentions. It is about seeing how this task and this moment fit into a bigger picture. It helps a learner to fulfil his or her potential and develop the self-efficacy and autonomy to survive the transition to a learning environment with less structure and support, such as from primary to secondary school or schooling to higher education.

6.2 How can we foster Strategic Awareness?

- In some schools, it could be said that teachers and time-tablers do most of the planning and thinking ahead, making it unnecessary for learners to develop these skills. Attending to ‘student voice’ means involving all learners (and the community) in the strategic thinking that creates the values, vision and sense of common purpose that successful schools are known by

- Mentoring-style and group conversations about personal interests, life purpose and aspirations can be made a regular feature of the schooling experience from an early age, rather than simply expecting teenagers to respond constructively to a formal careers interview when the time comes

- Making space for learners to plan and think strategically is not easy in a content-laden curriculum, but pairs and groups planning and managing open-ended, creative and investigative tasks do develop these skills and give opportunities for teachers to reflect this back and highlight the strategic awareness involved

- Skilled, confident teachers share their ‘background thinking’ with classes, talking aloud about decisions made in their planning, even involving learners in them where the relationship is right. This ‘opens the strategic awareness of the teacher for viewing’ and models it for learners to imitate when they get the chance

- Schools usually offer structured support for strategic awareness through such things as planners, year calendars and homework timetables, but under-achieving learners may need ‘scaffolding’ in the form of specific instruction and guidance from a trusted mentor in how to make best use of these

- As homework tasks become more open-ended with longer deadlines, the guidance and support can include time management skills to spread pressure and reduce stress – which can be related explicitly to Strategic Awareness

- Directing attention to process (not merely outcome) is always likely to increase Strategic Awareness. Process tools, such as agendas, time-lines, action plans, resource lists and action minutes with assigned responsibilities from the ‘management handbook’ develop capacity and self-management

- Developing responsibility in learners (for their own learning) inevitably means teachers progressively and safely letting go of any desire to control learning processes, which in turn involves judging when and how far to trust and challenge learners without them floundering and losing confidence. Such judgement must obviously be based on knowing learners and classes very well.

- Involving new classes in a structured process of writing their ground rules for effective learning sets a tone from the start that responsibility is shared and can be progressively transferred to learners when it is safe to do so.

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7.1 Learning Relationships

This dimension is about how a learner develops and uses the ‘social resources’ available to support her learning, whether in the family, in school, at work or at play. It involves learning from and with others, collaborating well and being a good ‘team player’, but also managing without them when necessary, rather than being either dependent, or withdrawn and isolated. Someone with strength in this dimension can move easily between the group environment and solitary learning.

7.2 How can we foster Learning Relationships?

- Although group work is now a regular experience in most classrooms, it needs to be managed intentionally to foster positive learning relationships: composing groups for clear purposes, such as balance and representation; anticipating tensions and fears; making group dynamics an explicit part of planning, teaching, learning and review; all build capacity in this dimension.

- Classroom layout has a significant impact on learning relationships. When learners can see each other's faces and are all in positions of equal importance in the room, such as in a circle or horseshoe formation, or cabaret style around group tables, they can relate to each other more easily than if they are in serried ranks, all facing the same way.

- The most important learning relationships in the classroom are those between the teacher and every individual learner. A learner’s confidence in using relationships to help her to learn better is underpinned by the feeling of being known, liked, respected for who she is and listened to by her teacher.

- Relationships outside school are just as important for learning but students are not equally fortunate in who they can turn to. Schools and teachers need to encourage parents, carers and families to become involved in learning with their children, showing interest and giving at least moral support and a listening ear. Schemes like paired reading or family learning evenings using ELLI can work well.

- Fostering the capability to work alone is also part of this dimension: helping learners to use the group and other support when it is there, to prepare carefully for times when it is not and to check out and be clear what is expected of them in tasks for which they are going to be solely responsible – whether individual tasks in group assignments or tests and examinations, where they are ‘on their own’.

- Assignments and units of work can be designed to foster learning relationships, such as where a small team are made the Editorial Board of a teen magazine and then have to act as the reporters, creating their own material to bring back to the group for editing and proof reading. The group makes strategic decisions and takes responsibility for design and process management. Individuals negotiate their own tasks, for which they are responsible to the team.

- An essential but challenging part of a teacher’s role and skill set is in conflict resolution. Excellent resources are available to help develop this important capacity, such as through the Living Values in Education network (see www.livingvalues.net)
Chapter 7

The fourth level of impact: on curriculum design

Some schools have gone a step further: they have allocated a significant part of the curriculum to ‘learning to learn’, or in one case re-fashioned the whole of a Key Stage into a ‘competencies-based curriculum’ where all the subject content was integrated into an enquiry-based approach. The ‘Opening Minds’ Curriculum, which was pioneered by St John’s Marlborough and other schools in partnership with the RSA, is a good example. ELLI has been used as a framework in some of these schools, to give shape and purpose to learning which was no longer designed in advance around subject-driven assessment targets. This chapter describes some of the ways schools have created space in the curriculum for ELLI and enquiry-based learning and goes on to explain and illustrate the sequence of a particular programme of learning through personalised enquiry, which has shown itself to be a specially powerful intervention with disengaged and hard-to-reach learners as well as high achieving students.
7.1 Designing a curriculum around competencies

The ‘Opening Minds’ curriculum, pioneered at St John’s, Marlborough and several other secondary schools in England, had five sets of ‘competencies’ at the heart of its assessment framework, expressed in terms of what students could achieve having progressed through the curriculum. They were competencies for:

- **Learning**, including understanding how to learn and manage their own learning
- **Citizenship**, including understanding of ethics and values and how to contribute
- **Relating to people**, in varying contexts, such as managing or being managed
- **Managing situations**, including managing time, change, risk, taking initiative
- **Managing information**, including analysing, synthesising, evaluating, applying it.

This amounted, in the words of the RSA, to ‘re-engineering’ education. It started to free schools from concentrating solely upon delivering subject knowledge, focussing instead on skills and competences needed to function effectively in the world.

This more open-ended approach to ‘knowing’ and ‘knowledge’ made it possible to design a more ‘integrated’ curriculum in which, for example at St John’s in Key Stage 3, broad themes, such as ‘Forests’, ‘Being Unique’, ‘Counting the Cost’ or ‘Making the News’ became module titles and starting points for learning about concepts, principles and processes, as well as information, from right across the curriculum. Each class would be supported by a small team of different subject specialists who would provide stimulus, coaching, resourcing and validation for an enquiry based learning programme, for the planning and undertaking of which small teams of learners became responsible.

The story of radical change at St John’s goes on, as we shall see in the next chapter but, for the moment, it is important to note the evidence that this re-engineering of the curriculum actually achieved even better outcomes for the ‘accountability agenda’ than the school had previously achieved through a more conventional curriculum model.

Fig: 7.1: The Alternative Curriculum at St John’s
7.2 Creating flexible space for expanding learning capacity

The school leaders in Cumbria, where professionals personified the Seven Dimensions, saw ELLI as a way of giving shape and purpose to some time that they had carved out in the first year timetable. They had seen how insular and narrow their students’ world view could become in that remote corner of England, which had suffered badly from the decline of ship-building and other
twentieth century manufacturing industries. They wanted to broaden their students’ experience, linking school with the world beyond, and give them a zest for learning and exploration. Having the Lake District on the doorstep was obviously an incentive to get ‘outside the walls’ of convention, so this weekly block of time for Year 7 classes was taught by a specially trained team and given the title ‘The Outdoor Dimension’. The development of Learning Power through structured activity, inside and outside the classroom, was the main objective and organising principle.

As is clear from the findings of this Research and Development project in the panel below, these objectives were exceeded in one year. What then needed to be addressed were issues of consistency, both with the rest of the Year 7 timetable, in which students appeared to find significantly less opportunity to grow and learn, and with the Year 8 curriculum that these students were moving on to.

<table>
<thead>
<tr>
<th>Case Study 7: The ‘Outdoor Dimension’ project - some of the findings:</th>
</tr>
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<tbody>
<tr>
<td>• As well as recalling the concepts readily, students almost unanimously reported finding them useful, demonstrating this by using the ‘learning power language’ in becoming remarkably articulate about their learning and how to improve.</td>
</tr>
<tr>
<td>• Students and their teachers reported significant positive change in the way the students learned, often including increased confidence and responsibility.</td>
</tr>
<tr>
<td>• The teachers interviewed reported that encountering the ELLI ideas and strategies had some significant impact upon their thinking and practice.</td>
</tr>
<tr>
<td>• The Year 7 cohort made pre-to-post gains that were statistically significant (i.e. to a significance of 0.05 or better) in all the learning power dimensions except Changing &amp; Learning, where the change was approaching significance. This was unprecedented in studies of similar age groups.</td>
</tr>
<tr>
<td>• The students were able to make connections between the way they were learning in the ‘Outdoor Dimension’, using the ELLI ideas and strategies, with learning opportunities elsewhere in the curriculum and in their communities, suggesting that they are developing transferable learning dispositions and skills for life.</td>
</tr>
</tbody>
</table>

From ‘Learning in the Outdoor Dimension’, ViTaL Partnerships, 2008

More recently, another school, serving a severely disadvantaged multi-ethnic community in a post-industrial Northern conurbation, embarked upon a similar but rather more radical and far-reaching reform of the Key Stage 3 provision. Eight fifty-minute sessions a week, throughout Years 7 and 8, were allocated to a programme called ‘My World’, with no pre-determined, conventional subject content. Each of the classes is shared by three teachers with different subject backgrounds who plan and work together to create a project-based learning programme, structured in six half-term units. The school’s aim, in everything it does, is to create and support a community of learners. What they have found
ELLi brings, to this aim and to the 'My World' programme in the space of a few months, is twofold: first, a way of evaluating and stimulating learning capacity; second, a language to deepen learning conversations.

7.3 Personalised learning through context-driven enquiry: a pedagogy of place

Just as significant as the introduction of ELLi into the 'My World' programme has been the interest of the teachers in a personalised learning enquiry method that we sometimes call the 'Eight Step Process', sometimes 'a pedagogy of place'. This has proved to be a most powerful format for structuring learning processes and energising a re-designed curriculum dedicated to building learning capacity. Pioneered at Newcastle University by Professor Milan Jaros, it has also been trialled alongside ELLi with a small but widely varied sample of NEET learners (not in education, employment or training), convicted young offenders and high achieving fifteen year-olds. It is now in use as part of the University of Bristol's Master's module in 'Transformative Learning'.

Here is a summary of the process:

First, the learner is encouraged to choose an object or place that fascinates her. Careful, 'hands-off' prompting and guidance may be needed from the teacher, to ensure that personal interest is strong and authentic. The rest of the process will be highly influenced by the integrity of this choosing process. Sometimes the 'object' turns out to be a person, or event – it is its susceptibility to observation and the strength of the learner's interest and engagement that are important.

Second, he or she observes and analyses the chosen object/place, both as a separate, objective entity and in relation to her own interest and reasons for choosing it. In this, she is developing her sense of personal responsibility. This initiates the cycles of a personal development process which is recorded in a workbook and in which the learner, tutor and later others participate. It requires the learner to develop the critical curiosity and strategic awareness necessary for independent learning, in the context of effective learning relationships. She is also developing a sense of herself as a learner who can change and grow over time.

Third, she starts asking questions: obvious, but open ones, such as: How did it get there? What was there before? Why is it how it is? Who uses it? How and why did they get involved? She is initiating and conducting a process of enquiry and investigation, driven by personal interest and shaped in turn by the answers to her own questions. She is exercising and developing critical
curiosity. All the time, the learner is encouraged to reflect on her motivation, reasoning and identity as a motivator of her own learning.

**Fourth**, the questioning leads to a sense of narrative, both around the chosen object and in the unfolding of new learning. Historical and present realities lead to a sense of 'what might be' both for the object/place and for the learner and her learning. She is becoming the author of her own 'learning story' or journey.

**Fifth**, the learner begins to discern that this 'ad-hoc', subjective narrative leads in turn to new, objective facts and knowledge. Subjective learning starts to be related to a wider, objective awareness. The learning becomes a 'knowledge map' which can be used to make sense of the journey and new learning as it comes into view. She is 'making meaning' by connecting new learning to the 'story so far'.

**Sixth**, with informed guidance and support from the teacher, the learner’s widening 'map' of knowledge can be related to existing maps or models of the world: scientific, historical, social, psychological, theological, philosophical... This is where awareness of the diversity of possible 'avenues of learning' becomes useful. It requires the tutor or teacher to act as supporter, encourager and 'tour guide' in the learner’s encounter with established and specialist sources and forms of knowledge.

**Seventh**, the learner arrives at the interface between her personal enquiry and the specialist requirements of curriculum, course, examination or accreditation. Her development as learner enables her to encounter specialist knowledge and make sense of it, in relation to what she already knows and in the way she already learns, interrogating it and interacting with it, instead of simply 'receiving' it, using the model of learning and 'knowledge mapping' skills she has developed through the enquiry. This is where the resilience will be tested, that will have started to grow through the responsibility and challenge of a self-motivated enquiry.

**Eighth and last**, the learner can forge links between what she now knows and institutional and social structures receptive to it: qualifications, job opportunities, learning opportunities, needs, initiatives, outlets, relationships, accreditation, publication... Initially, this takes the form of a portfolio or presentation, based on the *workbook*, making explicit both process and outcomes of the enquiry. Her learning has met its communicative purpose. She has created a pathway from subjective response and observation towards the interface with established knowledge. In doing so, she has also achieved life-enhancing personal development by asking and answering such questions as: *Who am I? What is my pathway? How did I get there? Where does it lead me? What were the alternatives? Who helped me and how?*

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**What else is it?**

A new paradigm, about a holistic, dynamic and relational view of learning.

It shapes a ‘curriculum’ designed to:

- recognise the *person* of the learner, her intentionality, authority, relationships and story
- allow these to initiate, shape and motivate the learning process
- include reflection on *process* as an essential component of what is learned (learning about learning)
- free the learner to span and connect pre-existing forms and stores of knowledge
- enable the learning to relate - and achieve a purpose of value - to the (accountable) world.
Here is a table, summarising the eight steps and mapping them against the Seven Dimensions of Learning Power and the learning and teaching tasks involved:

<table>
<thead>
<tr>
<th>Step</th>
<th>Pedagogical task</th>
<th>Thinking and learning capability – the Eight Steps</th>
<th>Corresponding Learning Power Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selecting a personally meaningful, concrete place, context or object</td>
<td>Choosing/deciding</td>
<td>Creativity, Meaning making, Strategic awareness</td>
</tr>
<tr>
<td>2</td>
<td>Observing and describing the chosen place, context, object</td>
<td>Observing/describing</td>
<td>Critical curiosity, Resilience</td>
</tr>
<tr>
<td>3</td>
<td>Generating questions</td>
<td>Wondering/interrogating</td>
<td>Creativity, Critical curiosity</td>
</tr>
<tr>
<td>4</td>
<td>Uncovering the stories behind the object/place/context and becoming aware of the personal ‘learning story’ which is unfolding</td>
<td>Discovering/storying</td>
<td>Meaning making</td>
</tr>
<tr>
<td>5</td>
<td>Identifying ‘new’ knowledge, or concepts for investigation</td>
<td>Navigating/mapping</td>
<td>Creativity, Strategic awareness</td>
</tr>
<tr>
<td>6</td>
<td>Connecting with pre-existing funds of knowledge i.e. historical, scientific etc</td>
<td>Spanning/connecting,</td>
<td>Meaning making, Resilience</td>
</tr>
<tr>
<td>7</td>
<td>Connecting with the specialist requirements of the curriculum</td>
<td>Interacting/incorporating</td>
<td>Meaning making, Critical curiosity, Strategic awareness</td>
</tr>
<tr>
<td>8</td>
<td>Summative, authentic assessment and evaluation</td>
<td>Reconciling, validating</td>
<td>Changing and learning Strategic awareness</td>
</tr>
</tbody>
</table>

Table 7.1: The intervention called a ‘Pedagogy of Place’, further developed in Deakin Crick, R. (2009)
7.4 Social interaction and the role of the Learning Guide

From the start, in Professor Jaros’s pioneering work with undergraduate students, the theory and practice of the ‘eight step process’ included two parallel and important strands of activity: the skilled use of learning relationships and the compilation of a ‘workbook’ by each student.

One of the most interesting findings, when the approach was tested with NEET learners and high achievers, was how difficult even the brightest students found some of these steps. Even the initial choosing took far longer than anticipated and was ‘scaffolded’ by ‘ideas spinning’ sessions, in which the learners practised making choices from collections of pictures and objects, discussing the question ‘What does it feel like to be interested in something?’ At every step of the journey, learners were encouraged to reflect together and support each other in their decision making, so they were learning as much from each other as from any adult.

The adult researcher observed and noted some of the essential characteristics of her role, which she called ‘Learning Guide’, rather than ‘teacher’. It was a much more ‘hands-off’ role than that of the traditional teacher, but when help was needed it was given as immediately as possible in the form of prompts, questions and open-ended suggestions. Above all, the responsibility of the learner as ‘author of her own enquiry’ was honoured at every stage. Reflecting upon the demands of this role, the researcher wrote that an essential requirement was for the Learning Guide to be committed ‘to the life narrative of the learner, rather than to a set of objectives devised on her behalf’.

7.5 The ‘Work-book’: creating space for reflection on process

The other parallel strand of activity was the maintenance of a learning journal, called the ‘Work-book’: part scrap-book and part ‘learning log’. In this, the learners would record difficulties, reflections, reasoning behind the decisions they made and the turnings they had taken and rejected as they made their way into their expanding ‘knowledge maps’. They would also paste in exhibits and evidence, to bring the process to life: programmes, photos, tickets, flyers, extracts from articles… with their own commentary alongside, representing a personal ‘Guidebook’ to their own learning journeys.

7.6 The finished ‘product’: meeting the requirements of external assessment

The eighth step was always seen to be just as important as the other seven. This ‘personalised’ learning methodology is far from ‘soft’ or ‘indulgent’ as it might at first appear by starting with choice: it is designed to enable learners to arrive at the same outcomes, or destinations, that they would be aiming at in more conventional courses, and perhaps even higher ones. It is about reconciling and integrating the personal identity, desire, motivation of each learner with the necessary rigour and real requirement to satisfy external criteria of success and apply all that has been learned to problems and needs in the real world. One of the Masters students at Bristol recently proposed a ninth step: ‘application in the world’ as the final justification and validation of this approach.
7.7 And does it work? Jess’s and other stories.

The story of how this Eight Step process was tested and validated with NEET Learners, Young Offenders and high achieving fifteen year-olds is written up elsewhere in the ‘Learning By Accident’ report. One of the NEET learners, Jess, is worth mentioning here with her permission, as her evaluation of the whole process, including the use of ELLI profiles and dimensions to scaffold the process, articulates its value to the whole group.

After thinking of starting with her Mum, Jess chose Cheddar Gorge as her place of interest, recording her reasons in her Workbook: ‘I chose this person and place because it was the time in my life when things were just normal at home and it was just me, my mum and my brother and we were all happy’. The deeply personal feelings behind her choice were traceable through her entire project and in her final product, an excellent tourist brochure for Cheddar Gorge which she had made using ICT to satisfy the requirements of the ‘Education to Employment (E2E) course.

Jess had targeted two ELLI Dimensions to work on, based on her original profile: Learning Relationships and Resilience (‘I don’t normally stick at things’) and, almost as if by magic, these were the two with which she made the most significant gains during the eight-week project, as you can see in Figure 7 above.

It was in Jess's evaluation of her project that it became clear how much it had meant to her and how much she had learned, both about herself and Cheddar Gorge. The specialist areas of knowledge that she began to develop interests in were History and Sociology, and the whole project came to life when, after one of her earliest questions had been ‘Did anyone live in the caves before?’, she came across the discovery of ‘my cheddar man’ – that is, an ancient skeleton which had been found in the caves of Cheddar Gorge, which became the central feature of her 'new knowledge'.
Here is an extract from the report:

In her final debrief Jess was enthusiastically positive about the process; ‘It’s made me not so scared to learn other things,’ she said. ‘It was a tiny little project and it spiralled into all these other things that were connected.’ For her it was a key time of attitude change - ‘I didn’t think I could learn any more but now I believe you can.’ The most important moment for her was the group evaluation session which had brought it all into focus for her. It was at this point that she was able to reflect on ‘how deep the project went. It’s not just about Cheddar Gorge, it’s about life stuff.’


It’s not just about Cheddar Gorge, it’s about life stuff!

Fig 7.2: Two more pages from Jess’s Workbook

The high achievers who took part in this project taught us as much as Jess did. One, Demelza, said ‘Having limits makes you more creative’. Jonathan, a studious historian who described himself as previously very ‘bookish’, who began ‘to think with his feelings’. One of their fellow students, whom I shall call Simon, was quite damning about his experience of syllabus-driven learning in normal, mainstream classrooms:

Mainly however I feel doing this project has allowed me to remove myself from the monotony of my usual courses and how they are taught, it gave me an opportunity to almost teach myself and to realise for myself the incorrect manner of doing things, instead of just being told what’s wrong. As an alternative of learning how the syllabus dictates I have discovered how to learn as an individual; rather than as the rest of the students in the room are being taught. In a classroom every student is taught as though they were the same person, outside of it you can choose which ways your mind will best process the task at hand.

The discussion between these high achieving students was videoed at the time and makes fascinating viewing. Reflecting again on the difference between this personalised project and their regular experience of the curriculum, one of them came out with the line:

_We’re programmed in such a way that our experience is invisible._

One of the NEET learners made an observation about his experience of mainstream schooling which might have partly explained why he had dropped out of it prematurely:

_‘Students often don’t get on with school because every student has to do the same work, you all do one thing. They need more choice in approach – it gives you more freedom to decide instead of depending on what the teacher wants._

_I have discovered how to learn as an individual, rather than as the rest of the students in the room are being taught._

_In a classroom every student is taught as though they were the same person._

The last word goes to Danny, one of the NEET learners, who had chosen ‘outer space’ as his place of special interest. He was profoundly dyslexic and had always struggled with school work and learning. The changes to his profile (on the right) show that, although his Resilience remained quite fragile, he made significant gains in his _Critical Curiosity_ and _Learning Relationships_ – as with Jess, the very ones that he had targeted. In the course of his project, he had found an astrophysicist, a former president of the Young Astronomer’s Society in his home town, who had welcomed Danny’s interest and invited him to his next call-out. Here are some of the things that Danny said in his evaluation:

_“I’ve improved my way of finding out information on certain subjects..._

_’I’ve got a new way of learning. I have questions, and I scan and pick out the things I need._

_You have to take a leap of faith!_

_It’s opened my eyes quite a bit to learn how to do these things_

_...that astrophysicist has invited me to his next call-out with telescopes and to a lecture_

_So I’ll go on learning!_

__...and it’s changed what I think I can do!__

Chapter 8

The fifth level of impact: systemic change - leadership for a learning culture

ELLI is about opening up the possibility of profound change, for individuals, organisations and communities. What is important to remember though, is that organisations and communities do not change unless individuals do first. Most, if not all of the schools and organisations who have invested in ELLI so far have found that ELLI does not bring about change. Using ELLI certainly inspires people to change the way they see themselves and the way they think, feel and behave. It usually illuminates issues, obstacles, pathways and possibilities for change. It offers a language, to name the qualities and behaviour required, and a framework to organise strategies into a programme of organisational and professional learning, all of which can add up, in the end, to a change of culture. This chapter is about the management issues that leaders have encountered, sometimes obstacles, scepticisms and resistance, in working with ELLI, but also the opportunities that leaders have seized and the differences they have made to their school systems and ethos, demonstrating that ‘embedding’ ELLI impacts on everything, since it symbolises a culture of learning and change which is the essence of 21st century education.
8.1 Embedding a learning culture

This last, some might say ‘highest’ level of impact, seems to require a combination of several things: cohesion around a sense of common purpose, good management of practical detail and a gradual embedding of these ideas over time. What makes such a combination much more likely is inspirational leadership founded on shared, community values.

The smaller and more cohesive an organisation, the sooner this kind of impact can be seen: it amounts to the gradual development of a ‘culture of learning’ throughout a school and its community. Secondary schools, universities and local authorities present a greater challenge than a nursery or small primary school when it comes to systemic change but, by seeing it as a spectrum on which all organisations are placed, we can identify some of the features likely to be present in cultures that are changing in this direction.

A Wiltshire Primary School, Christchurch, one of the very first to be involved in the ELLI Research Programme, has gone on to embed the Seven Dimensions into its culture, such as by organising its brochure under the same seven headings as the ELLI Dimensions, because this is what the Headteacher wants everyone to know the school is about. They have also introduced ELLI into their Performance Management system, each teacher setting themselves ELLI-related objectives each year, because these seven attributes need to be modelled by teachers so they can be developed in children.

Case Study 8: A Wiltshire Primary School - The Headteacher's story

Now, all our planning documents have these seven dimensions picked out in green. Teachers and learners look out for opportunities to develop one or more of them in every lesson and every Scheme of Work.

I’ll give you an example. Ancient Greece is on the list of topics provided by the QCA. Our Year 4 decided to ‘invent’ a time machine to go back there. Before they felt safe to travel, they started to ask questions. What would they find when they arrived? Were they heading for Sparta or Athens? How were girls and women treated? What was the food going to be like? Who could find out what? A whole battery of questions was generated by the Critical Curiosity of the group, who then used their Learning Relationships to allocate them to each other in pairs for investigation. Only one person was not expected to come up with the answers: the teacher! The class had to be creative and resilient, to go on until they had found out all they needed to know and connect it all up, to make meaning and sense of it all. They had to be strategically aware, planning, estimating how long tasks would take and managing their own and each others’ contributions. Once accustomed to taking up the challenge in this way, they found they were rarely stuck for solutions because they were changing and learning, over time, and knew what to do when they didn’t know what to do!

It is no exaggeration to say that these concepts and principles inform everything we do at Christchurch. Our school brochure, ‘Learning how to learn...’ is based on them. We use them to help us define our objectives for performance management. Above all, they have permeated the language and discourse of our school community. Knowing how to assess and develop children’s learning power gives us the evidence and confidence we need for self-evaluation. With this confidence, we can say ‘Yes!’ or ‘No!’ to QCA and centrally driven initiatives, depending on whether they serve our purpose. We feel safe in ‘letting go’ and creating space for creativity.

from ‘Letting Go Safely’ – an article for ‘Primary Focus’, Summer 2006
The Headteacher tells a story about a child who had recently moved into the area and joined one of the Year 3 classes. He was overheard by the Deputy Head saying, “I can’t be bothered with this, it’s too difficult! I’m stopping!” The child next to him said, “You can’t do that! At Christchurch we are resilient; we don’t give up!”

Fig: 8.1: A wall display at Christchurch School

Being the sort of story any leader would love to be able to tell about their school, this represents a momentary but important ‘pay-off’ for years of work embedding a ‘learning culture’ in a school community.

8.2 Obstacles and challenges

In one or two of the secondary schools to have ELLI Research and Development projects, obstacles have been more apparent than enthusiasms at times. There is the question of where to position the interventions, between the pastoral/tutorial system and curriculum delivery system. One school wanted ELLI to strengthen the role and impact of its tutorial system, since the leadership understood that, done properly, this can be a foundation for academic success. Unfortunately, the way in which the tutorial programme was already seen by most staff and students meant that ELLI was ‘tainted’ in their eyes by the context in which they encountered it. ‘Last week it was Drugs, this week it’s Sex, next week it’s ELLI!’ The values of the school and its community were so focussed on academic attainment that any part of the curriculum that was not assessed for some sort of qualification was tacitly relegated to ‘second-class’ status. Some students, when interviewed about their experience of ELLI, needed to have it explained again and then said that if their tutor had explained it properly they would have taken it more seriously.

In another secondary school, an enthusiastic team of ‘ELLI Champions’ made an excellent start, reporting that their Year 7 students were extremely receptive to the ideas and motivated by their ELLI profiles. Momentum was lost when the Champions found it difficult to come up with teaching strategies for following up the introduction of ELLI. They were suffering from the ‘overcrowded agenda’ that afflicts most schools in the system, it seems, which have little room for creativity and change because the National Curriculum and its testing and
assessment arrangements are so demanding of time and energy. (This Handbook has been produced partly to help with that difficulty, though working with Learning Power will always need teachers to apply the ideas creatively and imaginatively in their own setting, in which they are the experts, rather than following set models and guidelines handed down by ‘the experts’.)

What this difficulty illustrated powerfully was the crucial importance of allocating adequate management resource to the coordination of an ELLI project. In all the schools where ELLI has really ‘taken off’ this has involved giving an ‘operational person’ time, authority and a budget, accompanied by the active support and close involvement of the leadership team.

In a third secondary school, the one in Cumbria which created the ‘Outdoor Dimension’ curriculum slot in Year 7, the critical issues raised by ELLI were about curriculum consistency, continuity and progression. Interviewing the students who were benefiting from the ‘Outdoor Dimension’ and ELLI, it became very clear that this was the only part of their school experience in which they were experiencing things like choice, reflection on process and even working in groups. As great a concern to the leadership was the question of what this Year Group would experience in Year 8 when the project was over. Such was its success in motivating and engaging students and giving them a language of learning, it was showing up the rest of the school’s practice in a way that seriously challenged the status quo.

The question raised by such observations is ‘How do we scale up from a finite enquiry to embed these principles in a learning culture?’

8.3 Leadership and Learning

It takes a particular kind of leadership to achieve the cultural change illustrated by Christchurch School and this can be even more apparent in a larger, more fragmented organisation. It includes vision, courage and commitment to shared values. It also depends upon strategic foundation-building for consistency and coherence.

Much has been written and published about the relationship between learning and leadership in recent years but perhaps nothing more relevant to this Handbook than Ron Ritchie’s and Ruth Deakin Crick’s book, ‘Distributing Leadership for Personalising Learning’, published in December 2007. In Chapter 5, on the role of the Headteacher, a secondary school case study features Patrick Hazlewood, Head of St John’s, Marlborough, where some of the strategies and curriculum reforms described earlier in this Handbook were pioneered. The way in which strategic and organisational thinking was deployed to harness and support the creative learning energy of staff and students is clear from the account in Case Study 9, opposite. A fuller account of the story of the ‘Alternative Curriculum’ at St John’s can be found in their own book, ‘Nurturing Independent Thinkers: working with an alternative curriculum’, edited by Patrick Hazlewood and Mike Bosher and published by Network Educational Press in 2005.

Patrick Hazlewood describes the change as ‘evolutionary adaptation’, recognising that human organisations need to develop their cultures organically if they are to stay healthy, maintain coherence and serve a vision of collegial responsibility. Just as we saw in the role of the Learning Guide, in Chapter 7, an essential requirement was to be committed ‘to the life narrative of the learner, rather than to a set of objectives devised on her behalf’, so we could
say that an equally essential requirement of the Learning Leader is ‘a commitment to the life narrative of their learning community’, rather than merely to a set of outcomes devised by the State, or the ‘system’, on its behalf.

Case Study 9: Strategic Leadership and Structures for a Learning Culture - a Head’s perspective
Patrick Hazlewood, Head of St John’s Marlborough

The 'TLR' re-structuring exercise in 2005-6 offered opportunities for consolidating the principle in a new structure focussing properly on supporting learning. Titles such as Head and Deputy Head of Department, serving redundant, 'box ticking, accountability' functions, disappeared. They were replaced by leadership dedicated to the professional development of the teams of teachers and to the progress of the students from age 5 to 19.

'Whole School Strategy Managers' were made responsible for such things as Assessment for Learning, work-related and vocational education and performance data analysis. 'Directors of Impact and Innovation' were appointed, to help teachers to adjust and improve the curriculum (defined as 'everything') by observing and understanding its impact on each child.

'Phase Progression Leaders' were appointed to look in a more longitudinal way at whether students are properly enabled to make seamless, unhindered progress, from age 5 to 13 and from 13 to 19. The overlap (at age 13) means that these leaders have a year of joint responsibility to hand-over their personal knowledge, taper the input of one and increase that of the other. The theme is clear again, that personalised learning and distributed leadership are, both, often more about removing barriers to learning than making new things happen.

Patrick would say it is also an essential part of the sustainability of the vision to have what he calls 'an organic understanding of the organisation', in which roles and structures are fluid and responsive to change, the rigid assumptions and power differentials of old hierarchical models are left behind. The extent of this commitment to fluidity and continual evolution is evident in the redesign of the whole school's curriculum structure over the last eighteen months. Instead of the traditional subject departments and faculty structure, there are now four 'schools', all focussed on the education of human beings in the global dimension of the 21st century:

- School of Human Exploration
- School of Human Communication
- School of Human Enterprise
- School of Human Performance

Although this 'raised eyebrows' when it was first proposed, in a mere eighteen months it has 'become part of the way people think about the organisation of learning in the school'.

The next step in this story of 'evolutionary adaptation' to the times we live in and to the learners 'who are at the heart of everything we do', is what Patrick calls 'Radical Collegiality': embracing students into the 'collegial responsibility of the organisation' as co-researchers, observers, and participants, 'co-constructing the pedagogy', having equal worth and therefore an equal voice. A small group, consisting of a dozen students in each of the three Year Groups, 8, 9 and 10, are already being trained as researchers, together with partners from a school in Essex. They will train and teach the others. "If you teach something, you know it better yourself", says Patrick. “You enquire into the learning environment and understand the frustrations...” The idea is to give students some of the 'expert status' once reserved for teachers.

What has become apparent in all the organisations we have worked with using ELLI to stimulate learning and cultural change, is a clearer understanding of the relationship between the ‘bottom-up’ energy we are engendering and the ‘top-down’ power of systems and policy. If these are in harmony, then progress can be swift and ELLI will shine a light on the path ahead. Wherever they clash, ELLI will tend to illuminate the issues, raise questions and provoke debate about principles, priorities and criteria for success. The ideas and interventions in this Handbook will only work in the hands of creative practitioners who are encouraged and given the space to be creative with them. The evidence is growing that they serve the accountability and achievement agenda in a more sustainable way than centrally-driven change has ever done. It is important to move beyond a tired dichotomy between the imperatives of accountability and the ideals of personalisation. The ‘Every Child Matters’ outcomes are about achieving and enjoying, well-being and economic sustainability.

What we are exploring and delineating here is a new paradigm for learning and leadership that takes these often-opposed concepts of individual freedom and social accountability and unites them in a dynamic, shared responsibility for co-creating purpose and meaning in a fragmented world. It is a paradigm in which the learner’s personal engagement in an intentional, reflective and relational process builds the agency, capacity and self-worth she needs to achieve her own personal and economic goals, responsibly, in relation to those of others and those of her community.
In the introduction to this Handbook, we talked of a growing, global learning community. For nearly a decade, these ideas have walked into classrooms and other learning environments and inspired change. Opportunities are there, now, for them to make even more difference in two ways: firstly, by influencing policy and practice more widely in the UK, secondly by travelling the world and being tested in completely new and different settings. This chapter mentions some of these opportunities, starting with projects currently underway and ending with what might be spied on the horizon, or dreamed of beyond it.
9.1 Influence at home: the Learning Futures Programme

The School in the North of England that introduced ‘My World’ into its Key Stage 3 curriculum, mentioned in Chapter 7, is part of an exciting wider project called the ‘Learning Futures’ Programme, a partnership between the Paul Hamlyn Foundation and the Innovation Unit. Fifteen schools across the length and breadth of England are devising and testing innovative practice in teaching and learning, with the aim of developing a ‘toolkit’ of effective practice. Dr Ruth Deakin Crick has been appointed as academic evaluator to this project and ELLI has been adopted as an evaluation tool, to measure the impact of the innovations on students’ learning.

Some of the schools that have learned about ELLI as an evaluation tool have also decided to use it as a development tool. A School in the South of England, for example, has created a ‘Parents’ Forum’ to improve their partnership working with families. They have set up a portal for communications, through which parents can complete their ELLI profiles and discuss and exchange their ‘learning about learning’ with their children. One weekend day was devoted to giving forty parents an introduction to ‘Coaching for Success’, by a team from the Training and Learning Department of a major UK retailer (who are also working with Dr Deakin Crick on the development of a new Masters Degree in Systems Learning and Leadership). Another of these schools has extended their ELLI work into their Year 7 ‘Learning to Learn’ (‘L2L’) programme and finding that it is helping students to move beyond the ‘parroting’ of jargon phrases that ‘L2L’ can be reduced to, if it is actually ‘teaching about how to learn’ instead of ‘experiencing how I learn’.

Case Study 10: The Learning Futures Project

10.1: Engaging Learners

The aim of all Learning Futures’ practices is deep and sustained learner engagement. Why is it that such a priority, and what do we mean by ‘engagement’?

We believe that the rise in standards in English schools has levelled out in recent years. Most interventions focus upon raising student achievement, not student interest.

We believe that by shifting the emphasis to creating learning which is engaging (to students and staff alike) achievement will follow. It’s not hard to envisage that a student who is motivated is more likely to do well at school.

We believe that engaged students are more likely to want to extend their learning beyond school. Statistically, large numbers of students who have performed well in their examinations become disinclined to continue their studies beyond school. And there are now far more opportunities to learn informally, through social media and internet technologies, that schools face stiff external competition for their students’ interest.

Typically, schools view engagement as a matter of compliance: if the student does what is asked of them, stays out of trouble and appears to be making progress, he or she is deemed to be engaged. Learning Futures believe that we need to go much deeper than that.

Compliance in learning is insufficient – we need to aim for a shared commitment to learning. Engagement isn’t solely the student’s job; it involves school, family and community – all committed to a co-constructed learning environment.

- extract from the Learning Futures Website: www.learningfutures.org
The principles of the Learning Futures Programme are remarkably in tune with everything that ELLI is about. The purpose is to foster a ‘deep-rooted love of learning’ and the Programme recognises that this is part of a relational paradigm. Engagement is a function of how much sense things are making to students: if they ‘relate’ to what they are learning and can ‘relate’ their school learning to their wider experience and community, then the learning stands a real chance of being ‘authentic and motivational’. The emphasis on enquiry-based learning fits well with the models of curriculum re-design we looked at in Chapter 7. The theme of co-construction accords with our redefinition of the teacher’s role into that of a ‘Learning Guide’. The inclusion of mentoring in the relational theme is supported by the experience of mentoring framed by ELLI profiles: probably the single most powerful intervention of all.

The 'Operational' themes are no less relevant. The power of ELLI to offer and stimulate a language of learning is one of the most universal findings from the Research and Development programme. The development of independent learning tunes in with the aims of reducing Fragility and Dependence (by increasing Resilience) and avoiding dependence or isolation (by increasing the Learning Relationships dimension), though the dual nature of that dimension does remind us to work for 'interdependence', rather than simple independence. The implications for leadership, workforce, structures and resources have been explored at least partially in Chapter 8.

What this attention to operational aspects has in common with ELLI is a refreshing practicality: educators have talked about these ideals for a long time in many schools; now perhaps there is something we can actually do to move things in the right direction. This is an echo of what the leadership of the Malaysian Sixth Form College, KYUEM, said, once their project was underway: “We have talked about getting our students to be more confident, self-regulated, critically curious, able to think for themselves. ELLI has given us a practical way of doing something about it.” If the Learning Futures Programme is successful, many more schools will be able to benefit from these tools and strategies.
9.2 ELLI in Business

As well as one major business partner being involved in the development of the new Masters Degree in ‘Systems Learning and Leadership’ at the University of Bristol, another equally significant company is exploring how effective ELLI can be within a coaching framework, to foster creativity, resilience and learning relationships and improve employee satisfaction across a marketing department of 300. If successful, the company is considering offering its people ‘Ten Year ELLI Accounts’ as part of its investment in their potential, to be owned by them and portable if they were to move to another company. The idea is to shift the culture from a ‘top-down’, centrally directed operation to one where the energy, enthusiasm, initiative and capacity for customer analysis and ‘decisioning’ are embedded in the workforce. If it works, not only will the potential leverage for productivity be enormous, it will pave the way for similar change processes to be taken on by other commercial organisations.

9.3 Influence abroad: towards a global learning community

In recent years, as well as being tested and found effective in South East Asia (Malaysia), ELLI has found its way into schools in Australia, in three states: New South Wales, Northern Territory and South Australia. National and state-wide policy initiatives, such as Values Education and the Australian Government Quality Teaching Programme have provided a more receptive central policy context for ELLI than it has enjoyed in the UK so far, where the process of devolving power to schools has gone further and it has been those schools willing to take risks and be experimental that have benefited most.

Elsewhere, there is a significant Research and Development Project in progress in a Polytechnic in the Middle East, which includes the adaptation and validation of the ELLI inventory in that culture. A school district near Chicago has formed a community of professional learning around ELLI following a piece of doctoral research by a teacher in one of their schools, which found remarkable and significant gains in a target sample given ELLI-related interventions, compared with a control group of students given the ‘normal’ curriculum.

There are already Italian and Chinese translations in the pipeline and some of the most distinguished and influential philanthropic Foundations have expressed interest in exploring the possibility of researching and embedding ELLI into practice in community colleges across the USA.

The aspirations for Research are equally far-reaching, with a possible research design for a comparative study of five schools in each of five different countries and the possibility, subject to funding, of a longitudinal study which would fill an important research gap: tracking learning power through the learning journeys of a range of individual learners and their communities over time.

9.3 Communications

This interest and the global reach of ELLI raise obvious questions about how to communicate and continue to exchange the knowledge being co-created with so many partners, so far afield. Some of the most exciting developments currently under discussion involve the use of Web2 and Web3 technologies to put learners in touch with mentors, incorporate ELLI profiles into e-Portfolios and develop the Learning Warehouse into a global ‘village’ with tools and resources accessible and contributed to by learners across the world. Watch this space!
References and further reading


Deakin Crick, R. (2009) Pedagogical Challenges for Personalisation: Integrating the Personal with the Public through Context-Driven Inquiry Curriculum Journal, 20, 3 Special Issue


For more information

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