

Support Documents

Click onto the titles below for links to support documents. Shorter help documents can be accessed from the Quick Help link in the Support and Advice menu.

About Learning through Work

The Learning through work level indicators

Developing a Learning Plan

Reflecting on your experience

Writing learning plan modules

Renegotiating your learning plan

Developing a learning plan

Designing your module learning outcomes

Accreditation of prior learning (APEL)

Learning Activities

Self audit

Keeping track and reviewing your progress

An introduction to research

Managing projects

Making best use of online learning

Learning from doing: action learning, action research and reflective practice

Learning with others

Ethical issues

Identifying work based learning opportunities

Assessment

Self assessment and peer feedback

Producing a narrative argument

Assembling and preparing evidence

Using academic conventions

The Learning through Work Level Indicators

Introduction

Qualification levels are a means of expressing how demanding and complex learning needs to be in order to contribute to the qualification. LtW uses a system of nine levels (Entry and levels 1 to 8) which span further and higher education. This document includes a brief description of each level, along with the detailed criteria which will be used to assess whether work is at the relevant level.

The first four levels (Entry and 1-3) cover further education, and qualifications at this level are normally made by awarding bodies rather than universities - organisations such as City & Guilds, Edexcel (BTEC), OCR (RSA), and LCCI. The upper five levels (4-8) are at higher education level, and include qualifications such as first and master's degrees and doctorates which are made by universities. Qualifications at this level are also made by some awarding bodies and professional bodies. Learning through Work currently operates through the universities, so it is restricted to levels 4 to 8 (higher education levels 1-5).

<i>Learndirect level</i>	<i>F/HE levels</i>	<i>Qualification types</i>
Entry	Entry	basic skills
1	1	NVQ 1, foundation GNVQ, basic occupational qualifications
2	2	NVQ 2, GCSE, intermediate GNVQ, First Certificate / Diploma, many trade or basic craft certificates
3	3	NVQ 3, A-levels, advanced GNVQ, National Certificate / Diploma, many craft certificates, Access to HE courses
4	HE 1 / C	CertHE, some advanced craft or technical qualifications
5	HE 2 / I	DipHE, foundation degree, Higher National, some professional qualifications
6	HE 3 / H (degree)	Honours degree, graduate diploma, many professional qualifications
7	HE 4 / M	Postgraduate / Master's, some professional qualifications
8	HE 5 / D	Doctorate

What level is right for you?

If you are unsure what level you should be working at, think about:

- any qualifications you have already - if you have additional experience since, you may be ready to work at a higher level (maybe more than one level 'up' from your last achievements)
- what qualifications other people have who are doing a similar job to you
- what qualifications other people have who are doing a job you are aspiring to
- if you supervise or manage people, the level of qualification they would normally have (you are probably working at the same or a higher level)

- whether you need a particular qualification to do your current job or one you are aiming for.

However, you do not have to pitch your programme at the highest level possible - if you are gaining skills in an unfamiliar area (learning a new language is a good example) you may need to start at a much lower level than you would be capable of working at in an area where you are familiar.

Matching your intended programme to the levels

From the point of view of registering your programme, it is important to ensure that the level of qualification or credit you are aiming for is appropriate for what you are intending to do, and your programme modules are pitched at that level. If you are intending to take a qualification or gain credit based on work you have already decided to carry out, the emphasis will be on matching your programme to one of the levels; if you want to achieve a qualification at a particular level, you may need to build or at least adapt your programme so that you can be reasonably sure that you will meet the requirements for the level. The examples below illustrate how this might work.

- Patrick manages a nature reserve for an environmental organisation. He has put together an outline programme based on a habitat and land use survey he is due to carry out over the next 12 months. His intended programme most closely matches the requirements for level 6, but the university he is registered at cannot award a full degree unless he also shows he has covered sufficient ground at levels 4 and 5 as well (e.g. through demonstrating previous learning). While he could probably do this if he wanted, he opts to register for a level 6 Professional Diploma.
- Stephanie has recently been appointed as a company secretary. Her highest qualification is a National Certificate (level 3), but she has several years' experience in senior administrative roles. Through discussion with a university tutor, she decides to work towards a degree (level 6). Initially her proposed work-based portfolio looks likely to meet the requirements of level 5, but she is able to broaden it out by including an investigation of opportunities and threats facing her organisation. She revises her programme to meet level 6 criteria, and registers it for an honours degree.

How are levels described?

There are several systems in use to describe qualification levels. The Quality Assurance Agency for Higher Education (QAA) publishes minimum standards for each of the higher education levels, and regional credit consortia also have descriptions for each level. LtW has built on these and other statements to create descriptions and indicators for work-based learning.

Each level has an overall description, indicating at a general level the kinds of things you will need to do to work at that level. The description is useful to decide which level to pitch your programme at.

There are also detailed 'indicators' for each level, covering five main areas: complexity and responsibility, scope, thinking and understanding, investigation and evaluation, and innovation and originality. The indicators provide a means of judging whether your learning, as represented by the evidence you produce, is appropriate to the level of award or credit you are seeking. You do not have

to meet all the indicators in every piece of work you produce, but overall your work needs to reflect the indicators for the level you are working at.

Some of the level indicators are written in a fairly generic style, because they need to apply across all kinds of work and learning activities. If you are unclear about what they are asking, discuss them with your tutor.

The levels descriptions and indicators

The following descriptions summarise all nine levels but remember that LtW normally operates at level 4 and above. The more detailed indicators which will be used to judge the level are appended in a table at the end. The descriptions indicate the level of work needed to complete an award at the relevant level, **not** to enter the programme.

Entry level

Entry level is about applying basic skills effectively. At this level you can be working under guidance.

Level 1

Level 1 concerns work and learning which involves straightforward tasks and developing basic understanding. You will need to be able to carry out basic tasks and procedures on your own initiative, but you will be able to work with access to guidance.

Level 2

Level 2 will involve you in taking responsibility for a range of tasks and drawing on in-depth knowledge of your immediate area of work. You will need to be able to check the results of your work, and show that you can respond to unfamiliar situations.

Level 3

At Level 3, you will be making decisions about appropriate approaches, coping with situations which present a range of problems and choices, and reviewing your work. You will need to be able to use your understanding of principles which apply to your work, as well as drawing on your own ideas and experience to solve problems.

Level 4 (HE 1 / C)

At Level 4, you will be thinking through and reviewing courses of action, making informed judgements on issues which affect your work, and coping effectively with a range of unfamiliar situations and problems. You will need to be able to use your understanding of principles which apply to your work, as well as producing your own ideas and developing innovative responses. You will need to be able to carry out small-scale practical investigations, and review the appropriateness of different options.

Level 5 (HE 2 / I)

At Level 5, you will be thinking through and reviewing courses of action, including their impact outside of your immediate work. You will be making informed judgements on issues which affect your work and coping effectively with a range of unfamiliar situations and problems. You will need to be able to draw on a broad personal or formal knowledge-base and set of concepts which apply to your work, as well as producing your own ideas and developing innovative responses. You should be able to develop your own theories and find ways forward when faced with contradictions and dilemmas. You will need to be able to carry out small-scale practical research in relation to your work.

Level 6 (HE 3 / H)

At Level 6, you will be thinking through, understanding and reviewing different courses of action, including their impact outside of your immediate area of work. You will be making informed judgements on issues which affect your work, and working effectively with unpredictable issues. You will need to be able to draw on a broad personal or formal knowledge-base as well as concepts, theories and models which apply to your work.

You will be producing your own ideas and practical theories, and developing innovative responses in complex situations; you should be able to manage dilemmas and find ways forward in problematic situations. You will need to be able to design and make use of practical, methodologically sound research to contribute to your work or that of your organisation.

Level 7 (HE 4 / M)

At Level 7, you will be developing thought-through courses of action which take into account alternative implications and issues beyond your immediate area of practice. You will be making informed judgements on issues which affect your work, and working effectively with unpredictable issues. You will need to be able to draw on mastery of a broad personal or formal knowledge-base relating to the area of your work and its wider context, as well as developing and evaluating concepts, theories and models which apply to your work.

You will be producing your own ideas and practical theories, and developing innovative responses in complex and unpredictable situations; you should be able to manage dilemmas and value-conflicts and find ways forward in problematic situations. One of the features of this level is that you will need to consider issues beyond your immediate area of practice, and take a critical approach to the thinking and assumptions which you and others are using.

You will need to be able to design and make use of practical, methodologically sound research to contribute to your work or that of your organisation.

Level 8 (HE 5 / D)

At Level 8, you will be developing thought-through courses of action which take into account alternative implications and issues beyond your professional discipline or area of practice. You will be making informed judgements on issues which affect your discipline or area of practice, and working

effectively with unpredictable issues. You will need to be able to draw on critical and creative mastery of a broad range of concepts, theories and practices, as well as being aware of the assumptions underlying them from perspectives which go beyond individual disciplines and contexts.

You will be producing your own ideas and theories and developing innovative responses in complex and unpredictable situations; you should be able to manage dilemmas and value-conflicts and find ways forward in problematic situations, including those which go beyond your organisation or discipline. One of the features of this level is that you will be taking forward an area of practice in a way which is of value beyond your organisation or community of practice, and developing as a leading practitioner in your field.

You will need to be able to design and make use of practical, methodologically sound research which contributes to your area of practice, and which results in new understandings or approaches which extend or redefine existing knowledge or practice

The detailed levels indicators

The more detailed level indicators on the following pages will form part of the assessment criteria for your programme modules. It is not expected that every module will meet all the indicators, but for a major qualification at any of the levels you should meet all the indicators across the breadth of your work.

The notes on the final page should be read in conjunction with the indicators.

Field	Description	Entry level	Level 1 (FE)	Level 2 (FE)	Level 3 (FE)
Complexity and responsibility	This concerns the level of complexity you are dealing with and what you are personally taking responsibility for (which can be different from the responsibility expected in your job).	- Responsibility for straightforward tasks and procedures - Making straightforward choices - Coping effectively in routine situations	- Responsibility for a range of straightforward tasks and procedures - Making straightforward choices - Coping effectively in familiar situations	- Responsibility for a range of tasks and procedures and their immediate results - Making decisions about how to complete tasks - Coping effectively in familiar and occasionally unfamiliar situations	- Responsibility for results and standards as well as methods - Making decisions about appropriate approaches and, within limits, objectives - Coping effectively with unfamiliar situations which present a range of problems and choices
Scope	This is about whether you are for instance working within a closely-defined situation or considering wider implications and impact.	- Working within well-defined rules or guidelines - Accepting boundaries of work as given	- Working within rules or guidelines which require a minimal level of interpretation - Accepting boundaries of work as given, querying if unsure	- Interpreting and applying rules and guidelines to the area of work - Identifying different approaches within the overall guidance or boundaries of work	- Recognising principles and issues applying to the area of work - Identifying different outcomes and approaches within the overall boundaries of the work area
Thinking and understanding	This refers to the level of thinking and understanding you are using in analysing information, pulling information together and making decisions about what you are doing.	- Identifying and working with different types of information - Selecting the information needed to complete a task	- Using a basic level of knowledge, referring to others where gaps are identified - Sorting and selecting different types of information - Combining information from different sources to inform tasks	- Drawing on in-depth knowledge of the immediate area of work - Analysing data to extract relevant information for presentation or use - Interpreting and combining a range of information to assist action	- Acting on understandings of relevant principles, including awareness of alternatives and contradictions - Analysing information to identify relationships and make informed judgements - Combining information to develop ideas and choose courses of action or develop ways forward
Investigation and evaluation	This concerns how you are investigating information and evaluating situations.	Working with information more-or-less as provided	- Looking up information from easily-accessed sources - Checking own progress on tasks	- Identifying information which is needed and using a range of straightforward sources - Checking results of own work	- Identifying information which is needed and using a range of different sources, including from outside the immediate context - Evaluating the appropriateness of different approaches
Innovation and originality	This is about the level of originality and innovation you are bringing to your work.	- Checking that information is relevant to own situation - Working within given procedures or instructions	- Using experience to check provided information - Looking out for better ways of completing tasks	- Drawing on own ideas and experience - Putting forward ideas for better ways of working	- Using own ideas in addressing issues - Improving and modifying approaches to working

Field	Description <i>Qualification type</i>	Level 4 (HE1) <i>CertHE</i>	Level 5 (HE2) <i>DipHE</i>	Level 6 (HE3) <i>Honours degree</i>
Complexity and responsibility	This concerns the level of complexity you are dealing with and what you are personally taking responsibility for (which can be different from the responsibility expected in your job).	• Responsibility for courses of action and their results, including wider impacts • Thinking through and choosing courses of action • Coping effectively with a range of unfamiliar situations and problems	• Responsibility across a broad area rather than for individual tasks, including for negotiating objectives and outcomes and for their wider impacts • Developing thought-through courses of action • Coping effectively with a range of unfamiliar situations and problems	• Responsibility across a broad area including for planning, resourcing and quality as well as for outcomes and their immediate and wider impacts • Developing thought-through courses of action • Working effectively in complex and unpredictable contexts
Scope	This is about whether you are for instance working within a closely-defined situation or considering wider implications and impact.	• Recognising the implications of different issues and courses of action • Identifying and evaluating the practical effects and impact of operating parameters	• Understanding the implications of different issues and courses of action, • Identifying dilemmas and value-conflicts • Identifying and evaluating the effects and impact of operating parameters and principles	• Understanding the implications of different issues and courses of action • Understanding and managing dilemmas and value-conflicts • Identifying interrelationships between wider systems in which the area of practice is located
Thinking and understanding	This refers to the level of thinking and understanding you are using in analysing information, pulling information together and making decisions about what you are doing.	• Acting on understandings of relationships and contradictions between principles and ideas • Investigating, analysing and evaluating information to identify relationships and make informed judgements • Reinterpreting and combining information to develop ideas and choose courses of action or develop ways forward	• Drawing on a broad personal or formal knowledge-base and set of mental models relating to the area of practice • Developing practical theories, ideas and models including to find ways forward when faced with contradictions and gaps in theories • Researching, analysing and evaluating information to identify relationships and patterns and make informed judgements	• Drawing on a broad personal or formal knowledge-base and set of mental models relating to the area of practice • Developing and evaluating a range of practical theories, ideas and models, including to find ways forward in problematic situations • Researching, analysing and evaluating information to identify relationships and patterns and make informed judgements
Investigation and evaluation	This concerns how you are investigating information and evaluating situations.	• Designing investigations to provide new information and affect practice, including through practical investigation • Evaluating the appropriateness of different approaches and their impacts	• Designing practical research to provide new information and affect areas of practice • Evaluating the effects of options and actions, including impacts outside of the immediate context	• Designing practical, methodologically sound research to provide new information and affect areas of practice • Evaluating the actual and potential effects of theories and actions, including impacts outside of the immediate context
Innovation and originality	This is about the level of originality and innovation you are bringing to your work.	• Producing own ideas and developing innovative responses • Developing novel solutions to problems	• Taking innovative approaches to address issues • Developing novel solutions to sets of problems	• Taking innovative approaches in complex situations • Developing novel approaches to systems

Field	Description	Level 7 (HE4/M)	Level 8 (HE5/doctorate)
	<i>Qualification type</i>	<i>Master's / Postgraduate</i>	<i>Doctoral</i>
Complexity and responsibility	This concerns the level of complexity you are dealing with and what you are personally taking responsibility for (which can be different from the responsibility expected in your job).	• Full responsibility for methods, actions and immediate and wider impacts which extend beyond the immediate area of practice • Developing thought-through courses of action which take into account issues beyond the immediate area of practice • Working effectively in problematic contexts which contain value-conflicts and uncertainties which extend beyond the immediate area of practice	• Responsibility as a leading practitioner in a community of practice and extending beyond the immediate area of practice • Developing thought-through courses of action which take into account issues beyond the immediate area of practice • Working innovatively in problematic contexts and engaging with value-conflicts and uncertainties which extend widely in and beyond the area of practice
Scope	This is about whether you are for instance working within a closely-defined situation or considering wider implications and impact.	• Understanding alternative implications of different issues and courses of action • Understanding and managing dilemmas and value-conflicts • Understanding and acting on interrelationships between wider systems in which the area of practice is located	• Understanding alternative implications of different issues and courses of action • Understanding and managing dilemmas and value-conflicts in a way which takes forward wider practice • Understanding and acting on interrelationships between wider systems in which the area of practice is located
Thinking and understanding	This refers to the level of thinking and understanding you are using in analysing information, pulling information together and making decisions about what you are doing.	• Using mastery of knowledge relating to, and extending into the wider context of, the area of practice. • Developing and critically evaluating a range of practical theories, ideas and models, including to overcome dilemmas and find ways forward in problematic situations • Researching, analysing and evaluating information to identify inter-relationships between wider systems in which the area of practice is located	• Using critical and creative mastery of a broad range of concepts, theories and practices and the assumptions underlying them from perspectives which transcend individual disciplines and contexts • Developing and critically evaluating a range of practical theories, ideas and models, including to overcome structural dilemmas and find ways forward in problematic situations • Researching, analysing and evaluating information to identify inter-relationships between wider systems in which the area of practice is located • Generating new understandings and approaches which extend or redefine existing knowledge and practice
Investigation and evaluation	This concerns how you are investigating information and evaluating situations.	• Undertaking substantial investigation to address significant areas of practice, using methodologies which are consistent with their purposes and contexts • Critically evaluating thinking, action and structural factors operating in the area of practice, including underlying assumptions, and identifying implications for wider systems beyond the area of practice	• Undertaking original investigation to address significant areas of practice, using methodologies which are practically and philosophically consistent with their wider purposes and contexts • Critically evaluating thinking, action and structural factors operating in the area of practice, including underlying assumptions, and identifying implications for wider systems beyond the area of practice
Innovation and originality	This is about the level of originality and innovation you are bringing to your work.	• Developing innovative ways forward in complex and unpredictable situations • Developing novel approaches to systems	• Developing innovative approaches which redefine or extend the scope of practice • Developing novel approaches to complexes of systems

Field	Description	Notes	Interpretation
Complexity and responsibility	This concerns the level of complexity you are dealing with and what you are personally taking responsibility for (which can be different from the responsibility expected in your job).	Complexity and responsibility relate to factors such as: – the number of variables the learner is engaging with and the complexity of interrelationships between them – the criticality of the learner's actions – the breadth and depth of impact which the learner is taking responsibility for – the extent to which the learner is engaging with issues outside the immediate context – the extent to which the learner is addressing divergent issues.	Complexity and responsibility relate to how the learner engages with a situation, not to the situation itself. For instance, a learner in a fairly straightforward job may be demonstrating a high level of complexity and responsibility by going outside the job demands, while someone in a 'high-level' job need not be engaging with it in a way which demonstrates a high level of complexity or responsibility. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Scope	This is about whether you are for instance working within a closely-defined situation or considering wider implications and impact.	'Scope' refers to whether the learner is operating within close constraints, or 'outside the box' where s/he is dealing with wider systems implications, divergent or complex issues, and is setting the parameters of his or her action. Ethical, value-based and environmental / contextual issues will be reflected in 'scope' as relevant to the situation.	As with complexity and responsibility, scope relates to the learner's approach and actions, not to the context directly. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Thinking and understanding	This refers to the level of thinking and understanding you are using in analysing information, pulling information together and making decisions about what you are doing.	This field is essentially concerned with understanding and thinking in relation to practice. It is based on level increasing with factors such as – development and testing of personal theories and mental models – responsibility for evaluation – questioning of taken-for-granted assumptions – critical and creative, as opposed to purely technical, thinking – synthesis and interpolation – acceptance of and engagement with divergence, lacunae and 'wicked problems' or 'messes' – engagement with and management of dilemmas and conflicts of value.	Thinking and understanding need to be related to practice: in a work-based learning context theory-in-use or thinking-for-action is more important than espoused theory, although particularly at the higher levels the statements require reflection on the thinking employed in action. Particularly where intuitive and tacit understandings are involved, they may be evidenced through action rather than explanation, although in many situations a balance of action and explanation will be required. The emphasis on different parts of this field are likely to vary with the type of work the learner is engaged in; compensation within the field is acceptable.
Investigation and evaluation	This concerns how you are investigating information and evaluating situations.	This field draws on the three previous fields in the context of (practical) research and evaluation.	'Research' is used in the context of practical research: although the level of research expected is equivalent to that in an academic context, it may be presented differently (or used directly to inform action without being formally presented). The research criterion does not imply a distinct 'research project,' as research could be part of a development process, management plan or report, or other form of practical action.
Innovation and originality	This is about the level of originality and innovation you are bringing to your work.		Innovation refers to the originality of action for the context; it needs to be interpreted in the learner's context and does not imply something which is totally unique.

Reflecting on your experience

Introduction

Reviewing your experience is about doing more than producing a CV. It involves reflecting on your experience, deciding what parts of your experience are most relevant to you now, identifying what you have learned and what you have to build on, and identifying themes and turning-points that have been important.

You will need to review your experience to date if you are developing a LtW Learning Plan and if you are considering the possibility of making a claim for credit for your previous learning.

In reviewing and reflecting on your experience, you might think about:

- the experience you have - both your work experience and experience outside of work
- the parts of your experience that are relevant to what you want to do now
- any themes running through your experience that you can draw on
- any turning-points in your experience
- what you have learned from your experience and what will you build on.

Each point is discussed in more detail below.

Summarising your experience

A short CV-style document can be useful as a starting-point. You will need to make brief notes about what you did and achieved in each job or work role you have had. Sometimes there are important areas of experience that are not part of the official job description or role: don't leave these out.

Example

In her job as customer service supervisor Kerry had the opportunity to become involved in a quality forum that included other mail-order and e-commerce retailers. She felt this experience gave her a much wider appreciation of quality issues than she would have got from her own organisation, and gave her an understanding of some of her company's competitors and how they worked.

In addition to work experience, are there any other areas of experience that could be relevant? This might include things such as:

- voluntary or community work, organising sports or leisure activities or other events, membership of committees, active membership of clubs, groups and societies
- sporting or leisure activities, travel
- family responsibilities - e.g. bringing up children, looking after disabled or infirm relatives
- college, university or training

- significant events in your personal life that you have learned from.

There's no need to document everything you have been involved in, but identify activities that you think have helped you develop new skills, gain knowledge or rethink the way you go about things.

Examples

When Kevin's aunt became ill, he reorganised his work to help care for her. He also became involved in organising breaks and holidays for people with Alzheimer's disease. He has improved his organisational skills, learned to see infirm people in a more positive light, and has also become better at managing his work to fit in with other commitments.

When she was at college Sarah was events secretary for the orienteering club. She feels her experience of organising and publicising events, liaising with landowners and other clubs, and solving problems provided her with some skills that have been valuable throughout her career.

Bill is a union steward in a catering company. This has given him experience in negotiating, representing others, and understanding management issues that he would not have got from his job as a cook.

Marcel is a keen dinghy sailor and instructor. He feels his instructor role has helped develop his leadership and training skills, something he does not have an opportunity to do at work.

Identifying experience that is relevant now

As well as summarising your experience, you will need to identify that which is most relevant to what you want to do. For instance, if you are intending to develop a learning plan in a technical field, then you might emphasise any technical training, experience and qualifications you have. On the other hand, if your programme is to help you develop as a manager, you might draw out things such as planning, taking responsibility for projects, and working with other people.

Some things are likely to be important whatever direction you intend to develop in: these can include general skills such as working with people and communicating effectively, problem-solving and organising abilities, attitudes and approaches that have proved successful, and possibly areas such as writing and IT skills. You may also have more specific strengths that you want to emphasise, such as being a good negotiator, being good at getting detail right, or quickly seeing the big picture. As a result it can be useful to draw out experiences that have helped you develop these kinds of abilities.

Examples

Kim has had a successful career in sales and promotion, and wants to take on a more strategic role in marketing. While all her experience is relevant, she needs to emphasise more recent experience that has given her an understanding of the overall market the company operates in and the practical knowledge that is relevant to developing new products and services.

Rashid is a computer programmer who has recently moved into a team leader role. He wants to develop his project management skills, and will emphasise both his strong technical experience and his more recent experience of leading projects.

Identifying themes and turning points in your experience

Themes are things which recur in your experience and development. They need not be obviously related to the kind of work you do, but they often suggest personal strengths or preferences that underlie your experience - and may continue to be relevant in the future. Themes can appear positive or negative, although negative themes can often be turned to positive use.

Examples

James has worked in several fields, in retail, accounts, site management, and local government administration. Looking back across his experience, he identifies several things that he can associate with successful outcomes in each job. These are having a clear vision of what he wants to achieve; planning; and being meticulous about the detail. He also identifies that he dislikes other people interfering in his work, and likes to see things through to the finish.

Ruth has had eight jobs in eleven years and until she identified the connecting theme, thought her career was a mess. She realises that she enjoys new challenges and creating new ways of doing things, but becomes frustrated when she is not learning anything new. She recognises that she needs to find a job, or start a business, that can grow with her and allow her to explore new directions.

Ellen spent five years struggling as a trainee and junior manager before she moved into operational planning and more recently organisational consultancy, where her career seems to be taking off. Looking back, she realises that she disliked the crisis management in her earlier career, and is much better at working on systems and overviews than she is at day-to-day problem-solving.

Turning-points are events and experiences which led to or stimulated a significant change in your career or life. If you have experienced any significant changes, think about the events that led up to them.

Examples

Catherine can identify a turning-point in her career shortly after she returned to work and realised that she was capable of doing more than the clerical job she had been doing after leaving school. She remembers two events that triggered her decision to apply for a job that she thought was a long way out of reach: a discussion with a family friend who helped her realise that she had a lot of skills that weren't being used, and going on a risk assessment course where she realised she understood what was needed a lot more quickly than some of the managers.

Les remembers a growing sense of boredom in his career in insurance that led him to try several different jobs and open a shop selling computers. From his shop he realised that he didn't want to stay in a sales job, but he discovered that he had a natural ability for teaching and training. He has since moved to a further education college where he teaches IT skills to adults, a role he enjoys immensely.

What you have learned and what you have to build on

There is little point in reviewing your experience if you are unable to draw out learning points from it. You will need to identify how your understanding has changed, what skills and abilities you have developed or enhanced, and whether you do or approach things differently in any way. You might think about how your ability, knowledge and understanding has changed over the period you are referring to: what can you do now that you couldn't do, or were less competent or confident at, before

you gained your experience? You may also be able to identify points about how you learn effectively, to help you maximise future opportunities.

Examples

One of the most important things that Lilian learned is that her 'zany and rebellious' ideas are a real asset that she is now putting to use in her own design business. She reflects that she has learned to balance her creativity with a more serious side that lets her turn her ideas into products she can design and sell.

Reflecting on his work and voluntary roles, Ben is able to identify a range of organising and 'people' skills that are relevant to becoming a team leader. He also recognises that he picks up new skills and knowledge quickly when he has to get on with tackling a problem, particularly when he is working with others who can help spark off new ideas.

Jill's career as an academic and consultant has enabled her to develop a high level of expertise and knowledge in her specialist area. She also reflects that she has developed some valuable skills in helping people and organisations to work through problems and take responsibility for them, and as a result she is beginning to develop a model for organisational consultancy.

Your review should be detailed enough to show how your background prepares you for the programme you are planning to undertake, and explain what you will be building on through your programme. Your review may also help you to identify experience which could be used to gain credit towards a qualification (through an APEL process).

Examples

Lilian's review describes her skills and awareness as a designer and entrepreneur, and how they have prepared her for her programme in marketing design work. She also reflects on her intuitive style of learning, and how she will use it within the framework set by her Learning through Work degree programme.

Ben describes how he intends to draw together and build on his skills to develop as a team leader. He also describes how he intends to design his diploma programme around problems in his paid and voluntary work, to make best use of his preferred learning styles.

Jill describes her achievements and learning in organisational consultancy, and outlines the theories that she is developing. She argues that her learning has prepared her to embark on a doctorate, and describes how it forms a platform from which she can develop her doctoral project.

Further guidance

There are complementary support documents on:

- **Self-audit**
- **Accreditation of Prior Learning**

Writing learning plan modules

Introduction

Modules are the major activities that make up your Learning through Work programme. They are normally given a credit-rating, and are at the level of the qualification you are aiming to achieve (or, for a qualification such as a degree which is made up of stages at different levels, they should be at the level of the appropriate stage).

The modules in your plan should be at the right level for your programme, add up to the correct amount of credit for the qualification you have chosen, and form a coherent programme that meets the aims you have identified.

Most Learning through Work programmes will contain two key modules:

- planning, managing and reviewing your learning (of which drawing up and reviewing the learning plan forms a part)
- a work-based project or portfolio of work-based activities.

Your programme could consist of just these two modules: for instance, a postgraduate diploma (120 credits) might consist of a module valued at 20 credits for planning, managing and reviewing your learning, and a work-based project or portfolio valued at 100 credits. However, most programmes are likely to include other modules such as:

- distance or on-line modules, or training activities
- independent study or other work-based activities
- a claim for credit for prior learning (APEL).

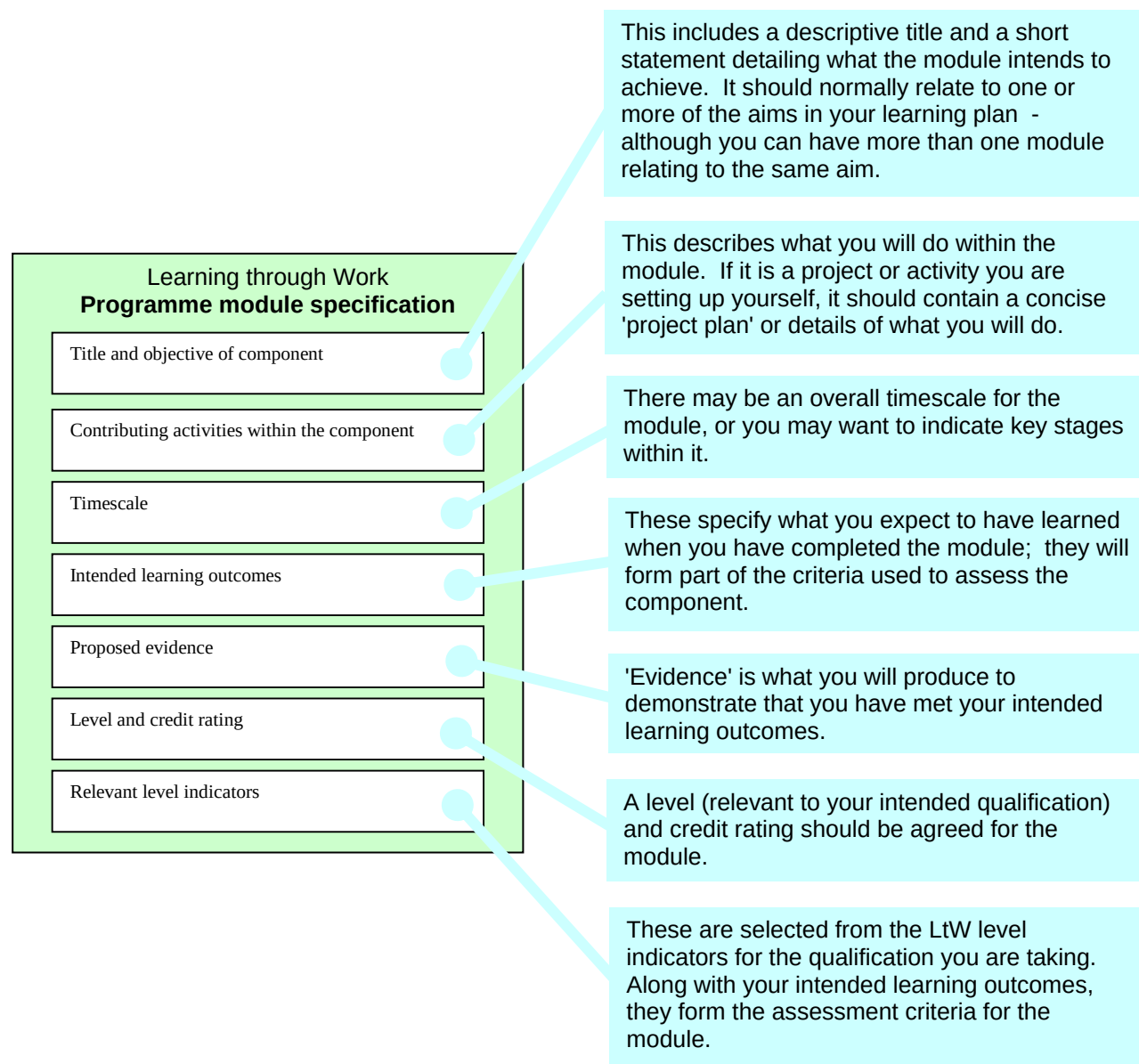
For example, a different learner's postgraduate diploma might consist of 40 credits for prior learning; 15 credits for planning, managing and reviewing learning; an on-line module valued at 15 credits; an investigative activity valued at 10 credits; and a work-based project of 40 credits.

When you first put together your learning plan, you will need to include an outline of your modules, as well as fuller details of any modules you intend to start within the next six months (including your claim for prior learning if you are making one). You should then update your plan at intervals to include full details of the modules you aim to start within the next six months or so (your university may specify this more precisely, e.g. based on semesters or terms).

Note that some universities or awarding organisations may offer Learning through Work programmes that are not subdivided into components, but they consist of a single major project or a portfolio of work activities. If your programme is designed in this way, you will need to specify the detail of the programme as a single component.

What should module contain?

Each of your modules needs to contain a statement of seven key things, as outlined below. Some examples are given later on in this document.



1 Choosing a title for the module and describing its objective

If the module is something you are designing yourself (e.g. a project, work activity or investigation) you will need to give it a short descriptive title, such as 'Business expansion project' or 'Safety review in Markham & Sons Ltd.' If it is a course, on-line or distance learning module you should normally use its official title.

As well as the title, include a short statement about what you are intending to gain from the module (or have gained from it, if it is your APEL component). You can do this with existing modules as well

as those you design yourself. For instance, the objective to *develop understanding and application in the area of web design and marketing* could apply to a web design project or to a module on web design and marketing.

2 Describing activities within the modules

Existing modules are likely to have a description of what the module will involve doing, which you can include in this section; alternatively you could describe, briefly, what the module involves. For example, an on-line module might involve working through an interactive text, completing an assignment based on applying the principles in your workplace, and taking part in an on-line discussion.

For modules you design yourself, you will need to put forward an outline or project plan of what you intend to do. The amount of detail needed will depend on the size and complexity of the module; for instance, if you are describing a major project, you would need to include a project plan and brief details of your proposed methodology.

For an APEL module, briefly describe the activities that led to the learning outcomes you are claiming credit for.

3 Setting the timescale

As a minimum, you will need to specify when you propose to submit your evidence for assessment for the module. You may also want to include some intermediate milestones, particularly with a longish project. Be realistic, and ensure you give yourself enough time to assemble the evidence you will submit.

4 Agreeing intended learning outcomes

Learning outcomes are the things you have learned when you have completed the module - e.g. things you will know or understand, or be able to do. Intended learning outcomes are the learning goals you set yourself when designing the module, against which you will be assessed. You need to ensure that these are realistic, specific enough to be assessable, and relate to learning - not, for instance, to what you will do (activities) or produce (your evidence).

If your module is a pre-existing one, it may have learning outcomes or objectives already stated. You should use these, although you may add your own if you want. For an APEL module, you will refer to the actual learning outcomes you achieved.

Because intended learning outcomes are used as assessment criteria, they need to be appropriate for the level that the module is pitched at. It can be helpful to have the level statement or level indicators available when you are writing your intended outcomes.

5 Deciding on the evidence you will produce

'Evidence' is the material you produce to show you have met your intended outcomes. You may be writing reports specifically to put forward for assessment, but you may also want to draw on things produced for work, such as reports, plans, records and so on. You will need to indicate in your module specification the types of evidence you are expecting to put forward; you will not be held to fine detail, but you need to be clear whether for instance you are producing a 10,000 word report, a portfolio and narrative, or whatever else you agree is an appropriate way of demonstrating your outcomes.

If you are making a claim for credit for prior learning, your evidence will include either an APEL (accreditation of prior experiential learning) portfolio or evidence of your previous qualification(s).

6 Agreeing the level and credit rating

You will have already agreed the level of your qualification in the learning plan, and the level of your component should generally match it (with occasional exceptions, for instance including a basic foreign language component that is relevant to a university-level programme). If you are including a pre-existing module that is rated at a lower level than your qualification, you may still be able to include it if you can demonstrate that your personal learning outcomes will be at the level you need (for instance through doing some additional work or ensuring that the work you put forward meets the criteria for your qualification level). Discuss this with your tutor before making a final decision about whether to include the module.

Credit ratings may be less straightforward, particularly for work-based activities and projects. You will need to discuss what an appropriate credit rating is, based on the work you intend to produce and the range of learning outcomes you are aiming to achieve. The same applies to APEL components, where the university needs to make a judgement on the volume and quality of work you are putting forward.

7 Selecting level indicators

Finally, you will need to agree which of the level indicators apply to the module. The level indicators are written in quite general terms, so you will need to discuss these with your tutor before proposing which ones to use, at least until you are familiar with how they work. The level indicators will be used as assessment criteria for the module, so it's important to avoid including any that you will have little chance of meeting. While most modules will only need a selection of the indicators, as a rule larger modules will be expected to meet more of the indicators. A major project - perhaps 60 credits - should normally meet all or most of the indicators for the appropriate level.

Examples

These examples show four different kinds of modules, including an APEL claim.

Module title: Wilscombe management plan

Objective

To develop a management plan for Wilscombe House. I need to increase my knowledge of landscape management planning, find my way around the terms used, and find out more about the thinking and research that goes into management plans for historic properties. Because Wilscombe has never had a management plan, there is an opportunity for me to develop one as a central part of the programme.

Activities

- Read up on management planning and the management of historic gardens
- Complete a survey and analysis of Wilscombe House Garden
- Undertake visits to HF gardens and discussions with relevant staff, backed by examining related literature e.g. their management plans
- Develop a management plan for Wilscombe and agree it with the regional manager and landscape adviser

Timescale

Background research by December 2007, management plan completed by May 2008

Intended learning outcomes

1. Understand the historic context of landscape management in order to be able to manage historic gardens in a sympathetic and appropriate manner
2. Confidently and capably apply knowledge of landscape management to propose a sensitive and workable plan for Wilscombe
3. Understand the main requirements for a successful management plan in order to be able to draw up a working 5-year plan acceptable to HF
4. Clarify and carry out the background research necessary to draw up a management plan

Evidence

A set of notes on historic gardens management and management planning as relevant to Wilscombe House

A survey report and management plan for Wilscombe House

Level and credit rating: 80 points, level 5 (HE2/I)

Level indicators

- Responsibility across a broad area rather than for individual tasks, including for negotiating objectives and outcomes and for their wider impacts
- Developing thought-through courses of action
- Coping effectively with a range of unfamiliar situations and problems
- Understanding the implications of different issues and courses of action
- Identifying and evaluating the effects and impact of operating parameters and principles
- Drawing on a broad personal or formal knowledge-base and set of mental models relating to the area of practice
- Researching, analysing and evaluating information to identify relationships and patterns and make informed judgements
- Designing practical research to provide new information and affect areas of practice
- Evaluating the effects of options and actions, including impacts outside of the immediate context

Module title: Managing people in an engineering department**Objective**

To improve my ability as a staff manager, and assess the effect of improved staff management on productivity and morale potentially as a model for using more widely in the company. My company has a strong 'task' culture typified by the attitude of 'get on and do it'. I am not satisfied with the level of productivity in my section and think it could be improved through better staff management. I don't have any support from other managers in the company, and need to demonstrate results within my section for my ideas to have any credibility.

Activities

- Read up on people management practices and discuss with other managers from outside the organisation
- Try putting some of the ideas I discover into practice
- Keep a reflective log of interactions and incidents with my staff over a 6-month period, and keep track of productivity and absence.
- Get feedback from my staff (and if possible from other colleagues) on how I am doing
- Analyse and reflect on what I have been doing and write it up
- Make recommendations that could be used more widely in the organisation.

Timescale

Complete by October 2008

Intended learning outcomes

1. To gain knowledge of different approaches to staff management, and ideas that will help improve staff relations at Fidco
2. To become more open, reflective and proactive in managing my staff in order to improve relations and productivity
3. To identify lessons that can be applied elsewhere in Fidco to improve staff morale and productivity.

Evidence

My reflective diary

Structured feedback from my staff (possibly in the form of a 360° appraisal)

An analytical and reflective report.

Level and credit rating: 20 points, level 7 (HE4/M)

Level indicators

- Developing thought-through courses of action which take into account issues beyond the immediate area of practice
- Working effectively in problematic contexts which contain value-conflicts and uncertainties which extend beyond the immediate area of practice
- Understanding alternative implications of different issues and courses of action
- Understanding and managing dilemmas and value-conflicts
- Developing and critically evaluating a range of practical theories, ideas and models, including to overcome dilemmas and find ways forward in problematic situations

Module title: Training in staff development**Objective**

To gain an understanding of Barcombe District Council's staff development programme and be able to implement it for my department. The Council has recently launched a staff development process that will be managed by section heads following training in the principles and processes involved.

Activities

- Attend a two-day internal course
- Undertake initial reviews with my staff, one shadowed by the staff development manager
- Attend a workshop day to discuss issues arising
- Complete reviews with my staff and revisit them in six months' time.

Timescale

Training completed by October 2007, reviews by June 2008.

Intended learning outcomes

1. To understand practical implications of theories of work-based learning
2. To understand the principles used in the BDC staff development programme
3. To be able to undertake staff development reviews fairly and effectively.

Evidence

My course notes, written up into a report usable by other managers

Completed review forms (confidential), with feedback from my staff and the staff development manager

A reflective report.

Level and credit rating: 15 points, level 6 (HE3/H)

Level indicators

- Responsibility across a broad area including for planning, resourcing and quality as well as for outcomes and their immediate and wider impacts
- Developing thought-through courses of action
- Working effectively in complex and unpredictable contexts
- Understanding the implications of different issues and courses of action
- Drawing on a broad personal or formal knowledge-base and set of mental models relating to the area of practice
- Developing and evaluating a range of practical theories, ideas and models, including to find ways forward in problematic situations

Module title Professional conservation practice (prior learning claim)**Objective**

This is a claim based on my learning and professional competence as a conservator of fine art, to demonstrate that I have already undertaken significant work at Master's level.

Activities

My claim covers a broad spectrum of activities which have given me a depth and breadth of understanding of my field that I believe equates to the taught part of a Master's degree. This draws on five years in employed posts (V&A and MGC) after completing my diploma, and 11 years in private practice. My evidence also draws on specific activities contributing to the profession, such as running courses and contributing to postgraduate teaching, acting as an assessor for my professional body, and publishing practical research and techniques.

Timescale

Submission for June 2008

Learning outcomes

1. Professional capability and understanding in conservation to professional accreditation level
2. Ability to evaluate and deal with complex conservation problems
3. Understanding and application of professional ethics and codes of practice, including in situations where there have been conflicts of interest and values
4. Ability to manage my learning and development at a professional level
5. Ability to contribute to the development of the profession and to the advancement of techniques, through practical means and publication.

Evidence

- My application for, and confirmation of, accreditation by the UK Institute for Conservation
- CPD reviews covering the past three years
- Selected conservation reports including collection surveys and condition reports, recommendations and conservation plans, and reports on objects treated
- Expert witness reports
- Details of courses I have designed and run for heritage bodies and museums
- An assessment report produced as an assessor for my professional body (confidential)
- Articles written for the Journal of Art Conservation and Fine Art Quarterly.

Level and credit rating: 90 points, level 7 (HE 4/M)

Level indicators

- Full responsibility for methods, actions and immediate and wider impacts which extend beyond the immediate area of practice
- Developing thought-through courses of action which take into account issues beyond the immediate area of practice
- Working effectively in problematic contexts which contain value-conflicts and uncertainties which extend beyond the immediate area of practice
- Understanding alternative implications of different issues and courses of action
- Understanding and managing dilemmas and value-conflicts
- Understanding and acting on interrelationships between wider systems in which the area of practice is located
- Using mastery of knowledge relating to, and extending into the wider context of, the area of practice.
- Developing and critically evaluating a range of practical theories, ideas and models, including to overcome dilemmas and find ways forward in problematic situations
- Critically evaluating thinking, action and structural factors operating in the area of practice, including underlying assumptions, and identifying implications for wider systems beyond the area of practice
- Developing innovative ways forward in complex and unpredictable situations
- Developing novel approaches to systems

Further guidance

There are complementary support documents are available on the following topics:

- **developing a learning plan**
- **making a claim for prior learning**
- **the Learning through Work level indicators**
- **assembling and preparing evidence**
- **renegotiating your learning plan.**

Renegotiating your learning plan

Introduction

This support document provides guidance on renegotiating your learning plan, should this become necessary.

Note that unless you have agreed the detail of all the modules of your programme when you register your plan, you will periodically need to submit details of your proposed modules as you come close to starting them. This process is covered in a different pack on writing programme modules, rather than this one that concerns renegotiating what you have already registered.

What can be renegotiated?

In principle it is possible to renegotiate any part of your programme. In practice, and depending how far into your programme you are, if you want to make fundamental changes you may need to go back and start a new programme. The principle of coherence that applies to Learning through Work programmes means that you can't suddenly change tack in the middle of a programme, and automatically expect new aims and programme modules to be approved if they don't relate to what you have already done.

Having said that, the things you may be able to change include:

- The timescale of your programme, or of individual modules (you will need to get approval for an extension, but there is nothing to stop you finishing early).
- The qualification or credits you are registered for. As you get into your programme, you may find either that your qualification or credit target will be difficult to achieve (perhaps because of a change of circumstances, or you find the work more challenging or time-consuming than you expected), or that you are able to work at a higher level than you registered for, or want to extend your programme.
- The overall focus or individual aims of your programme. As suggested above if you are already some way into the programme and you change its focus, you may need to start what is effectively a new programme. However, you may find that some of your aims are no longer relevant, or it would be useful to include new aims in your programme in the light of your learning to date.
- Your programme modules. As your programme progresses you may need to make changes to your original plan, either because of external circumstances such as a change of job or changes within your organisation, or as a result of your learning to date. It will normally be possible to renegotiate the mix of modules in your programme provided the proposed changes meet the requirements of your overall programme.

- Changes within your modules. You can normally make some changes to individual modules provided that this doesn't affect their level, credit rating or relevance to your programme, and isn't simply a method of making them easier for you to achieve.

Examples

Marco was originally registered for a degree in information technology, 'topping up' from an HND. His aims revolved around developing his expertise in web-based multimedia design, and his programme consisted of a mixture of APEL, on-line learning and two work-based projects. Part way through the programme he changed job, taking on a project manager role which would mean he would no longer be involved directly in multimedia design. Marco decided to renegotiate his programme around a project management theme, requiring a rethink of all his project modules including his APEL (he would now be drawing on a different set of experiences and learning to those that he had put forward in his original APEL claim).

Tracey had registered for a higher education diploma in environmental management. After the first work-based module of her programme it was clear that she was producing work closer to postgraduate level, and she was also keen to develop a major project around the work she had been doing. She renegotiated her programme to lead to a master's degree over a longer time period and was able to include some of the work she had already completed because it met the relevant level indicators for master's level work.

Further details of each area are given below.

Timescale

Extensions to the programme, or changes within the programme such as reordering some of the modules, will normally be approved if they are for a good reason and do not mean you will overrun any maximum time-limit the university sets for achieving your qualification.

You should avoid using extensions as an excuse for lack of motivation: if you find yourself putting work off, you may need to ask whether you need to renegotiate other aspects of your programme.

Qualification and credits

There is usually scope to renegotiate the qualification or credits you are registered for, provided that your university offers the award you want to transfer to and it is realistic for you to work towards it.

Examples could include:

- deciding to opt for 'credits towards' rather than a full qualification
- opting for a smaller-size award, e.g. a postgraduate certificate rather than a postgraduate diploma

- going for a qualification at a lower level, e.g. a graduate diploma rather than a postgraduate diploma
- going for a qualification at a higher level, e.g. a master's degree rather than an honours degree
- extending from a smaller qualification to a larger one, e.g. from a postgraduate diploma to a master's degree, or a certificate of higher education to a diploma or foundation degree (this will involve work at a higher level as well as a greater volume of work).

If you are aiming to work at a higher level, you will need to demonstrate that you are capable of working at the level concerned, for instance through the work you have completed already.

If you renegotiate the qualification you are aiming for, you will also have to adjust your programme modules to ensure that they are appropriate for the new level and provide you with enough credit. Changing levels will mean selecting new level indicators for your modules, and it may also mean adjusting your intended learning outcomes.

Programme focus and learning outcomes

The focus and outcomes of your programme can be renegotiated, although as in Marco's case above a major shift in focus may mean designing a new programme and registering a completely new learning plan.

You may find as you progress through your programme that one or two of your outcomes are no longer appropriate or realistic and it will normally be possible to adjust or substitute them as appropriate (this is also likely to affect your programme modules). Equally, you may find that changes to circumstances or your learning from the programme point to new outcomes that are important to include; again these can normally be accommodated.

One pitfall to avoid is continually attempting to adjust your programme to take account of changes in your perspective as you learn from the programme. Unless circumstances make your outcomes inappropriate or impossible to achieve, there should be a point where your programme becomes final and you should aim to complete it.

Programme modules

Like programme outcomes, there is normally scope to renegotiate the modules of your programme. It need not be unusual to renegotiate your modules, particularly if your programme is lengthy: you may find for instance that an anticipated work activity doesn't come off, or you realise that a planned activity isn't the best method of covering a particular part of your programme.

When renegotiating the mix of modules in your programme, you will need to bear in mind the level and credit size of the qualification you are aiming for, the overall coherence of the programme and whether you are still able to meet the outcomes of your programme.

Changes within your programme modules

You can normally renegotiate the detail of modules you have already registered if it becomes necessary, provided this does not affect the level, credit-rating or focus of the module, or simply provide a 'get-out' because you are finding the module more challenging than you thought. Once you have started the module you will not normally be able to change your intended learning outcomes, but if you have good reasons you may be able to renegotiate how you will go about the module (the contributing activities), the timescale, or the evidence you will produce.

The procedure involved

You should first discuss any plans to renegotiate your plan with your tutor. The formal procedure is to request renegotiation through the LtW system, return your plan to an 'unapproved' state, then agree it with your tutor and put it forward for reapproval.

Further guidance

In the first instance your contact for renegotiating your plan will always be your tutor.

There are also complementary support documents on:

- **developing a learning plan**
- **writing programme modules.**

Developing a Learning Plan

Introduction

The Learning Plan is the means used to negotiate an individual learning programme and register it with a university for a qualification (or for credit).

The Learning Plan sets out:

- your individual learning programme and the reasoning behind it
- your obligations, and those of the university and others involved in the programme.

It provides:

- a tool to help you design a unique programme of learning to meet your needs
- information needed by the university or awarding body to register your programme for a qualification (or credit towards one).

A formal plan is needed because the programme is unique to you. It shows that your programme is relevant to your needs, and where appropriate to those of your employer or organisation. It also shows that the programme meets the requirements for the qualification or credit for which you are registering, as well as showing that you are ready and able to start on the programme. As well as providing a registration document, it is also a working resource: it provides a tool for helping you reflect on your experience and plan ahead, and a reference point to help you track your progress and prepare for assessment.

Basic principles of the Learning Plan

A Learning Plan answers a number of key questions about who you are, what you are intending to do, and how you will go about and demonstrate your learning. Briefly, any learning plan will include:

- Your name and contact details.
- Some information on your experience and previous learning. This will need to show that you have a sufficient base on which your programme can build. It may also form the basis of a claim for credit based on previous learning.
- The qualification or credit you are aiming to achieve.
- Your rationale for your programme - why are you embarking on it, and what will it achieve in terms of your work, career or business?
- What, more specifically, your programme will cover - the aims of your learning.

- The modules making up your programme - e.g. taught or on-line modules, independent study projects, work-based projects, a submission for accreditation of prior learning if you are making one.
- Within each module, your intended learning outcomes, what you intend to do within the module, and how and when you intend to demonstrate your learning.

Learning plans need to be approved: they form an agreement between you, that you will undertake what you have agreed in order to gain the qualification, and the university, that it will award you the qualification or credit if you complete what has been agreed in the plan. The university will normally also be undertaking to provide you with a given level of tutor or supervisor support. If you are employed, it is normal also for a representative of your employer to review and agree to your plan.

Thinking about your plan

Before going into the detail of what your plan will look like, you may find it useful to sketch out some essential points such as:

- What do you want it to achieve for you? What will this involve?
You could express this as a gap between where you want to be (whether that is a major career move or improving some specific skills) and your current abilities, knowledge and experience.
- What does this mean more specifically?
Sketch out what you need or want to learn, as well as thinking whether there is a particular qualification you need or would like to achieve.
- Do you have a particular timescale in mind? Is it realistic?
- What opportunities do you have to work on your programme?
These could be through work activities and projects, specially set-up opportunities at work, or things you can do away from work such as computer-based or distance learning, reading and internet research. Are there any people who could help you?
(Alternatively, you may already have a major piece of work in mind that you want to use for your programme).
- How do your existing experience, abilities, knowledge and if relevant qualifications prepare you to undertake your programme?

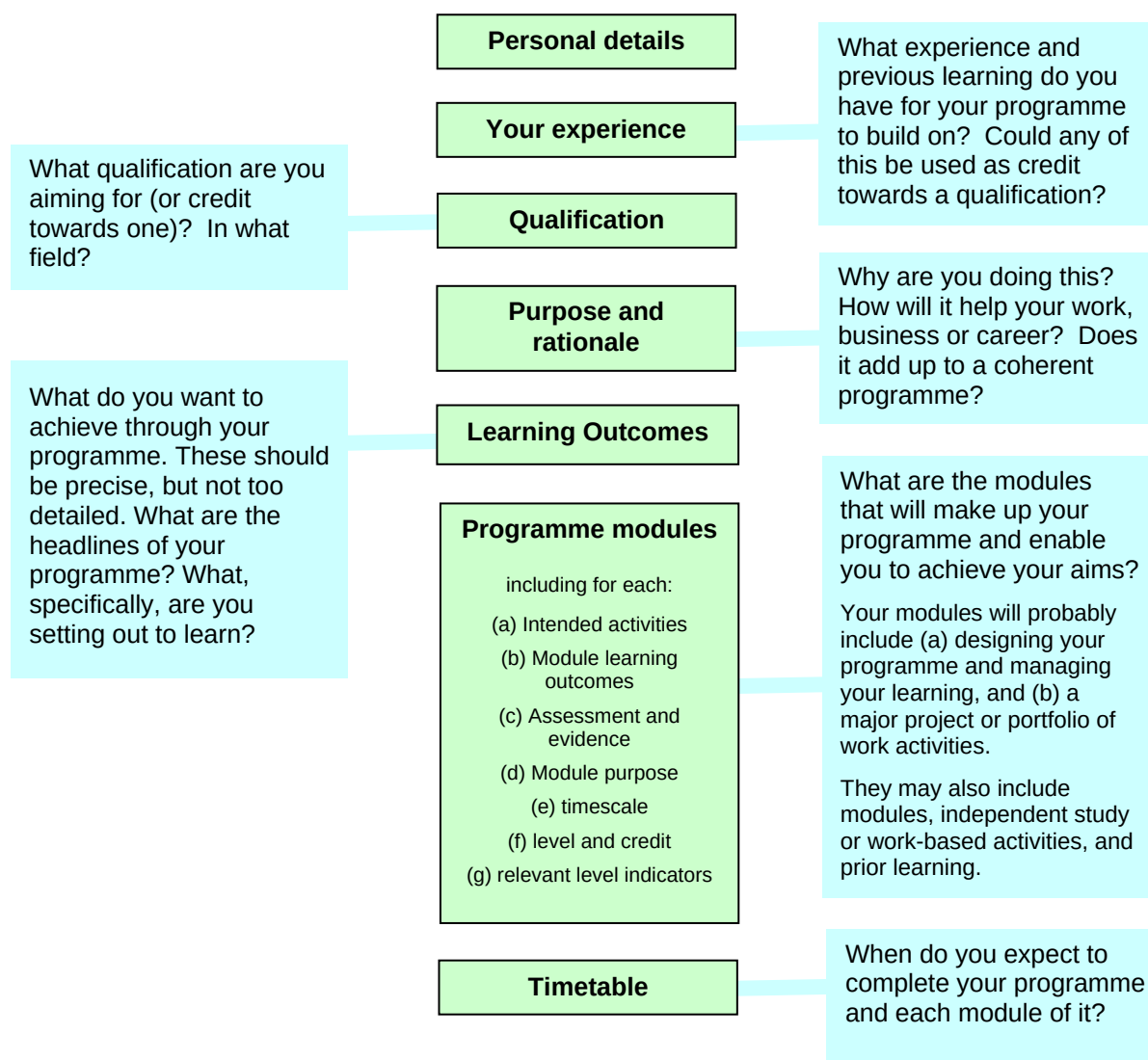
Having some answers to these questions will help make your task easier when you start working on the learning plan.

Using the LtW Learning Plan

The Learning Plan enables you to complete all the plan requirements on-line. It is also linked to information and support resources, to any on-line resources you may agree to use as part of your

plan, and gives you links to a tutorial dialogue facility and the Learning through Work discussion forum.

The diagram below shows how the Plan is structured. You do not need to work through it in any particular order, and it may be useful to complete several sections in outline before firming up on the detail.



When you have completed the Plan, you will also be asked to review and reflect on your learning from the process itself. In many cases this will contribute to the assessment of your Learning Plan – particularly if you are gaining credit for its development.

Where to go for help

As you work through the Learning Plan, use the Support and Advice menu to access Quick Help (brief instructions) and Support Documents (fuller explanations), and the FAQs button directs you to information on specific questions. The Dialogue facility allows you to send messages for your tutor's attention. You can also use the Forum facility to communicate with other learners.

Building up the Learning Plan

The following sections take you through the building up the learning plan. As mentioned before, you may find it useful to sketch out information in each section, then build up the detail by revisiting different sections as you become clearer about how you want to develop them. If you want, you can work off-line then cut and paste the information in.

1 Your experience

You will need to describe what your programme will be building on in terms of your experience and previous learning. This involves giving a reflective account of your relevant experience - not just a CV-type description - which shows you are ready to work on the programme you are creating. It also requires an assessment of where you are now relevant to your intended programme - what your key strengths and abilities are, whether there are any areas where you want to develop further, how you are likely to be affected by future changes, and whether you need any additional skills to achieve your goals or take you in the direction you want. You will also be asked if you already have any qualifications relevant to your intended programme.

You may also be able to sketch out things which could contribute to a claim for credit for your previous learning. If you have experience that you will be extending directly through your negotiated work-based learning programme, you may have the basis of a claim for credit which will form one of the modules of your programme.

2 Your qualification

What qualification are you aiming for, or, if you aren't aiming for a full qualification, what level of credit do you expect to achieve? (If you are unsure about qualifications, levels or credit, there is more guidance on this linked to the on-line learning plan). You will also need to give an outline of the field you will be working in; later on this can be developed into your qualification title or 'descriptor' (different universities have different rules about how the field covered by their qualifications is expressed).

3 Your purpose

You will need to put forward a convincing rationale for your programme. Why are you doing it - what will it help you achieve in terms of your work, your career or your business? You will also need to explain how the approach you have chosen fits in with your work situation and aspirations, and show that your intended programme is coherent - not just a bundle of separate modules. This last part will probably be easier to do after you have drafted some aims and thought about the modules that will make up the programme.

4 Programme Learning outcomes

Learning outcomes are fundamental to your LTW programme, there are two types of learning outcome – programme learning outcomes, which summarise, in general, the learning for the whole programme, and module learning outcomes, which identify the learning that will be assessed within the individual modules.

Learning outcomes should not describe learning activities, but focus on what you need to understand and be able to do when you have completed the programme: they identify the broad goals of your learning. Don't go into detail at this stage, as that will be done in the individual modules of your programme. In a major programme you might have, as a guide, between three and seven main outcomes.

Ideally Programme Learning Outcomes will identify:

- The knowledge and understanding that you will gain during your programme (e.g.Knowledge of management models and the role of leadership; research methodologies)
- The intellectual skills that you will develop (e.g. Critical evaluation, appraisal)
- The practical skills that you will develop (e.g. Ability to undertake research; to utilise specific equipment in your work place)
- The transferable skills (e.g. time management; report writing)

In planning your programme learning outcomes you should think:

- What am I hoping to know or do as a result of my studies generally?
- What is the purpose and aim of my programme and how do my learning outcomes relate to this?
- How do my Programme Learning outcomes relate to the individual modules? Do the Programme Learning Outcomes reflect all the aspects of the learning from the modules?
- Do my programme learning outcomes relate to the appropriate set of level indicators?

5 Programme modules

Programme modules are the major activities that make up your programme. They are normally given a credit-rating and are at the level of the qualification you are aiming to achieve (or, for a qualification such as a degree which is made up of stages at different levels, they should be at the level of the appropriate stage). Most Learning through Work programmes will contain two key modules:

- planning, managing and reviewing your learning (of which drawing up and reviewing the learning plan forms a part)
- a work-based project or portfolio of work-based activities.

Your programme could consist of just these two modules: for instance, a postgraduate diploma (120 credits) might consist of a module valued at 20 credits for planning, managing and reviewing your learning, and a work-based project or portfolio valued at 100 credits. However, most programmes are likely to include other modules such as:

- distance or on-line modules, or training activities
- independent study or other work-based activities
- a claim for credit for prior learning (APEL).

For example, another postgraduate diploma might consist of 40 credits for prior learning; 15 credits for planning, managing and reviewing learning; an on-line module valued at 15 credits; an investigative activity valued at 10 credits; and a work-based project of 30 credits.

When you first develop your learning plan, you will need to include an outline of your programme modules, as well as full details of any modules you intend to start within the next six months (including your claim for prior learning if you are making one). Separate support resources are available for **writing programme modules** and **making a claim for prior learning**.

Some universities or awarding organisations may offer Learning through Work programmes that are not subdivided into modules, but they consist of a single major project or a portfolio of work activities. If your programme is designed in this way, you will need to specify the detail of the programme as a single module.

6 Timetable

You will need to check that the modules you have planned fit into a manageable sequence, and leave you enough time to prepare evidence for assessment. The learning plan includes an interactive calendar which allows you to view your overall programme on one screen, then focus in on detail and if necessary go back to the learning modules screens to change details.

If approved by the university, the completed plan becomes the formal document on which your qualification or credit is based.

How the plan is assessed

The university will look at your plan and associated information from two perspectives. The first will be, 'does this provide enough information to register the programme for an award?' To answer this question, the university will want to ensure the plan meets the requirements listed in the box below. The second is to assess whether the plan, and your associated review, demonstrates that you are able to reflect on and plan your learning and development (this will contribute to credit you will be awarded for completion of the plan). The criteria used to do this will depend on the level of award you are registering for, but they are broadly reflected in the registration requirements below. Your review can be used to provide additional reflection and depth not included in the main plan.

Registration checklist

- Have you reflected on your experience and current abilities, and shown that they provide an adequate basis for your programme to build on?
- Have you shown how your proposed programme will help you in terms of your effectiveness, career or business, or will help your employer's organisation or business?
- Is the qualification or award you are aiming for specified in the plan?
- Is your proposed qualification consistent with the purpose and aims of your programme?
- Have you specified your aims for the programme? Are they consistent with what you are aiming to achieve and with the level of qualification you are going for?
- Have you specified learning activities for your programme that will enable you to achieve your aims?
- Are these activities all workable? Are they at the right level for the qualification, and does the credit add up to the total needed? Do they represent a coherent programme (rather than just a bundle of credit)?
- Have you written the detail of any modules you will be starting in the next six months?
- Does your programme include work-based activities that will show you can integrate and apply your learning?
- If you are claiming for credit for previous learning, have you discussed what you will be putting forward with your tutor? Can you be reasonably sure of the level and amount of credit you are claiming?
- Have you agreed a timetable? Is it feasible?

Amending and renegotiating a plan

Sometimes it becomes necessary to renegotiate a learning plan, for instance because planned activities are no longer feasible, circumstances change (including changes of job), or as you progress you realise you need to refocus your programme.

Periodically, you will need to add details of any modules that you did not specify in detail when you first registered your plan. Some other minor changes may also be accommodated by discussion with your tutor, depending on the regulations of your university. More major changes, including extensions to the total timescale and changes to the overall structure of the programme will usually need to be agreed formally with the university by resubmitting the plan. It may also be possible to suspend a plan in some situations, for instance a sudden increase in workload, change of job or redundancy; you will need to consult the university's regulations about what is permissible.

There is a separate support resource for **renegotiating your learning plan**.

Next steps

If you haven't already started on a learning plan, the next step is to start looking at the on-line learning plan, and explore the help and information pages linked to it.

Further guidance

There are complementary support documents available on the following topics:

- **writing programme modules**
- **making a claim for prior learning**
- **the Learning through Work level indicators**
- **reflecting on experience**
- **self-audit**
- **producing a narrative argument**
- **assembling and preparing evidence**
- **renegotiating your learning plan.**

Designing your Module Learning Outcomes

What are Learning Outcomes?

Learning outcomes are statements of what it is expected that you will be able to do as a result of your learning activities. They will be related to the acquisition and demonstration of knowledge, understanding and intellectual and / or practical skills.

Learning outcomes are integral to the design of individual programmes and modules and are fundamental to their purpose.

Module Learning outcomes form the basis for assessment and should be negotiated with and agreed by your tutor. The number of Learning Outcomes required in each module will vary with the credit value of the module and – sometimes – with the extent of learning represented by the learning outcome. Ask your tutor for advice on this.

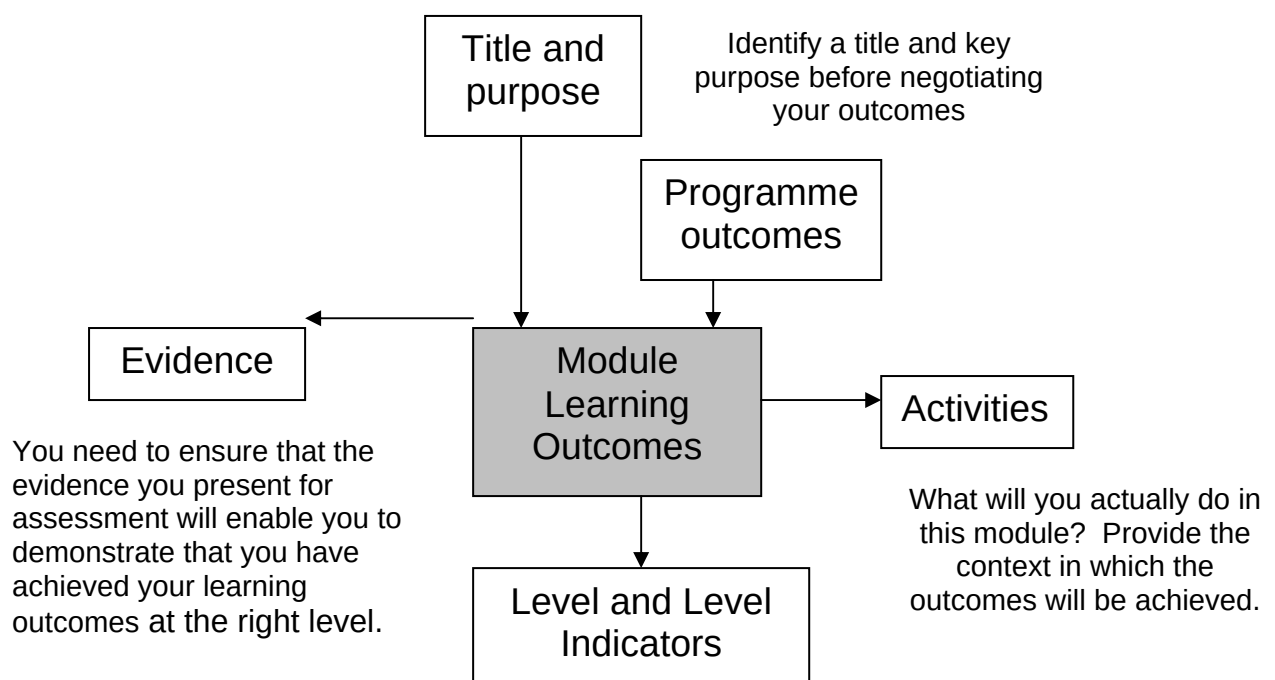
When formulating module learning outcomes, ask yourself:

“How will I demonstrate for an assessor that I have achieved the learning intended in each one? Also, what evidence will be most appropriate to present?”

What is the purpose of Learning Outcomes?

The purpose of learning outcomes is to help you to sharpen the focus of your module, to identify its scope and boundaries and to provide a clear basis for planning your learning activities and their assessment. They identify clear, mutually understood requirements for you and your tutor. If appropriate, they can also be shared with workplace colleagues and / or mentors

Module Learning Outcomes – the Central Feature of Module Design



How do module Learning Outcomes tie in with the programme learning outcomes?

The Programme Learning Outcomes section of the Learning Plan gets you to describe what you want to achieve through your programme. They should be precise, but not too detailed. They need to summarise all the learning that you hope to achieve in your programme, demonstrating the breadth and depth of the learning that you hope to achieve.

Module Learning Outcomes relate to and add detail to the programme learning outcomes. The programme learning outcomes can be assigned to modules. It is important that you link each module and its learning outcomes to at least one of your programme learning outcomes.

If none seem suitable, it may alert you to the need to return to your programme learning outcomes and either add a new one, amend an existing one or review the module. This is a good cyclical and developmental process in itself and is one of the reasons why you may get credit for designing your programme of study through the learning plan.

How do module Learning Outcomes tie in with the Purpose of the module?

The purpose section should be a paragraph or so describing what your module is about and why you are doing it – your rationale. The module learning outcomes add detail, thus helping you to be precise about the learning activities and their links to assessment.

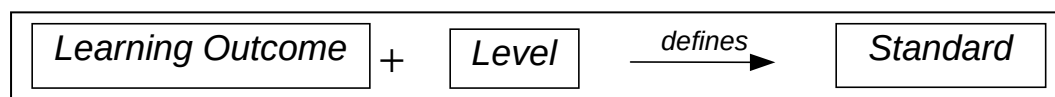
How do Module Learning Outcomes tie in with Evidence for assessment?

A match between these is essential and must be clear. LtW encourages diversity of assessment, but you must clearly demonstrate achievement of the learning outcomes in your chosen form(s) of assessment. The links should be explicit. It is useful to consider and discuss with your tutor the most appropriate way for you to demonstrate that you have met a module learning outcome.

How do Programme and Module Learning Outcomes tie in with academic levels and the LTW Level Indicators?

Level indicators are derived from QAA academic level descriptors and describe the kinds of activity appropriate for work-based learning at particular credit levels (e.g.4 – 7). The language for your programme learning outcomes should be consistent with the academic level that you are hoping to achieve – and will be reflected generally in the level indicators for your chosen level.

The standard of work required within a module is determined by a combination of the module learning outcome and level descriptor, so that the learning outcome does not, by itself, determine the standard.



It can be helpful to think of the level indicators you have selected for the module as criteria for assessment in conjunction with your module learning outcomes.

What kinds of key words are helpful when writing Programme and Module Learning Outcomes?

Table 1 below outlines the types of **cognitive learning** proposed by Bloom's Taxonomy of Learning and lists some of the key words which may be useful in formulating learning outcomes.

Table 1

Cognitive learning	Useful key words
▪ Knowledge ▪ Understanding ▪ Application ▪ Analysis ▪ Synthesis ▪ Evaluation	<i>state, list, name record, indicate recount, identify, discuss, explain, clarify, recognise apply, illustrate, exemplify, demonstrate, employ analyse, examine, compare, appraise, criticise prepare, summarise, organise, plan, design, formulate evaluate, assess, appraise, criticise, compare, judge</i>

Table 2 outlines several types of **intellectual skills** and lists some key words which may be useful in drawing up learning outcome statements.

Table 2

Intellectual learning	Useful key words
▪ Intellectual curiosity ▪ Creativity ▪ Aesthetic awareness ▪ Articulation & exposition	<i>enquire, investigate, research, question, initiate, seek originate, invent, conceptualise, imagine, create, solve recognise, reflect, discover, value, perceive, reveal make distinctions, use subtle expression, achieve coherence, express abstract concepts, display ideas</i>

Table 3 identifies a several **transferable skills** and lists key words which may be helpful in crafting learning outcome statements.

Table 3

Transferable skill	Useful key words
▪ Communicate ▪ Cooperate ▪ Organise	<i>express, precis, articulate, advocate, argue, present, justify, formalise, question, defend, examine, explain co-operate, interact, establish rapport, communicate effectively, collaborate, listen, respond, participate direct, co-ordinate, arbitrate, guide, initiate, lead</i>

What is the tutor's role in developing Programme and Module Learning Outcomes?

Your tutor will be a useful sounding board and will give you feedback as you formulate your learning outcomes, helping you to clarify them for a range of audiences and to shape the boundaries of your learning in a particular module and ensuring that your programme learning outcomes reflect the level and general content of the programme. Make use of the website's dialogue facility to interact with your tutor.

Most importantly, the tutor **must** agree that both your programme and module learning outcomes meet the requirement of your HEI in order for you to be able to attain credit and award. This is their academic responsibility.

Can I see some examples of acceptable Module Learning Outcomes?

Box 1

The following learning outcomes were developed by a training professional as a 30-credit module in Distributed Learning: a Training Solution? at level 7 as part of a master's degree.

Learning Outcomes

1. To analyse strategic and organisational dimensions of training and development.
2. To reflect on differences between behaviourism and constructivism.
3. To analyse a range of motivational concepts.
4. To critique a range of different approaches to instructional design.

Box 2

The following learning outcomes were developed for a 30-credit module in Democratic Communication in Organisations at level 7 as part of a master's degree.

Learning Outcomes

- 1: Critically evaluate policy proposals within the context of organisational culture
- 2: Demonstrate leadership and advocacy skills to influence decision making

Box 3

The following learning outcomes were developed for a 30-credit module at level 6 within a BA (Hons) programme in Outdoor Education Management.

Learning Outcomes

1. Demonstrate curriculum design ability for teaching climbing techniques to trainee climbing guides
2. Critically reflect upon the process of creating the course manual

Box 4

The following learning outcomes were developed for a 30-credit module in Managing Human Resource at level 7 as part of a master's degree.

Learning Outcomes

1. Critically evaluate current working practices within work setting, highlight areas of strength and weakness
2. Research good practice within human resource management, provide suggestions for implementation at XXX
3. Reflect upon specific human resource experiences
4. Develop coherent personnel policies for XXX

Box 5

The following learning outcomes were developed for a 15-credit module in Project Management at level 7 as part of a master's degree.

Learning Outcomes

1. To analyse project management principles at both strategic and operational levels
2. To critique contextual factors in project management with reference to own role
3. Research, analyse and evaluate aspects of the use of Microsoft 2000 project software

BOX 6

The following learning outcomes were developed for a 15-credit module in Child Protection within a level 4 programme.

Learning Outcomes

1. To identify my current knowledge and awareness of child protection issues.
2. To analyse and report upon how the policies and procedures in my work place relate to relevant government legislation, policies and procedures.

BOX 7

The following learning outcomes were developed for a 15-credit module in Technical Design Practice within a level 7 programme as part of a master's degree.

Learning Outcomes

1. To critically evaluate the effect of combustion systems on furnace performance and prediction of NOx and Unburnt Carbon.
2. To evaluate the feasibility of applying mathematical modelling to the prediction of NOx and Unburnt Carbon.
3. Critically analyse the relevance of NOx and Unburnt Carbon theory to test data.

BOX 8

The following learning outcomes were developed for a 15-credit module in Retail Group Research within a level 5 programme.

Learning Outcomes

1. Identify customer focused strategies within Retailer communication;
2. Identify and analyse segmentation within the Weleda Retail groups in line with relevant literature about market segmentation, and use of appropriate research techniques;
3. Ability to reflect upon my professional contribution to the team project

BOX 9

The following learning outcomes were developed for a 15-credit module in Stock Control within a level 4 programme.

Learning Outcomes

- 1: Understand and compare best practice of stock control systems.
- 2: Recommend improvements to the stock control system.
- 3: Demonstrate the cost benefits of the system, to justify future improvement within the company.
- 4: Be able to demonstrate to other managers a more professional approach.

BOX 10

The following learning outcomes were developed for a 15-credit module in Applied Hydrology and Hydrometry within a level 5 programme.

Learning Outcomes

1. Identify the main hydrological processes impacting on the UK.
2. Identify how these hydrological processes are measured.
3. Explore how hydrological data is used in a work-based situation.

Accreditation of Prior Experiential Learning (APEL)

Introduction

It is often possible to incorporate relevant learning that you have acquired through previous experience within your LtW programme. The process of doing this is referred to as the Accreditation of Prior Experiential Learning (APEL). Experiential learning simply means learning which has been achieved through experience. Learning that can be used within an APEL claim has usually been gained through work related activities but learning from voluntary work or other activities may be considered provided it is relevant. APEL may be included within an LtW programme as a **module** – one of the building blocks towards your qualification.

The principal advantage of undertaking an APEL claim is that it allows you to capitalise on your existing learning – as long as your learning is *relevant* and can be *demonstrated*, it is possible for it to be counted towards your qualification.

You may also have come across the terms APL (Accreditation of Prior Learning) and APCL (Accreditation of Prior Certificated Learning). These usually refer to learning achieved through a course of study which has been completed and assessed but does not form part of your current programme. The crucial difference is that APEL is about providing evidence for accreditation of learning that you have achieved through *experience* rather than through formal study.

Most of the LtW universities and colleges have established APEL procedures that provide a way of generating **credit** towards your qualification based on your relevant experiential learning. Each of them will have their own procedure that fits in with their institutional quality assurance and programme approval processes. So the exact procedure you need to follow will differ depending on which university or college you are enrolled with. However, all participating universities and colleges conform to a set of basic principles on APEL, namely:

- Credit awarded is based on learning *not* experience. Experience is valuable as a *source* of learning but it is the *learning* itself that can be assessed and therefore accredited.
- All learning must be expressed in the form of a set or sets of learning outcomes or statements. This allows the learning to be described and enables assessment.
- The APEL process is *learner led* - tutor and documentary support is part of the process but the onus is in the learner to define and provide evidence of their own learning.
- APEL is a staged procedure including a planning and *reflecting* process, an evidence gathering process where a *portfolio* is compiled and an *assessment* process where the evidence is assessed and credit is awarded as appropriate.

APEL, level and credit

Your claim for APEL will need to be presented in the form of a **module** within your overall LtW programme.

The size (ie the amount of credit) and level of your APEL module will depend on the amount, depth and complexity of the learning you have achieved together with the structure of your proposed programme. Your tutor will be able to give you advice on this. For example you - together with a tutor - might arrive at the view that the learning in question forms a module worth 40 credits at level 5 (HE level 2) for example. This will then be the credit you will claim for your prior experiential learning

Most universities and colleges have an upper limit of the amount of credit that can be gained through APEL within a qualification programme. These limits vary but – as a guide – many institutions require at least one third of a qualification to be achieved through 'new' learning. Your tutor will be able to advise you of the particular rules relating to your qualification.

Mapping experiential learning

There are basically two ways in which APEL can be incorporated within a qualification:

- Learning can be mapped against an existing module or unit that is normally undertaken by attendance or distance learning. For example, if you have been involved in undertaking research projects you may be able to match your learning to a taught research methods module.
- Alternatively, it might be possible for you to put together a package of learning outcomes which effectively means *designing* your own individualised 'module'. If your prior learning is relevant to your LtW programme, is at the right level, and is coherent, you may be able to put together a negotiated APEL module.

In all cases you will need to discuss these options with your tutor who will advise you of the specific APEL opportunities open to you and help you to judge the volume and level of credit of your APEL module.

Key criteria for APEL

There are three important considerations to bear in mind when deciding if learning is likely to attract academic credit:

- It must be *relevant* to the qualification you are hoping to achieve - and to your specific programme

- It must be at an appropriate *level*. That is, it must be equivalent to the level of learning required for the programme.
- It must be able to be *demonstrated* - once you have proposed an APEL claim you will have to show the university that you really do have the learning you are claiming credit for.

It is important to re-emphasise here that it is *learning* not experience that is important. Experience is only significant as a *source* of learning.

Generic guidance on undertaking APEL

Each university and college has its own APEL procedures designed to fit in with its particular institutional requirements and regulations. *It is extremely important that you contact your tutor to find out the particular requirement of your university or college's APEL system.* You should do this at a very early stage to ensure that you have all the institutionally specific guidance that you need to help you with your APEL component. However, all universities and colleges in the LtW partnership share some common principles and the following guidance will be largely applicable across the board.

Whether you are mapping onto an existing module (or unit) of study or designing your own individual module, the key task will be to provide the *evidence* of the learning for which you are claiming credit. Your evidence is then assessed as agreed in your learning plan.

Most universities and colleges require your evidence to be presented in the form of a *portfolio*. The purpose of your portfolio of evidence is to support and verify the learning outcomes for which you are claiming credit - to put it simply, you need to prove that you do indeed have the learning that you claim to have.

Although the format and detail of APEL portfolio requirements vary with the individual HEI, all are likely to require the following elements:

- Information about you and the nature of your relevant experience;
- A copy of your APEL module setting out the agreed learning outcomes;
- A reflective commentary or written account of learning that focuses on the achievement of your experiential learning;
- Items of evidence that substantiate and corroborate the claim that learning has been achieved.

As you start identifying, collecting and – perhaps - generating evidence you should keep in mind the following points:

- Not all evidence will come from one source.

- Most of your evidence will be drawn from your current work and you are strongly encouraged to capitalise on this. However, evidence brought forward from previous relevant employment or voluntary activities can, of course, be acceptable.
- Although evidence has to cover all your learning outcomes remember that a single piece of evidence is likely to be relevant to more than one outcome.
- Don't be tempted to include everything you've ever done in your portfolio - be selective!

Evidence of learning

It is important to be aware of the nature of supporting evidence - whether it is direct or indirect. Being able to make a judgement about whether a potential piece of evidence is direct or indirect should help you to decide what you include in your final submission.

Direct evidence consists of your own work and could include:

- Proposals you have drafted;
- Procedures you have been responsible for developing;
- Budgets or financial forecasts you have put together;
- Artefacts you have designed, made or adapted;
- Project or research reports you have produced;
- Articles you have written;
- Training plans you have designed;
- Questionnaires or surveys you have designed and administered;
- Handbooks or manuals you have contributed to.

In short, direct evidence is something that you have either produced yourself or for which you have been primarily responsible.

Indirect evidence is information about your learning gathered from or generated by others, such as:

- Statements from employers/customers/clients;
- Certificates of completion from non-credit rated courses;
- Supporting letters from managers or experts

To summarise, direct evidence is work of your own making. Indirect evidence is information *about* you from others. Generally, direct evidence is stronger and, for that reason, usually preferable to indirect evidence.

Quite often evidence is more relevant if comments are provided which set the evidence in context. Items that constitute evidence are usually produced for a particular (usually work-related) audience – they are not normally produced in order to be formally assessed. Therefore some degree of explanation and/or comment is often helpful.

In general, you will find that you have a mixture of evidence - some direct and indirect. And remember: some pieces of evidence may be relevant to more than one of your learning outcomes.

Deciding what evidence to include

Once you have begun to collect your evidence together, you need to decide what you are going to include in your portfolio in order to effectively show evidence of all your learning outcomes.

Look at the material you have got and *be selective* - choose concise, clear samples of your work. This is much more valuable to an assessor than large amounts of material which need to be sifted through to 'find' the learning. For example:

- A major report may be represented by an executive summary, or a selection of relevant parts;
- Evaluation of a training session may be represented by a copy of the evaluation form, and an analysis of the results obtained;
- A resource/information file you have compiled may be represented by a contents list, and perhaps an analysis of when and how it is used.

When selecting items it may be helpful to ask yourself the following questions:

- How does this item help to prove my learning?
- Is it the best evidence for this area of learning?
- Is it sufficient - or do I need more?
- Do I really need it, or have I already provided sufficient evidence?

This last point is important - don't include too much! It can be tempting to include more than you need to, just to be sure that you have 'proved your point'. But if the amount of evidence in your portfolio makes it confusing and difficult to assess this can be counter-productive. Just be sure that each piece of evidence illustrates the achievement of some of the learning you are claiming. If it doesn't, or if it doesn't add anything to your existing evidence, leave it out!

It is possible that some materials that you may wish to use may not be able to be reproduced by you because of their confidential or sensitive nature. There are several ways that you could get around this problem for example:

- If you are offering evidence relating to areas such as teaching, assessment or counselling, you could ask your clients/students, or your supervisor to verify your learning.

- If you are presenting a confidential report or a reflective diary you could delete information that identifies individual people or institutions.

- You could demonstrate learning achieved through various situations by writing a fictional, but illustrative, case-study.

- In all cases where you are uncertain, it is crucial to check with your manager, or tutor, before including the evidence.

Often one item of evidence will relate to several learning outcomes. Consequently your assessor needs to be clearly directed to the appropriate area. A clearly structured portfolio and good cross referencing will be important here. Bear in mind that it is to your advantage to make your learning as 'visible' as possible.

Reflective commentary or written account of learning

It is normal for universities and colleges to require some kind of written piece of work that sets your prior experiential learning in context. The exact nature of this requirement varies so do check with your tutor before you start work on it.

Your account of learning should be a focused piece of writing which provides the background to your other evidence and puts into context the learning you have achieved. You will be expected to communicate fully and effectively how your learning has developed over time, drawing on and referring to the supporting evidence you are providing.

The account should be seen as being the most valuable piece of 'evidence' that you have produced. Although many skills can be assessed and validated by demonstration, learning goes much further than 'doing'. It involves reflecting on what you (or possibly what others) have done. You do not just learn how to do things, you learn attitudes and values. You do not just know that a particular procedure is important, you understand why it is. When looking for academic credit, it is important to recognise that academic work involves analysis and critical thinking to a greater degree than many workplace situations.

This piece of work is often presented as a type of report. But an academic approach is usually required and references to theoretical models and perspectives are included where necessary. Again, you should check with your tutor exactly what will be required by your university or college.

Assessment of your APEL portfolio

When your portfolio of evidence is assessed, the main task of the assessor will be to decide if the evidence of learning that you have presented meets the requirements as set out in your APEL module. In doing this s/he will pay particular attention to the following:

Relevance - previous learning must have relevance to the planned new learning and development and must be at an appropriate academic level. In a LtW programme the *level* of the prior learning will be judged by reference to the level indicators for LtW programmes; the *relevance* of the learning will be judged by reference to the proposed programme that you submit in your learning plan.

Sufficiency - your submission for recognition of prior learning must be adequately and appropriately evidenced. In other words, you must provide sufficient evidence to support the case you are making and to satisfy the assessors of the submission that you have made an adequate case for them to be able to grant credit.

Currency - your prior learning must be sufficiently recent to continue to be meaningful in the field in which the learning has taken place. In other words, it must be up to date and reflect contemporary thinking, knowledge and ideas in its field. It must also be sufficiently recent for you to be able to continue to use, understand and remember it. The cut off for prior learning claims varies but is often five years and within this time span, each case must be treated on its merits as in some fields, information and concepts date more quickly than in others. So, for example, a certificate showing that you completed a research methods course four years ago, may also be supported by evidence that you are using the skills you learned on the course in a research context *now*. A written account of learning can be helpful here.

Reliability - the evidence you present in support of your submission must be such that the assessor feels it would be generally accepted by other assessors in the field.

Authenticity - the evidence to support your submission and the ways in which you argue and present your case in the context of your LtW learning plan, must leave the assessor in no doubt that *you* have achieved the learning you are claiming. You need to clearly demonstrate to the assessors that the evidence you submit verifies *your* learning. So, if you are including work which you have contributed to in a team setting, you need to 'tease out' the work that was exclusively yours. With joint reports and projects for example, you need to clearly indicate the role you played. Again, a written account of learning may be very helpful with this.

Further guidance

Your university will have its own guidance on APEL, and your tutor will also advise on your claim.

There are also Learning through Work support materials on:

- **reflecting on experience .**
- **assembling and preparing evidence .**
- **producing a narrative argument .**
- **using academic conventions .**
- **writing programme components .**
- **the Learning through Work level indicators. .**

Self-audit

Introduction

This self-audit guide is designed to help you assess 'where you are now.' It can be used in the design stage of a learning plan, or to help you review where you are at the end of the programme. It can be used at any stage in your career, or it can be applied to a business or other venture.

The audit is divided into seven sections. In sections 1-5 the questions are arranged in left- and right-hand columns; the left-hand column asks you to list skills, opportunities etc., while the right-hand column asks further questions about what you have listed. You may find it useful to use a similar layout on paper or on a word-processed document to record your audit.

1. Strengths

What strengths and abilities do you have? Think about:

- skills and abilities
- knowledge and expertise
- contacts, networks and relationships
- other resources you have available or have access to

Are any of these under-used?

Do they suggest areas that you could build on?

2. Opportunities

What opportunities are there for you to develop?
For instance:

- jobs you could do or opportunities to learn where you work now
- your organisation's future plans
- changes in the industry you work in
- wider career or business opportunities
- opportunities you could create

How do these opportunities match your current strengths?

Do any of them suggest new things you need to learn or be able to do, or other strengths you need to develop?

3. Aims and aspirations

Do you have any aims or aspirations? It may help to think about:

- immediate or short-term aims, e.g. in your current workplace
- longer-term aims that are fairly concrete
- longer-term aspirations

What do you need to achieve them?

Do you need to develop any new strengths, skills etc., or gain access to additional resources?

4. Obstacles

Are there any barriers to your aims and aspirations, or blocks to taking advantage of opportunities? Think about:

- barriers that involve your competence or confidence
- external barriers caused by for instance finance, other people, your organisation
- uncertainties - where you are unsure about what will happen

What do you need to overcome them?

These could be skills, confidence, knowledge etc., support from others, or additional resources. Think of more than one way to overcome your obstacles.

5. Problems

What problems or threats are you facing? For instance:

- changes that you feel you have no control over
- things you are not competent or confident to deal with
- frustrations

Are there any abilities or resources that would help you face or overcome these problems?

Do any of them suggest areas where you could create new opportunities?

6. Areas for development

Having gone through sections 1-5, use your answers to the questions in the right-hand columns to identify areas for further development.

7. Action plan

The final stage is to draw up an action plan for developing the areas you have identified. If you are developing a learning plan, this will form your action plan, or part of it. If you have a company employee development plan or a continuing professional development plan, you might think about using that to support your action plan.

Examples

Below are two examples of self-audits. Both examples are summarised; the original audits would contain more detail and depth.

Jim

Jim works in the parts department of a car importer and distributor. He is 44, has a technician qualification and previously worked as a car and motorcycle mechanic.

Strengths

Identifies his main strengths as solving problems on the spot, being good with people, good at making contacts and getting others to help. He also feels he has a good knowledge of the industry at a practical level, and gets on well with dealers. He feels his skills in 'liaising and fixing' are under-used and his role is too low-profile.

Opportunities

The company wants to improve the way it works with dealers and needs staff who are good at dealing with people and sorting problems quickly. This fits well with his current skills, but he feels better knowledge of IT and intranet services will be needed. He gets on well with the new parts manager who has a positive attitude towards staff development and training.

Aims and aspirations

Jim sees the next step as being a management or possibly dealer relations role in his company or in a similar organisation. He feels he has most of the skills needed for this role, 'although doing a management course might help me put it over better and get the job at interview.'

Obstacles

The main barrier he identifies is that despite his skills he is not perceived as 'management material' in his firm, and he needs to be more active in convincing the senior managers that he is serious about getting promotion. As well as understanding his manager's role better, he feels taking an external course would help prove his commitment; however, there is another obstacle in that the company doesn't normally support management training for non-managers.

Problems

Changes in the company are likely to be positive, but central depot staff will be reduced and there is a chance he could lose his job. This has made him start scanning job advertisements, although he doesn't want to make a voluntary move immediately.

Areas for development

He identifies:

- formal management development
- a better knowledge of the parts manager's job
- improving ICT skills and understanding how the dealer intranet works

Action plan

Jim's action plan includes:

- exploring the options available for management courses that he can do without needing time off work, aiming to enrol by this autumn
- job shadowing his manager within the next six months
- getting up to speed on the company IT systems and the intranet
- applying for manager / supervisor roles in other companies and aiming for at least two interviews for the experience
- getting a management job within two years.

Bernadette

Bernadette has recently started work in graphic design and publicity for a supplier of building materials. She is 29 and has 2 A-levels and an HNC. She has previously worked in page layout and design for a magazine and has recently returned to work full-time after a 2-year break.

Strengths

She sees her main strength as graphic design; being able to take an idea and turn it into something that's visually attractive. She also feels she is energetic and a good communicator and has good computer skills. She thinks some of the work she is doing isn't particularly exciting from the design viewpoint.

Opportunities

She recognises two main areas of opportunity: design work for small companies, and freelance work for magazines and journals. Her basic skills match well with these although she needs better knowledge of the small companies market, and (if she is to work freelance) better computer equipment.

Aims and aspirations

Her immediate aim is to consolidate her skills in her current job, but she would like to start her own business within two or three years. She needs better equipment, more knowledge about starting and running a small business and more contacts in small companies as potential clients.

Obstacles

Bernadette sees the main barriers as being lack of business experience and contacts and lack of equipment. She feels she can get work to tide her over as a designer with magazines, and build up experience and contacts as she goes along. She also needs to ensure that she has time for her young daughter.

Problems

None other than some frustration with some aspects of the work not being challenging enough.

Areas for development

Immediately, to consolidate her skills and make sure she is up-to-date, both in her current job and through keeping in touch with wider developments in her industry.

In the medium term, to develop business contacts and more knowledge of running a small business.

Action plan

Within 6 months: to develop her skills through work and enhance her knowledge through reading and contact with other designers to the point where she feels she can use leading-edge ideas.

Six to 12 months: to learn more about business start-up and running a small business through a mixture of on-line materials, possibly one or two courses if there is anything on that's relevant, and talking to others who have recently started up; to build up contacts, both in magazines and small and medium-sized businesses, mainly via friends and former colleagues.

Twelve to 18 months: to invest in up-to-date computer equipment and software with a target date of starting 18 months from the present.

Further Guidance

A Learning through Work support document is also available on **reflecting on your experience**.

If you have access to the LtW on-line resources you may find it helpful to look at **Enhancing Your Personal Effectiveness**.

Keeping track and reviewing your progress

Introduction

This document provides some guidance on keeping track of your progress and reviewing your learning during your Learning through Work programme.

Keeping track of your progress

As you work through your programme you will need to keep track of your progress within the modules you are currently working on and your progress on the programme itself.

Within each module think about:

- am I on target to finish this module on time?
- if not, can I get back on track - what action do I need to take?
- if not, do I need to renegotiate when I will be assessed?
- if I need to renegotiate, what effect will that have on the programme as a whole?

For the programme as a whole think about:

- how am I progressing in terms of the programme - e.g. which modules have I finished, how am I doing with those I'm working on at the moment, will I be able to start the remaining ones on time?
- if anything is behind schedule, will I be able to catch up or do I need to renegotiate the time-scale of the programme?

Use the calendar part of your learning contract to keep track of your programme.

If you need to resubmit any work or be reassessed, be aware of any possible effects on your programme as a whole: will this affect your ability to start the next modules, or will you need extra time to do the additional work needed?

Other things to watch for are changes in your own workload that could mean you do not have as much time as you expected to work on your programme, and changes to anything you are relying on in order to start or complete any part of your programme (for instance, a delay to a work project that you were intending to use as the basis for one of your programme modules).

Throughout your programme, you should know how you are progressing within each module, how your programme is going compared with your agreed time-scale, and whether there are any problems that might affect your programme.

Reviewing your progress at different levels

Within each module

Within each programme module you will need to keep two things in mind when reviewing your learning: are you achieving your intended learning outcomes and are you working at the right level for the module (as represented by the level indicators relating to the module)? If you have doubts about being able to meet these, discuss them with your tutor.

Against your programme learning outcomes

As your programme progresses, you should start thinking whether you are achieving the top level outcomes you set for your programme. If you are struggling with your programme modules it is also likely that you may not be on target to meet your aims. You could also find that you are meeting the requirements of your modules, but don't feel you are meeting your programme outcomes adequately. If this is the case, check:

- whether you could alter the work you are doing for your programme so that your outcomes are met
- whether you need to renegotiate any of your modules so that they reflect your outcomes more clearly.

The purpose of your programme

Finally, you will have set yourself an overall purpose for your programme that reflects what you want it to help you or your organisation achieve. As you progress through the programme, you need to ask whether it is helping you achieve this purpose and if not, what you need to change to achieve it. As above, this might mean changing the way you approach parts of your programme (for instance the way you tackle a project module) or renegotiating some of it.

Formal reviews contributing to your learning plan module

In some Learning through Work programmes you include a programme module based on managing your learning – essentially you gain credit for successfully planning and undertaking a learning plan.. This covers designing your programme and developing a learning plan, and reviewing your learning as you progress. Your assessment for this module is likely to include your learning plan itself, an initial review of your learning, and a summative review - and possibly one or more progress reviews. The exact format will depend on what you have agreed with your university, but outlines of what is likely to be required for initial and summative reviews are given below.

The initial review

Your initial review is a piece of work that reflects on your 'journey' from exploring Learning through Work to developing your learning contract to the stage where it is ready for approval. It allows you to go into more depth about what you are aiming to achieve from your programme and how it builds on

your previous experience. It can also be used to reflect on what you have learned from the process so far, and how you expect your programme to develop.

You do not need to have completed your review in order to submit your plan for approval, but you will need to submit it early in your programme if you are including credit for your plan design.

You will need to discuss what is required for your initial review with your tutor. The length and depth of review will depend on the level of qualification you are aiming for and what you have already written in the learning plan. If the Experience and Purpose parts of your plan already contain the kind of discussion needed for your review, you may be able to refer back to them or (depending on your university's requirements) you may not need to complete a separate review.

The criteria used to assess your review will depend on your university and the level of award you are aiming for, but broadly speaking your learning contract and review taken together will need to demonstrate that you have:

- assessed your current position - your starting-point in terms of knowledge, skills, resources and working context - sufficiently to identify what your programme will be building on
- identified what you want to achieve through your programme, and how this contributes to your wider aims and capabilities - including in terms of your effectiveness, employability or business competitiveness
- identified how you prefer to learn and related this to the opportunities available to you to support your learning
- identified objectives for your learning and developed a plan for meeting them
- identified, in outline, how you will demonstrate that you have met your learning objectives in a way which can be assessed
- registered for a named award with a university or awarding body.

The summative review

At the end of your Learning through Work programme you will probably be expected to review your learning from the programme. This review might cover things such as:

- ♦ to what extent your learning has contributed to the purpose you set out for it in your learning plan
- ♦ any unexpected or unplanned learning from your programme, particularly if you have renegotiated your programme or part of it
- ♦ where you see yourself now and how that has changed from when you started the programme
- ♦ any plans you have for the future and how you expect to use what you have learned from the programme
- ♦ anything you have learned about your own learning and development that you could use for the future.

Further guidance

There is also a complementary support document on **reflecting on your experience**.

An introduction to research

Introduction

The purpose of this document is to introduce some of the main issues you will need to address when setting-up projects or research enquiries within your programme. Much of your learning and many of your objectives and outcomes will entail reading what other people have written. However, most programmes will contain some elements of research, that is learners will engage in finding out for themselves by setting-up planned and systematic processes which enable them to learn, to understand and to know. This section gives a brief introduction to some of the main types of research activity. It cannot provide sufficient detail to support your own enquiry. Before embarking on your own research or project work it is essential that you read some of the many research methods books which have been published and that you speak to your tutor about the methods and data collection techniques best suited to your own field of enquiry. In order to make good use of these books and your tutor it is also essential that you identify carefully the main purposes and outcomes of the project or investigation you wish to conduct.

There is a comprehensive on-line learning resource on Research Methods which you may have access to. If you do have access to this resource you are strongly encouraged to use it as it includes much of the background, information and practice you need to plan and undertake a work-based research project.

What is research?

Research is a systematic activity: it is designed to investigate and generate information relating to a particular, specified enquiry or issue. It may generate accidental or unexpected findings and conclusions but research is always undertaken in a planned fashion to address questions and to generate data from which reliable findings may emerge. 'Research is best conceived as the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data. It is a most important tool for advancing knowledge, for promoting progress, and for enabling man to relate more effectively to his environment, to accomplish his purposes and to resolve his conflicts' (Mouly, G.J, *Education Research: the Art and Science of Investigation*, Allyn and Bacon, Boston, 1978).

Research may be undertaken in different contexts and for different purposes. It may, for example, be designed to investigate the role of monasteries in fourteenth century Britain, the techniques of producing illuminated letters, the attitudes of the British public to the European Union, the nature of the human genome or techniques for reducing traffic congestion in inner London. In broad terms you are likely to be attempting to test-out existing theories (for example replicating someone else's research results or applying theories to your work-context) or you may be seeking to generate your own theories out of your own research.

The purposes of your research investigation will influence the ways in which you plan and carry-out the research; they will influence the choice of research methods and the techniques used to collect data. These in turn, will influence, and be influenced by, the context. It would, for example, be impossible to conduct an investigation into fourteenth century monastic life by using action research or oral history as the context of the fourteenth century is no longer available and nor are the people to speak about it. This is fairly obvious, but often it is not so obvious what research methods we should choose and what techniques we should use. Yet how we carry out the research will very significantly influence what we can find out and will also influence how we may interpret and use the data we collect. It is therefore essential to match the methods and techniques used to the purposes and key questions which our research intends to address.

In LtW programmes the research will be work-based, that is it will have direct relevance to work and is likely to derive from work-based contexts, purposes and investigations. The research topics and approaches could be just as varied as those cited above but in all cases research in LtW programmes will link to work contexts and will inform work practices in some way.

Research can be used within programmes at different academic levels, from undergraduate to Doctoral. However, it is important to be aware that at the highest academic level, namely Doctoral level, research must result in original outcomes of publishable quality. At lower academic levels, the outcomes from the research and the depth and breadth of the research will be less. However, good research, even if it results in a small project and project report at undergraduate levels, must always be planned and carried out in a systematic and informed way in order to ensure that it results in reliable findings. Only if the findings are reliable can they be usefully applied to the benefit of work and workplaces. .

Designing your project or research proposal

Before deciding on your research area you will need to consider what you and your work place are interested in or want to know. These two factors will give you a starting point but you then need to consider a number of additional things in order that your research is purposeful, manageable and complementary to existing knowledge and experience. The planning of the research will be an iterative process as you consider and work with these different considerations.

Deciding on your research focus

Your personal interest and your employer's interest in your research proposal should be vital drivers in determining your research focus. Your research focus is about what you want to find out (for example, an answer to a question or set of questions, a solution to a problem, a new piece of information) and how you intend to do this (for example how you will approach the research – your research paradigm- what methods and techniques you will use, what data you will collect and how you will interpret it). Your personal interest in your research will keep you working on it during difficult and challenging times; your employer's interest will help to

ensure that you get support (time, access, materials, expertise, people-support) and encouragement. Be clear about the potential business benefits which will arise from your research; how your research links to your work roles and ensure that other relevant people in your business are aware of these benefits and links.

In deciding the focus of your research it is essential to be realistic about the access you will need (to equipment, materials, documents etc) and the likely impact of this on your workplace. Access and the availability of materials must be pretty well guaranteed otherwise your research programme may founder without result and this will have serious implications for your progress in your programme overall. When determining your focus it is important to be in touch with others in your workplace who have existing experience in research and project activities or in implementation and practice. You should make yourself aware of what may be happening in your research area in other places of work.

Finding out what's been done by others

Your project or research investigation will be designed to address your own particular questions or problems and will therefore be somewhat individual to you and your workplace. However, before you embark on your own investigation it is essential that you find-out what has already been written and researched in relevant and related areas. Firstly, you don't want to re-invent the wheel and secondly, you will be expected to make links between your own research outcomes and those of others, for example: what are the similarities and differences between your findings and theirs; what relationships are there between your findings, your research processes, techniques and methods and theirs; do your results complement, add to or disagree with those of others; to what may you attribute differences between your outcomes and others'; what have your findings added to the existing understanding and knowledge of this area? You must therefore locate your own investigation within the context of what is already known and has been done. This will also enable you to see what gaps there are in the publicly available knowledge-base around your investigation. You will need to keep notes and records of others' work and you will need to keep a full bibliography of all work consulted, both published and unpublished, so that you can refer to these in your own writing.

Identifying the research outcomes

When planning your research focus you will need to identify what will be achieved by this research. What do you hope to learn by doing the project or research and of what benefit will the results be to others, both those in your business and those in the wider community of practice and knowledge (this includes those working in these areas in other businesses, in universities, in professional bodies and so forth)? What will be the tangible and public outcomes of your research? You will write it up for your studies, but how will you disseminate this knowledge and experience more widely? Will you write articles for Journals or Professional Magazines; will you present a paper at a conference or an employers' forum, a professional gathering or a management team meeting; will your work be used to generate guides and advice sheets to improve operations, processes or practices? The intended

outcomes of the research or project may have some impact on the precise focus of your research as well as on how you plan and conduct it; the outcomes must relate to the wider fields of knowledge and practice mentioned in the preceding paragraph.

Matching the research proposal to the contexts

Your research or project is being undertaken as part of your LtW programme and it is linked to your business and work-based requirements. The proposal and outcomes must therefore satisfy the needs of your employer or business, your personal and learning development and the qualifications requirements of your university. Your proposal must also be achievable and manageable; this means that it should be capable of delivering the expectations for academic awards yet must also be feasible within the timescale and facilities which are available. The proposed activity should relate to your overall LtW programme and should link to, and progress your existing knowledge, skills and experience. You should consider carefully the ethical implications of your proposal: will the data be confidential, who will have an interest in its confidentiality beside you, what ethical issues will arise from your work in relation to its processes, data, findings and the people with whom you collaborate in undertaking the research?

Designing your research approach

In order to undertake a research investigation it is essential to consider the strategies, methods and techniques you will use. Research is a means of discovering truth and it seeks to achieve this by being systematic and controlled, by being empirical (checking subjective belief against objective reality) and by being self-correcting (the scientific method aims to protect the investigator from error and the procedures and results are open to scrutiny by peers). Careful design of the research is an important part of ensuring that the findings are both valid and reliable. Validity means that the research methods used are appropriate for investigating the research question and that they are capable of leading to secure and logical findings. Reliability means that the results which are obtained are consistent, replicable and trustworthy. As Rob Barnes puts it: *'it is possible to make **reliable** measurements of the size of people's feet but difficult to claim that this is a **valid** measurement of intelligence'* (Barnes, R. 1992, *Successful Study for Degrees*, Routledge, London, p159)

Research strategies

Research strategies may be broadly divided into two families: Quantitative and Qualitative. Quantitative research is concerned with the collection and analysis of data in numeric form. It tends to be used for large scale sets of data which may be presented as statistically representative. Qualitative research is concerned with collecting and analysing information in non-numeric forms. It tends to focus on exploring in detail, collecting data from single or small numbers of individuals or instances and focussing on depth rather than breadth. It does not generally seek to be representative or generalisable, but to highlight and illuminate. In designing your research approach you should consider which of these broad approaches will best answer your research questions and achieve your intended outcomes.

There are other ways of thinking about your fundamental research strategies and, although the separation of quantitative and qualitative strategies is common, it is possible to combine both approaches in one piece of research. Determining your underlying strategy is a very important process and it has implications for the research methods and techniques you will use. There are very many research methods books available which you should consult before making your decisions. Whichever approach you decide upon you should be certain about why you have selected it and how it will help you to form some answers to your research questions.

Research Methods

Research methods are the approaches used to gather the data from which the researcher will make explanations, interpretations, inferences and predictions. Some research methods are more closely associated with the qualitative strategy than the quantitative strategy but they are not automatically ruled-out.

To determine the most appropriate research approach for your project, you will need to consider the nature of your research question, your own expertise and preferences and the opportunities which you have for undertaking the research. Six different research methods which might be used in LtW programmes are outlined below: survey, experiments, action research, case study, ethnography and soft systems methodology.

Survey Surveys gather data from a wide range or number of people, objects or events. They may be used as a frequency count (e.g. for which political party are people intending to vote in an election) or to produce a relational analysis and to investigate causes of phenomena (for example, is voting intention linked to social class). The scope of the survey may vary: it could, for example, be nation wide or limited to one community. One of the main advantages of surveys is that they enable data to be gathered from large samples, and some generalisable conclusions to be proposed (for example, a large enough sample of voters will enable a statistical estimate to be made of the likely election outcome). Another advantage is that they enable the researcher to identify characteristics which are linked systematically to events or situations and to draw causal inferences (eg. social class affects voting intentions).

Experiments In experimental research, the investigator deliberately controls and manipulates the events which they are investigating. They do not discover and account for what has already occurred rather, they arrange for events to happen. Usually this involves making a change in one variable (the independent variable) and observing its effect on another variable (the dependent variable). Experiments may be used with people as well as with materials and processes. Ethical considerations are very important if the experiments are concerned with people although experimentation with people need not be at all harmful or intrusive.

Action research is about diagnosing a problem in a specific context and attempting to solve it in that context. It is usually, but not always, collaborative, with researchers and participants working together on a project. Team members take part in implementing the research and evaluating it along the way, because the ultimate objective is to improve practice. These steps

of diagnosing the problem, implementing changes and testing and evaluating the outcomes is cyclical. The key researcher needs to be involved actively in these processes and therefore it is helpful if this person is already a member of the team and has the authority to make changes.

Case study is described by Cohen and Manion in the following way: *Unlike the experimenter who manipulates variables to determine their causal significance or the surveyor who asks standardised questions of large, representative samples of individuals, the case study researcher typically observes the characteristics of an individual unit – a child, a clique, a class, a school or a community. The purpose of such observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalisations about the wider population to which that unit belongs.* (Cohen L, Manion L, 1994, *Research Methods in Education*, Routledge, London, p106, 107). Case study can be ideally suited to the workbased researcher; its main limitation is the extent to which broader generalisations may be made from the individual case study. If a case study is proposed, it is wise to select it carefully bearing in mind the possibility of comparing it with, or carrying out, similar comparative studies.

Ethnography involves the researcher in observing a group or a situation as a participant and not as an outsider. A case study can be conducted by an outsider but ethnographers are members of the group being studied and in this way their presence, as observers and researchers, does not have an impact on the events being studied. For the group, it is as if the researcher is unnoticeable, they are there only in their normal role within the group.

Soft Systems Methodology aims to bring about changes which are systematically desirable and culturally feasible. It provides insight into the differences between an ideal model of how things might work and how they appear to work in real life situations.

Selecting your research techniques

In order to carry-out your research you will need to gather information and subsequently analyse and interpret it. There are many techniques for gathering information, or data, and the ones you select will be determined by your research question and the research method or approach you have selected. You may use a range of research techniques to investigate your research question and you may use more than one research approach. This would normally be done where the researcher is anxious to increase the validity of their findings and this planned approach is known triangulation. Four techniques for collecting data are considered below.

Documentary sources

Most research involves some data collection from documentary sources. Sometimes documentary sources may be the principal or only source of data; this is quite common in historical research, in other research it is one amongst several sets of data.

Documents can be usefully categorised as primary source material and secondary source material.

Primary source material encompasses all materials which are original to the problem under study. In other words these were produced at the time in question by people involved in, affected by, or directly observing or commenting upon the events, from their own perspective and as contemporaries to the event. Primary sources include documents, artefacts (objects and items of any man-made sort), human and animal remains. Primary sources can be classified by origin or purpose and these classifications can be useful in helping researchers to locate them. For example, archive collections will house materials such as documents, photographs and drawings and these may be sub-divided into Government or Public records (for example, Parliamentary and Local acts, regulations, laws, censuses); Ecclesiastical records (for example, church court records, private wills, registers of births, deaths and marriages) and Private records (for example those of companies and families). Objects, relics and buildings can be grouped in a similar way but will usually be located on sites or in museums and galleries rather than in archive offices.

Secondary source materials are those which were produced subsequent to the events in question or do not have any direct physical relationship to the period or event being studied. A secondary source is one in which the person describing the event was not present and obtained their information from another person or source. Their own information source may or may not be a primary source. Secondary sources include all manner of published books, encyclopaedias, reproductions and replicas of original artefacts, films, videos and paintings about an event with which they have no direct physical or temporal link.

Documentary research would include materials which are library and computer based.

Questionnaires

Questionnaires are a widely used data collection technique, especially in survey approaches. Questionnaires may be sent out to respondents and returned or may be administered by the researcher. The questionnaire is designed for a predetermined set or sample of respondents and enables the researcher to survey a large number of respondents in a relatively short space of time. Analysing and interpreting the mass of data which is returned in the completed questionnaire is a major task, and the questionnaire must be designed with this in mind. As it is also difficult to go back to respondents and ask for further information it is essential that the researcher anticipates reasonably accurately what questions to ask and that the questionnaire is designed so that all respondents are able to understand what information is required from them and that they are able to answer unambiguously.

Designing the questionnaire is therefore a major task. Firstly the researcher must select the areas on which questions are to be asked. This will be determined by the research problem, the hypotheses the researcher has about links and variables within the research problem and the methods of analysis of the data which the researcher proposes to use. Secondly the researcher needs to write the questions. This must be done in such a way that all respondents understand the questions and their interpretations of them are unambiguous. It also needs to generate the type of answers that are capable of analysis by the methods selected by the researcher. For example open-ended questions which invite the respondent

to write prose answers must be analysed differently from questions which ask the respondent to select from a range of given answers or by a scale or measure of some sort. These different types of response will also generate different data and therefore facilitate different interpretations by the researcher. Thirdly the researcher needs to plan the layout of the questionnaire to maximise the chance that the respondent will complete it. For these reasons it is common for questionnaires to be piloted and amended in the light of the outcomes of the pilot before distribution to the main sample group.

As the construction of a questionnaire is a very sophisticated task, it is essential to read in more depth about the issues above before commencing the construction of your own. However, a well-designed questionnaire will facilitate effective and efficient analysis and robust data sets.

Interviews

Interviews are a means of gathering data from individuals or groups orally by the researcher questioning or discussing issues with them. The interview may be highly structured through a list of questions determined in advance by the researcher in much the same way as the researcher may set about designing a questionnaire. Alternatively the interview may be only lightly structured by the researcher, merely to ensure that pre-determined issues or areas are considered by the respondent or indeed, it may be structured not by the researcher but by the respondent who could be given a very wide and general topic to talk about in the way that the respondent considers appropriate. By these means the interview technique may be tightly controlled by the researcher or very much led by the respondent.

The interview technique, like questionnaires, needs to be carefully designed and practised, so that the researcher obtains what they want from the interviews and is able to interpret and analyse the data which emerge.

Observations

In this technique, the researcher observes, records and analyses events and interactions. Observations are guided by the theories which the researcher holds: they guide the researcher in deciding what to observe and record and why, and they help the researcher make sense of what they observe: *when one does not know what one is looking for one does not know what one finds* (Febvre in Burke, P (ed.) 1973, *A new kind of history: from the writings of Febvre*, London, Routledge and Kegan Paul).

Further guidance

Your university may have guidance materials on research methods, and all university libraries will have texts on research methodology. It can also be useful to talk to people who are familiar with the different approaches used; your tutor may be able to help you or put you in touch with someone who can.

There is a comprehensive on-line learning resource on **Research Methods** which you may have access to. If you do have access to this resource you are strongly encouraged to use it as it includes much of the background, information and practice you need to plan and undertake a work-based research project.

There are also LtW support materials on:

- **learning through doing,**
- **managing projects** and
- **using academic conventions.**

Managing projects

What is a 'project'?

A project is any activity with a clear start and end point, where there is a defined objective or goal in mind, and a point where the outcome or result of the project can be identified and assessed. Projects can be any size, and can range from short individual activities (such as a typical course assignment) or involve large numbers of people and organisations and last for many years (such as a major civil engineering or construction project). Some activities are obviously projects - e.g. a research project, developing a new product, or building a house - while others do not have to be set up as projects, but may benefit from a project approach (e.g. improving one's practice, or changing the way something is done).

The notes below tend to assume that there will be more than one person working on the project, but the principles are just as relevant to a research or similar project which is operated by one person.

Stages of a project

Most projects have four or five broad stages: design, planning, doing (or implementation), reviewing, and deciding what to do next. The design stage involves deciding on the focus of the project and its key objectives. Planning involves setting out means of achieving the project objectives, identifying the resources needed, and setting out timescales and schedules. 'Doing' refers to the process of getting the project under way and completed, but it also includes ongoing monitoring against objectives and timescales (and the budget, if relevant). Review involves checking whether the outcomes meet the project objectives, reviewing the process (what went right / wrong and why), and identifying any other learning points from the project such as whether the planning could be improved. It may also include a wider review of the value of the project: the objectives have been achieved, but what value and impact are they having? Finally, it may be necessary to implement follow-up action, repeat the project perhaps in a slightly different way, or abandon the work the project refers to.

In practice, while some small, straightforward projects follow these stages neatly, larger projects tend to become more messy: the stages overlap, there may be a need to review and replan in the middle of the implementation phase, and there can be many sub-projects making up the main project.

Phases and roles in a project

As well as project stages, it can be useful to recognise that projects can go through different phases that call for different approaches and roles.

- Exploring ideas and ways forward. This can be a 'blue skies' phase, calling for imagination, creative thinking and (if it is a group project) a 'think-tank' approach. At this point, people may not have distinct roles in the project.

- Developing a plan. This is a more pragmatic stage that requires more focus and discipline. It often also needs a mix of strategic, overview thinking (the 'project director' role), and hands-on practical organising (the 'project manager' role). These roles - along with those of working on the project and getting things done - continue through the 'doing' stage, although the project director role may be an intermittent one, looking in at review points.
- Implementing the project. The 'project manager' and 'project director' roles remain important in this phase. In addition to others involved in implementing the project, another role, that of 'project controller,' becomes important - checking that things are going to plan, monitoring how resources are being used and the budget is being spent, and checking that targets will be met.
- Rethinking and reviewing. These need not be distinct stages but can occur at any time during implementation. They may require stepping back and rethinking the implications of any problems and changes that might occur, including effects on timescales and planning. The ability to replan quickly can be important in projects.

Design

Unless the objectives are already defined, the first stage will involve working out what the project needs to achieve. This may be a fairly straightforward exercise of identifying and setting targets, or it could take the form of devising a research question or setting a development agenda. Some projects can be flexible in the results they produce, while others need to have closely defined targets.

The objective-setting stage of a project may involve gaining agreement from different stakeholders, as well as identifying what resources are available (or can be sought) for the project. It can be critical at this stage to ensure that the project is sufficiently well resourced to see it to completion; as well as budgets and physical resources, people's time, commitment and expertise need to be considered.

The initial stages of a project can also be highly creative, and a range of different skills can be needed at this stage to ensure that the project is worthwhile and viable.

Pitfalls to watch for:

- *objectives that aren't sufficiently challenging, or are overambitious - leading to adjustment or abandonment later*
- *lack of clarity about objectives - leading to unclear targets and confusion later in the process*
- *not checking the resources needed are available - leading to delays, overruns or abandonment of a half-finished project.*

Planning and scheduling

The scheduling stage of a project involves taking the project objectives and working out a plan that will achieve them on time and within budget. Techniques to consider in planning include:

Flowcharting. A flowchart shows which parts of the project need to be completed in what order. It is usually best approached by starting from the finishing-point and working back. The flow chart for some simple projects may be a single chain of events, but it is more likely that a number of 'paths' contribute to the completed project, the flowchart fanning out towards the start of the project. Resources needed for each stage can be identified at this point.

Critical path diagram. When a project consists of several 'paths' that converge to produce the project outcome, it is important to identify which are the critical ones in terms of time and resources. Identifying the 'critical path' (the longest chain of events from start to finish) will enable the project to be completed in the shortest possible time, and avoid non-critical parts of the project holding up the more critical ones. The resources needed for each part of the project should also be checked: for instance, what might look like an ideal plan from the viewpoint of completing the project could run into problems because critical people or equipment are overloaded by things outside the project, or facilities that are needed aren't available.

Contingency plans and buffers. Project planning should make allowances for obstacles that need to be overcome, and areas where things could go wrong. While the aim should be to keep the project on track, it is useful to anticipate problems in advance and have a good idea of the implications if they do occur - and know what recovery actions are available. If the project does overrun in any particular area, it is worth being aware of the implications for later parts of the project, for instance resources not being available or an activity being slowed down by running into a holiday period. Many project plans incorporate time 'buffers' at each stage - e.g. building in an extra few days for contingencies - although it can be safer and more efficient to have one large buffer at the end.

Project charting. A simple project chart sets out the different stages and components of the project as a series of horizontal bars on a time chart. This doesn't show interdependence between different stages, but it does enable a quick check to be made on timescales and progress. As a working document, the project chart (or GANTT chart) can be easier to follow than a complex flow diagram or critical path diagram.

The project chart will indicate when each part of the project is complete, but it can also be useful to identify specific milestones when intermediate objectives should be achieved, and review points for the project.

Pitfalls to watch for:

- *unrealistic timescales allocated to one or more parts of the project*
- *excessive buffers that create complacency and slow the project down*
- *not checking that key resources will be available when needed*
- *not allowing for factors outside of the project including supplier lead times, other demands on people's time, holidays, busy periods*
- *committing to a critical end-date without allowing for contingencies.*

Doing

Project implementation needs to consider three basic things:

- getting things done, i.e. implementing the project plan
- monitoring progress against plan - both in terms of timescale and budget or resource usage
- monitoring that the work is actually achieving the objectives stated.

In small, straightforward projects this may be simple, but larger projects often involve contingencies and sometimes changes to objectives as they go along.

An important part of running all but the most simple projects is to keep an active check that the resources needed for the next stage will actually be available at the time they are needed. Other things to be aware of are the actions available if the project is running behind or ahead of schedule, and anticipating obstacles that might occur and having plans to deal with them.

Pitfalls to watch for:

- *lack of communication - key people and suppliers are not kept up-to-date with project progress, leading to delays when they are needed*
- *confused roles within the project - sense of direction disappears, some work is duplicated while other things don't get done, and the project is liable to overrun on time and budget*
- *disruptions caused by running ahead of schedule then finding resources are not available*
- *insufficient flexibility to respond to changes that require objectives or methods to be rethought*
- *allowing unanticipated obstacles to dominate the project.*

Reviewing

The review stage asks a number of questions about how the project went and what was learned from it, normally including:

- were the objectives achieved? why / why not?
- what has the impact of achieving the objectives been?
- how did actual expenditure and resource usage compare with the budget?
- did the project progress according to plan? why / why not?
- what recommendations or decisions can be made as a result of the project?
- what has been learned from the process and management of the project?

The review normally includes writing up the project, possibly with different reports for different audiences - e.g. those responsible for funding the project might be interested in costs, progress and achievement of objectives, clients or senior managers in the recommendations, and the project team in the progress and learning points.

Pitfalls to watch for:

- *inaccurate reporting, e.g. ignoring factors that could be learned from*
- *not evaluating the outcomes: i.e. assuming that because the project achieved what was planned, it has done a good job*
- *not learning from successes: 'why it went right' can be as important as 'why it went wrong,' particularly if adjustments were made to get the project right*
- *ignoring findings that don't seem to fit with the general pattern or with preferred decisions.*

What next?

The final stage in any project is to ask 'what next'? The project team may only be able to recommend further actions, but part of the recommendations of a project need to consider whether the project is now completed, whether there are unresolved issues that need dealing with, or whether a new line of development or enquiry is suggested.

Pitfalls to watch for:

- *ignoring indications that more work is needed: assuming that because the objectives have been met, the project is complete*
- *failing to 'let go': e.g. the project team recommends or creates more, similar work because it has developed a strong sense of ownership for the project.*

Further guidance

Your university may have guidance materials for undertaking research projects, and there is a wide range of literature and internet resources on project management in different work contexts. A useful, easy-to-follow guide for academic and research projects is:

Bell, Judith (1986) *Doing your research project* Buckingham, Open University Press

There are comprehensive LtW **on-line learning resources** on:

- Project Management; and,
- Research Methods.

If you have access to these resources you are strongly encouraged to use them as they include much of the background, information and practice you need to plan and undertake a work-based project.

There are also complementary support documents on:

- **Learning from doing**
- **Introduction to research**
- **Ethical issues**

Making best use of on-line learning

Introduction

It is likely that many of your learning activities will take place off-line in the work-place itself—preparing and writing reports, completing assignments, reading, taking part in group discussions, dealing with problems or working on projects. However you may also be including in your programme learning packages which are available on-line. You may also use the internet and other on-line resources as **support** activities for your programme of learning.

On-line learning resources

The LtW system includes a range of on-line learning resources that have been specifically developed for work-based learners.

You may have access to one or more of these resources depending on your programme of study and which your university has allocated to you.

If you are using the LtW system simply to enable access to one or more of these resources they will be available to you from your menu.

If you are developing and undertaking a 'full' programme of study through the LtW system it is likely that your university will have allowed you full access to the entire range of learning resources.

You should seek advice from your tutor on which of these resources will be suitable for you and which – if any – should be built into your LtW profile as modules of study.

You may find that your university also has additional on-line materials.

Well-designed online learning materials should have clear navigation to sources of data, dialogue and other learning activities. CD-ROMs allow more use of multi-media materials but have the great disadvantage of being self-contained and isolated. If you are using your own telephone link you should look for 'hybrid' systems that allow you to work with detailed data or graphics off-line via CD-ROM but which facilitate on-line updating of materials, logging of progress and access to other data and online discussions.

On-line data

The Internet offers you easy access to the world's online resources. Using the net can also be very frustrating (delays, system failures etc) and expensive, especially if you are using a telephone link and a private Internet Service Provider (ISP). So it will help if you follow some simple rules:

- always book-mark (or 'favourite') each interesting site so that you can return later;
- wherever possible, down-load items or use the 'save as' facility so you can study detailed materials off-line;
- establish a flexible filing system on your machine with folders for each topic in your study, for easy retrieval of downloaded materials;
- maintain a list of useful email addresses of people or organisations. Email contact can be followed up later. Organisations and individuals who publish their email address usually welcome genuine enquiries.

Using search engines

Search engines are essential tools for surfing the Internet. They find – and prioritise – sites that match your search instructions. There are many search engines to choose from. Some have helpful sub-lists of search topics, many specialise in particular areas. Try more than one - they often throw up different answers.

Some useful tips when using search engines:

- have a clear and concise idea of the topic (even if only general) before you start;
- consult the 'search tips' or 'advanced search' facilities offered by most search engines to avoid receiving thousands of irrelevant sites;
- keep refining your search words in the light of experience;
- when happy with the list of sites on the screen, book-mark that list or 'save as' a file on your machine for future reference.

Searching for the right sort of data for your work

Useful material can be anywhere, but it is wise to start with the **main providers or players** in your field of work – academic associations, trade associations, professional bodies, government departments, companies, Sector Skills Councils, specialist libraries, publishers – and then check their websites. Useful examples include:

- <http://www.open.gov.uk> - access to UK Government reports, statistics and other official documents.
- http://europa.eu.int/index_en.htm - access to official EU reports and data on all topics covered by the Commission.
- <http://www.inst-mgt.org.uk/> - for members of the Institute of Management - extensive data services, including journals, research reports

- <http://www.bl.uk/> The British Library - for a search of the library's catalogue
- <http://www.kogan-page.co.uk/> - A typical Publishers' website.
- <http://www.accesseric.org/> - US database on items in print relevant to education, including abstracts.
- Most university websites include details of staff publications - many downloadable.

And many many more.

Most large sites have 'portals', or gateways with links to specialist areas. Use a bookmark / favourite when you strike gold – you can come back to it later.

Don't be afraid of following links to other sites – serendipity is a legitimate research method. However, many links to other sites do not have return links so it is easy to get lost. Use the 'Back' button, or make use of book-marks (or favourites).

Take a **sceptical** interest in what you find on the open web – if something looks interesting or useful, always check:

- its provenance or status,
- who provides and maintains the site,
- if there are contact details,
- if there is a date of the most recent entry.

Citing websites in reports

For most academic and official reports, it is essential to cite sources of data, quotations and extracts. This applies to web-based material as well as more conventionally published materials. However, there are difficulties with the citation of web sources: sites can change or disappear and their status is often unclear. It is important that users of your report can check your sources, or use them for their own studies. So, when referencing your sources, quote the name of the item, the URL, the date of your most recent visit and, if not obvious from the URL, details of the provider.

Using On-line Discussion Groups

Online discussion groups can be a valuable source of advice and information, and can provide opportunities for exploring ideas, collaboration, exchanging information and exploring what others are doing. Ideally, you should find a group with common interests or if one does not exist, you could invite other LtW users to join you.

The LtW Forum can be accessed directly from the LtW system. Ready-made groups can be found elsewhere, e.g. on JISC (<http://www.jiscmail.ac.uk/>) JISC has over 5000 to choose from. Look for groups, like those on the JISC list, which have clear descriptions of the topic, and provide an archive of all exchanges so you can judge its usefulness before joining. Other lists can be found at <http://www.tile.net/lists/>

To get the best out of your group, be proactive. If everyone is waiting for something to happen, nothing will. Tell people what you are doing and why you have joined. Ask open-ended questions relevant to your work and follow up each reply. Share your information; someone will reciprocate. Observe the 'rules of engagement' (language and etiquette) for the group. Try being provocative, but always be polite. Stimulate debate. If it is 'dead', move on.

In the jargon of the trade, discussions are either synchronous or asynchronous. **Synchronous** discussions take place in real time, with more than one person online at the same time, allowing for free and spontaneous exchanges as well as planned 'starter' inputs. To be successful, synchronous groups need to be carefully planned. They usually have a specialist convenor and are often associated with fixed courses or online packages. 'Chat-lines' open to anyone surfing the web, where the identity and interests of participants are difficult to determine, are rarely useful for pre-planned studies.

Asynchronous groups – with people participating at times which suit themselves as individuals - are more easily organised. Contributions can be grouped around topics and can be carefully planned. 'Threads' of different arguments can be traced over time making it easy to identify those contributors who might be worth following up with particular queries. Most 'lists' are of this kind.

Using on-line tools and services

A number of online research tools are available free of charge provided they are used for genuine academic research purposes. Many are available for limited trial periods only, in exchange for your feedback on their use. These research tools cover a range of services including surveys, data analyses and modelling systems. Some universities keep lists of such tools - check with your University for details of their computing services.

Further guidance:

Learning from doing: action learning, action research and reflective practice

Introduction

Action learning, action research and reflective practice are different approaches to 'learning from doing' that are particularly applicable to work-based learning. This resource summarises each approach and gives suggestions for how they can be used in an LtW programme.

Reflective practice

Reflective practice is essentially thinking about what you are doing while you are doing it and making changes as a result. Donald Schön, who has written extensively about reflection, distinguishes two aspects of reflective practice. 'Reflection in action' involves reflecting and making changes as you go along (as with a teacher modifying his approach depending on the reaction of the class, or a negotiator changing her strategy to deal with the priorities of the other party). 'Reflection on action' involves stepping back from a situation, reviewing it and thinking how the action can be modified; it can be relatively short-term, as in taking a break from a meeting, or longer-term, as in putting aside a project to evaluate and regroup.

Examples

A college lecturer feels that while her sessions are reasonably successful, she would like to improve them further particularly for students who seem to be less motivated. She starts to notice more about how her students are reacting and introduce more variety into what she is doing (reflection-in-action). She keeps notes about what she did and how each session went, and reflects back on how she organised the sessions and handled the students (reflection-on-action); she also discusses some of the issues raised with her colleagues. As a result she has introduced greater variety into her teaching and is better at 'reading' and responding to students' reactions.

A newly-appointed engineering manager feels he is not getting the best out of people, and senses mistrust developing in his section. The culture of his organisation is one of 'get on with it' - when he has raised problems with his manager, the response has been vague and unhelpful. He decides to keep a log of problems and incidents and how he is handling them, and review it on a weekly basis (reflection-on-action). Quite quickly he realises that he needs to follow up potential problems more conscientiously and go out and talk to staff - not wait for them to come to him with problems. He also becomes aware that a more constructive dialogue develops if he spends more time listening and responds to concerns raised by his staff, rather than concentrating on his agenda (involving both reflection-in-action and reflection-on-action).

- *When have you reflected in, and on, action?*
- *Where would it be useful for you to use reflective practice in your programme?*

Further reading:

Schön, D A (1987) *Educating the reflective practitioner* San Francisco, Jossey-Bass

Schön, D A (1983) *The reflective practitioner* New York, Basic Books

Action learning

Action learning in its broadest sense means learning from any form of action by comparing your existing knowledge and understanding with what is happening in the situation, and using the comparison to raise questions, develop your understanding and modify what you are doing. Action learning is usually thought of as a group process following the thinking of Reg Revans, the pioneer of action learning in management. In Revans' model, groups of practitioners get together at regular intervals in action learning 'sets' to discuss issues, with each outlining his or her issue in turn while the others act as consultants or counsellors, usually with the assistance of a facilitator. Individuals then go away to work on their issues and report progress at the next meeting. However, the action learning approach can be used without a 'set,' and could involve for instance two or three colleagues coming together and discussing issues on a regular basis.

There are two points that are essential if an action learning set is to work. There must be an agreed process for each member of the group to 'take the floor' in turn and present his or her issue, so that the group does not become dominated by particular members or issues. Secondly, it's important for the other members to focus on helping the presenter work on his or her issue, for instance by asking appropriate questions and if necessary challenging assumptions, and not bring their own agendas into the discussion. If a member has some advice to offer or thinks their experience or an anecdote would help, the presenter should be asked if he or she would like to hear it - the set should help the presenter work on his or her issues, not take them over and offer solutions.

Examples

A small business owner has decided to diversify his operation. He has read up on his intended plans and attended two courses, but he feels he needs further support in putting them into action. Using the internet, he finds two similar businesses in other parts of the country that are thinking along the same lines. They agree to hold discussions by email and telephone every fortnight, where each reports progress and puts forward issues and questions for discussion. The group continues in this way until the businesses have completed their plans, when it becomes an informal discussion group.

A professional association has recently introduced a continuing professional development (CPD) scheme, requiring all members to plan, undertake and review their development on an ongoing basis. However, other than providing a format and requiring reviews to be submitted every three years, the association provides no further guidance. A small group of members decides to meet monthly to discuss CPD and work out how they will do it; in the early stages they invite a development specialist to their meetings to act as a facilitator. After several meetings the group produces a guidance note on CPD, but it continues to meet as an action learning set to discuss issues relating to individual members' work.

- *What situations in your work would benefit from an action learning approach?*
- *Who could you call on as your colleague(s) or action learning 'set'?*
- *Is there anyone you could use as a set adviser or facilitator?*

Further reading:

Revans, R W (1980) *Action learning: new techniques for management* London, Blond & Briggs
McGill, I & Beattie, L (1992) *Action learning: a practitioner guide* London, Kogan Page

Action research

Action research essentially means taking a researching approach to practical action, so that an action research 'project' results in (a) a practical outcome and (b) knowledge that can be used to improve or modify future action. There are many different approaches to action research, ranging across small- and large-scale projects, and academic, social, organisational and industrial approaches.

Essentially, any action research process consists of a cycle or spiral of activity: planning the activity or project, putting the plan into action, reviewing the outcomes and deciding what to do as a result. An action research 'project' often runs through this cycle several times and sometimes sub-projects each with their own set of cycles are developed to take forward different parts of the main project.

Example

A company runs a central induction course for its new employees. Department managers are generally critical of the course and think it could be done better on-the-job in their departments. The training manager responsible for the course agrees some changes are needed, but wants to keep the course centrally controlled. After discussion with the managers and recent recruits, he modifies the course and runs it with the next group of recruits. The course is monitored, further interviews are carried out, and additional changes are made for the second 'cycle.' The third cycle results in an approved model where the course is shortened and shared between the training section and the departments. The training manager also puts in place a regular review of the course so that modifications can be made as needed, and writes up key points emerging from the study so that the principles established from the research can be referred to and prevent previous mistakes being repeated. He also writes the process up as part of his *learning through work* programme.

- *Have you used an action research approach in your work?*
- *Will you be involved in anything that could be approached as an action research project?*

Action research can be fairly pragmatic, as in the example above, or it can be more critical or creative, with wider implications than the immediate area of work. This more critical or academic action research would often be written up and published. Equally, an action research approach can be taken to large-scale applications such as organisational change or introducing new systems.

Many books on action research describe small-scale action where individual practitioners, or small groups of practitioners, take a researching approach to their own work or immediate situation. This means that the term 'action research' is often associated with small-scale changes. The Shewhart or PDCA (plan-do-check-act) cycle sometimes used in industry is a form of action research, and soft systems methodology is another form used for organisational or system-wide interventions.

Further reading:

Kemmis, S et al (1981) *The action research planner* Victoria, Deakin

McNiff, J (1988) *Action research: principles and practices* London, Macmillan

Joiner, B L (1994) *Fourth generation management* London, McGraw-Hill pp44-52

Wilson, B (1990) *Systems: concepts, methodologies and applications* Chichester, John Wiley

The cycle of learning from work

The idea of a cycle of learning through doing is borrowed from action research, but it can also be approached as action learning or reflective practice: it does not imply formal research or writing up the results, although you would need to write it up to use it within your LtW programme. The basic cycle is:

- **Planning.** What problem or issue are you tackling, or what do you want to improve or find out about? What could you do to solve the problem, improve the situation or your abilities to handle it, or find out what you need to know? If you have several alternatives, which one is most likely to be successful?
- **Doing.** Putting the plan into action, and keeping track of what happens (gathering data and information, or keeping notes).
- **Reflecting.** Considering what happened: did it go as planned, or have the effect that was wanted? Why / why not? Were there any unexpected results? What else could you have done? What options are there now, or how could you modify what you are doing? What would the effects be? What have you learned? You may want to write up your 'findings' and interpretations at this stage, or at least make some notes.
- **Deciding.** Deciding on the next steps - whether you need to re-plan or modify what you are doing, continue without making changes, find out additional information, or whether you have finished this activity.

You can enter the cycle at any stage, for instance you could start by reflecting on something you are already doing, identifying what you are learning from it, and seeing whether there are any modifications that could be made. You can run through the cycle as many times as you need.

Some questions

Reflective practice

- what can you do mentally, what will be helped by writing up (e.g. in a diary or log), and what is it useful to discuss with colleagues?
- are you reflecting on a single issue, or should you treat it as a cycle (plan-do-reflect-decide)?
- when is it most effective to reflect in action, and when do you need to step back and reflect on action?

Action learning

- can you identify a colleague or group of colleagues to use as your co-learners or action learning 'set' (group)?
- how will the 'set' be managed so that it sticks to issues raised and avoids digression?
- do you need a facilitator, at least to get the 'set' started?
- have you thought about timetabling 'set' discussions, and making sure you have something to bring to each discussion?
- do all the 'set' members understand the role of helping the 'presenter'?
- does your 'set' (or one-to-one discussion) have sufficient focus to be effective?

Action research

- could what you want to do be described as a project, or could you design a project to address the problem or issue you are dealing with?
- have you identified key stages of the project cycle?
- would it be useful to adopt a reflective practice or action learning approach within the project?
- how will you collect information from the 'doing' phase to inform your decision, or to write up?
- have you thought about options at the end of the project (or at the end of each cycle)?

Further guidance

Your university may have guidance materials on practical research methods and work-based learning, or use the references listed after each section. It can also be useful to talk to people who are familiar with the different approaches used; your tutor may be able to help or put you in touch with someone who can.

There are also **LtW support materials** on **an introduction to research** and **managing projects**.

If you have access to the **LtW learning resources**, **Research Methods** and **Project Management** may prove useful.

Learning with Others

Introduction

Many adults learned, as children in school, to work alone, especially when writing and answering questions. At school today children are frequently encouraged to learn in pairs or groups, they share ideas and undertake activities together, they construct group answers to questions and even assess each other's ideas and work. In many respects, this mirrors the experiences of adults at work where group endeavour is often central to developing new processes, practices or products, to meeting targets and to solving challenges or problems. In today's universities collaborative work is also common, especially in experimental work, in seminar discussion and in large projects.

Collaborative learning can be a significant feature in LtW programmes, and there are several different groups of people who may be able to support your learning. These groups include other learners, colleagues at work and university tutors. This resource explores some of the ways in which you could work with, and benefit from, others.

Drawing on other learners

LtW programmes are supported by the on-line learner support environment and forum. The electronic medium offers opportunities for you to make contact with other learners which may be formal (arranged with your university perhaps) or informal (arranged and agreed with other learners with whom you come into contact during your studies). Sharing ideas and learning with other learners, your peers in LtW, can be an excellent way of building support and enhancing your learning.

Although the medium for collaborating with your peers may be on-line, the purposes of such collaboration are likely to be similar to those that pertain when learners meet face-to-face. The purposes fall into two main categories: to gain support from other learners and to provide a forum for discussion.

Support from other learners is particularly helpful in solving difficulties associated with studying or understanding a course structure or process. Other learners who started before you may know quite a lot about the processes of work based learning which will help you to understand the general principles of the programme and to structure your own. Sharing experiences of learning on-line, of integrating learning and work, of pursuing an award while raising a family, and many other everyday issues for people in the same position as you, helps you to gain a wider, vicarious experience and also to put your own experiences into a wider perspective. Even learners who meet face-to-face on courses need to share their experiences and difficulties otherwise they frequently think they are the only ones who are experiencing them.

There is great value to be gained from discussion of nominated topics with other learners. This activity might be described as mirroring a seminar and as having the key purpose of

setting-up dialogue with others to explore a given issue for the explicit purpose of gaining a wide spread of ideas and information. It is rarely intended to result in 'right answers', rather it is intentionally set-up to provide a forum for 'polite disagreement'. Discussion of this sort, where participants intentionally provoke thought amongst others and where they intentionally challenge each others' ideas, is structured into most university courses. The purpose is to gain experience in proposing and defending propositions or findings. It is therefore important that the discussion points are supported with evidence and with structured and reasoned arguments. The subsequent debate will aim to reconsider these arguments or to add new information, or evidence, and therefore to endorse or refute the propositions or viewpoints of individual participants. Discussions of this kind, both on and off-line can be an exciting and highly instructive way of gaining support for your learning. In particular it will assist you in developing your own arguments and ideas and enable you to gain new insights through discussion with others.

Drawing on colleagues at work

There are three main ways in which colleagues at work might work collaboratively with you on your LtW programme.

1. Colleagues may work alongside you as part of a team which is designing and carrying out aspects of a work-based project that also forms part of your learning. For example, this might be a planned team project in work and you may find that you have to agree the time scales, approaches, work-activities and outcomes for this project with the team at work. For this to feature as a part of your LtW programme, you will need to agree with your university tutor the specific requirements of your programme regarding the claims you may make to independent activity. You will also need to agree the extent to which, and in what form, the group elements may feature within your programme. One essential requirement is for you to be able to describe, discuss and evaluate the team contributions to your own findings and your own role in the team's activities and outcomes. You will find that the conduct of the project at work and your discussions with colleagues will provide very many forms of support and invaluable ways for you to enhance and develop your own knowledge and understanding. This type of collaborative activity can be encompassed within your own programme but you must check what requirements and constraints your university will impose in order to meet the requirements for your award.
2. Colleagues at work may be able to act as subject-specific guides and advisors. These people may be colleagues who are already experienced in subject matter and/or practices associated with your own field of activity for your programme. They may be line managers to you or they may be colleagues in different parts of your organisation. They may also work alongside you. Ideally you would ascertain their willingness and capacity to offer support to you and build this into your Learning Plan, because this will help you to demonstrate how you will achieve some of your objectives and with what resources. However it is never too late to seek advice and support from such people. You should discuss these forms of support with your university tutor so that s/he may ensure that you are all working towards the same goals and have compatible approaches and understandings.

3. You may seek out a colleague at work who will act as a mentor to you in your studies. This person may not know a great deal about the subject matter and field of your programme, but they should be familiar with, and understand your programme structure and they should have some specific supporting role which is agreed between you. The role of a mentor, in this context, is a person who can act as supporter, challenger and friend. As supporter they will be there to guide and advise in general matters and possibly to assist in gaining wider support and assistance from your work-place such as time and resources; as challenger they may expect to play the role of a critic, who might discuss and challenge your ideas and approaches and your expectations or assumptions; as a friend they may listen, discuss and generally encourage you in your activities and especially support you when times are hard.

When working collaboratively with colleagues at work on your learning you should ensure that they are aware of your LtW activities and also of the nature and demands of your programme and the ways in which you will use their contributions. You should be especially thorough in ensuring that you have asked their permission to use any information or ideas that they have contributed and that you acknowledge their contributions explicitly. (See the support resource on 'Ethical Issues').

Drawing on university tutors

Your university tutors will support and assist your learning in many different ways. Their principal role is to assist you in understanding the standards and other requirements of university programmes and to advise and guide you in meeting them. In practice this role will embrace all sorts of things, from guidance and discussion on your learning plan proposal through to guidance and discussion about your reading, ideas or understanding through to assessment and feedback.

As an LtW learner you may or may not meet your tutors face-to-face and all LtW learners are likely to contact their tutors through the LtW dialogue facility and possibly through e-mail and, in some cases, by video conferencing. Time for meeting, writing and talking to tutors is always at a premium as tutors and learners both have limited time and have many other tasks to complete. It is therefore essential to use this contact time to maximum advantage using minimum time.

Written contact is often easier to handle as the recipient, whether tutor or learner, may respond at a time and pace suited to their circumstances. However, it is helpful if tutors and learners have an agreed time scale for responses to queries and keep to this agreement even when it necessitates advising each other that the response must be put on hold.

Telephone and face-to-face contact is most efficient and successful when both tutor and learner have a shared agenda and set of expectations. It is usually best to agree, in advance:

- the overall purpose of the contact
- an agenda

- a time scale for the discussion

And during the discussion:

- action plans and follow-through from this contact
- date and time of subsequent contact.

Sometimes contact needs to be made urgently or at times which have not been pre-arranged. However, immediate responses are not always possible and in these cases, tutor and learner should indicate the purpose of the contact and arrange a time for a lengthier discussion.

You can maximise your gains from time with your tutor by being certain about your purposes. You may have several purposes and these may include one or more of the following:

- asking questions
- applying things you have learnt
- testing your ideas with an expert
- discussing feedback or assessment
- agreeing dates and action plans for the work you are doing for your tutor

Time with your tutor is an opportunity for two-way communication. Be certain that, when you have queries, you have fully explored other options and done the necessary reading and research so that your expectations of your tutor are reasonable and so that you are as fully informed as you may be. That way, you will be able to discuss and explore with your tutor and share ideas rather than seek explanations and fundamental information which you could readily have found elsewhere.

You and your tutor can make the discussions more productive by preparing yourselves and by giving each other maximum information in advance, for example, you should both always aim to:

- think through discussion points in advance and keep notes or jottings so that your mind is clear and prepared. Tutors tend to do this as a matter of course and you could think of this process as preparing yourself much as you might for an interview for a job.
- get notes, questions or other work to each other in advance of the discussion so that you may both prepare your responses and share common texts.

Be certain that it is your tutor whom you need to contact. If your queries are about administration, for example, the record of your results, overall dates or timescales, general support, fees, entitlements and similar matters then your tutor may not be the appropriate contact point.

Further guidance

There are also **support materials** on **learning from doing**, **an introduction to research**, **managing projects**, and **ethical issues**.

Ethical issues

Introduction

Ethics is concerned with what is morally right or ultimately good. In practice, acting ethically means acting in a way that is fair, truthful, humane, and mindful of the consequences, whether they are immediate or longer-term.

Ethics concern both conduct in businesses, organisations and professions, and project and research activities. A few examples of unethical practice in business and organisations are:

- advertising in a way that is calculated to mislead (or could reasonably be expected to mislead)
- making promises (not just contracts) without the intention of keeping them
- negotiating terms or using contracts in a way that is unfair or exploitative (this could apply equally to international trade and to the contract between an employer or employee)
- withholding information to gain an unfair advantage
- taking advantage of confidential information for personal or business gain
- deliberately or recklessly giving false or misleading information
- failing to get permission before acting on a person's behalf or releasing information about them
- taking punitive action against a person because he or she is acting ethically (e.g. reporting malpractice)
- taking on work which the person or organisation is not adequately equipped to complete.

It is important to distinguish unethical and illegal practices. Many unethical practices are also illegal or could give rise to claims in the civil courts, but something does not need to be illegal in order to be unethical. Codes of practice (e.g. from professional bodies, government and local government organisations, specialist organisations, employers and unions) can also provide guidance on ethical issues, but similarly they do not cover all the possibilities. As discussed below under 'ethical dilemmas,' acting ethically occasionally means coming into conflict with the law.

Common ethical pitfalls and malpractices in research and similar activities include:

- breaching confidentiality, e.g. revealing the source of information (or enough information so that the source can be identified) when discussions or surveys have been described as confidential
- using information for a purpose other than that for which it was asked for - e.g. for personal gain, to pass on an interesting story to the press, or to act against the interest of participants
- using others' work but failing to attribute or acknowledge it - whether they are colleagues, authors or other researchers
- making up or guessing results
- deleting or distorting information, or deliberately biasing the research methodology, to produce preconceived, convenient or politically acceptable results (the researcher has an ethical responsibility to people who took part in the research)

- misreporting research results or reporting them out of context, so that an inaccurate impression is received
- accepting a 'compromised' project (e.g. where a stakeholder is applying pressure for a particular result)
- concealing results if they are not what was expected.

Particularly in organisational projects, it's important to be aware of unintended uses of results. For example, in one organisation the results of a training needs project were used to help select workers for redundancy on the basis of skills they lacked.

Applying ethical principles in research projects and other Learning through Work activities

There are three main areas to consider when carrying out research, development or other work-based learning activities.

Is the project itself ethical? In particular, is what it is setting out to do ethical? This will involve considering immediate and longer-term impacts, and possibly looking at implications for wider systems. Environmental practice uses the idea of the 'footprint' of an activity - simplistically, does it tread lightly or does it heedlessly trample people, values and the environment underfoot?

In practice there will be limitations to what is reasonable to probe in your work situation; for instance if you work for an armaments manufacturer or tobacco company, you are not expected to agonise over the ethics of working in those industries. However, depending on the project you might be expected to check that what you are doing is not fuelling unethical practices such as supporting oppressive regimes or promoting smoking to children. More generally, if the task for your project is set by your organisation, you will need to ensure that your project is going about it in an ethical way.

Is your methodology ethical? This area concerns issues such as confidentiality, avoiding misrepresenting participants, accurate interpretation of data, acknowledging other contributions, and how you are going to report and use the project. You also need to be clear about the boundaries of the project, so that it does not become distorted in a way that wasn't intended.

Are you carrying out the project in an ethical way? This extends the methodological issues to the way you actually go about the project. It includes details of the methodology such as maintaining confidentiality from interviews, questionnaires and other personal sources, as well as how you react to any pressures to misrepresent, conceal or misuse the results.

Dealing with value-conflicts in project and research work

Value-conflicts can occur when ethical concerns come up against other pressures - for instance organisational rules, financial imperatives, client or customer demands, or management decisions or preferences. Value-conflicts can involve ethical dilemmas (see below), but more usually the conflict is between an ethical principle and a rule or a pragmatic concern.

Simple value-conflicts are sometimes resolved through a professional approach to the situation which states clearly that there is an ethical principle involved that can't be compromised. In some cases it can be difficult to counteract organisational pressures from an ethical perspective, particularly if you don't have organisational or 'expert' power to draw on. In these cases it may be useful to refer to external codes of practice (such as those of professional and research organisations or government bodies and agencies), or if appropriate to the organisation's own codes.

In some situations it is possible to find ways forward that don't compromise ethical principles, but provide a practical way of meeting pragmatic needs. This may mean changing the approach to the problem rather than doing something entirely different.

Having said this, there may be a need to defend ethical principles against pressures for instance to misuse information or breach confidentiality. This can be uncomfortable if there is strong organisational or client pressure, but it needs to be dealt with in a clear and firm way. Making ethical boundaries clear before starting work can reduce arguments later.

Dealing with ethical dilemmas

An ethical dilemma occurs when two ethical principles conflict, or when applying a principle (such as personal freedom or freedom of speech) in one case prevents it from being applied somewhere else.

An example that can occur in research is where a confidential interview results in a confession that is serious enough to warrant criminal or at least disciplinary action - e.g. a research participant confesses to committing abuse, fraud or professional malpractice. The researcher might ask:

- What is the stronger principle in the case concerned - confidentiality or the duty of care to others? This could be influenced by factors such as the seriousness of the offence and how long ago it was committed, as well as by the nature of the research.
- Is there a source of professional advice that could be sought in confidence - maybe initially anonymously?
- If the matter is not a serious offence, would the participant be unduly victimised for his or her honesty (e.g. where the practice concerned was not confined to one individual)? In some instances the duty of care could be discharged by reporting a general problem.
- Can the problem be dealt with in a way that gets the participant to take responsibility, e.g. by confessing to the appropriate authority, rather than the researcher having to report it? In any case, the researcher should make clear that the limits of confidentiality have been exceeded rather than reporting the matter without the participant's knowledge.

A learning point in this situation is that the researcher might in future specify the limits of confidentiality that can be offered.

As a general principle, ethical dilemmas need to be approached from the viewpoint of finding the higher or more general principle that applies to the situation. This means not getting caught up in specific rules and interpretations, but looking for principles that transcend the dilemma.

Learning from value-conflicts and ethical dilemmas

Conflicts and dilemmas that can't easily be resolved can be a source of great frustration and possibly also stress, but they can also provide learning opportunities. You might consider:

What problems led to the conflict in the first place. Were there misunderstandings or things that weren't made clear, or had promises been made that couldn't be kept?

What was actually done to attempt to resolve the situation, and what happened? In hindsight, could anything else be done?

How would you approach a similar situation? Could you avoid the conflict or dilemma arising in the first place?

Further guidance

Professional bodies, research organisations, government departments and agencies and other public bodies often publish ethical guidelines and codes of practice relevant to their area of work. You will also be able to discuss ethical issues with your tutor or other staff from your university.

Identifying work-based learning opportunities

Introduction

This support resource provides guidance on identifying and making use of learning opportunities at, and related to, work. It also prompts you to think about how you can select opportunities and approach learning to make best use of the ways that you prefer to learn.

About learning

Learning is the process involved in gaining new knowledge or skills, improving existing abilities, improving understanding or awareness, and changing perspectives and attitudes. Learning can involve tangible changes that are easy to describe - e.g. finding out new knowledge, or improving a practical skill - or it can be tacit and intuitive, with the results only apparent on later reflection.

Learning is often described as 'formal' or 'informal.' Formal learning describes learning that is planned and structured - for instance from a training or educational course, distance learning or self-instruction manual, computer-based training package, or planned research project. Informal learning - likely to make up the majority of your learning once you have left full-time education - includes learning from work activities, looking things up, learning from a colleague or supervisor, discussing things with other people, reflecting on experience, and so on. Not all learning falls neatly into one or the other: for instance, it is possible to plan and structure learning from work, carry out ad-hoc research alongside work activities, and 'dip into' packages to look things up.

The way you choose to learn can depend on a variety of things such as how quickly you need to learn, what opportunities are available, constraints such as your time and the nature of your job, and how you learn most effectively.

Learning at work

While courses, conferences, distance learning and other specific learning activities contribute to ongoing development, using experience as a source of learning is likely to be more important particularly on a day-to-day basis. This will be particularly true where people:

- reflect on their experience and learn from successes and failures
- think their way around problems or plan improvements
- take time to investigate issues and keep up-to-date with new developments
- get involved in new projects or developments.

Some jobs and organisations provide more natural learning opportunities than others. Particularly good opportunities can occur when:

- people are positive about learning from each other, and helping others to learn - there is open discussion geared to learning and making improvements, and the organisation may provide coaching, mentors, secondments, job rotation etc
- work involves a variety of different kinds of projects, or is involved in innovating, or developing or setting up new products, services or systems
- there is a culture of reviewing and learning from work activities - not just celebrating successes or finding fault for failures
- there is a genuine culture of employee development in the organisation, possibly with formal processes such as employee development reviews and individual development plans, but more importantly with commitment that is backed by action.

However, it's still possible to learn in jobs or organisations that don't have these factors present, but it will mean that you will have to take more of the initiative to create learning opportunities. Having a mentor or supportive colleague, either inside or outside the organisation, can be highly useful in any case, but it can become critical if the job or organisation doesn't encourage learning.

Work-based learning opportunities

There can be a wide range of opportunities for learning from work if you are prepared to seek them out or set them up yourself. Ignoring for a moment the more obvious examples of training courses, these might include:

- Work-based projects and activities - particularly real-life work activities and projects which will result in learning relevant to your objectives
- Specially set up work activities, such as secondments to another department or organisation, or opportunities to learn new skills at work
- Job shadowing (working with another person to learn part of their job or gain insights into how they go about things), or job rotation (exchanging jobs)
- Learning from a coach or experienced worker
- Investigation or research projects
- Problem-solving groups, project teams, quality circles, action learning sets or other formal or informal groups of colleagues
- Reading, particularly searching out relevant books and journal articles
- Opportunities to attend conferences, demonstrations, exhibitions etc
- Opportunities to get involved in external activities, such as representing your organisation on a forum or taking part in a joint project
- Visits e.g. to other companies, customers, suppliers
- Gathering information from the Internet
- Learning through internet networks, discussion groups or other types of forum
- 'Learning projects' - things you will learn on your own through work-based activities or independent study
- Development projects - developing new ideas, approaches and systems, either for real or as an exercise.

With all these activities, you need to ask yourself 'will they work.' This means for instance checking out whether any additional support you need is available, whether the organisation is committed to following them through, and (not least) whether you are committed to learning from them (see the section on learning preferences below).

Your organisation or employer may also provide access to training opportunities such as:

- On-line learning packages or courses
- Distance learning packages
- Courses and other forms of training provided by your employer or another organisation such as a professional body, trade association or equipment supplier
- Completing NVQ or Key Skills units or other 'small' qualifications - your employer may provide support to work towards these, or you can find a mentor at work.

Some kinds of activity - particularly those such as visits and courses that take you away from your normal work - can be largely wasted if you don't do something with them afterwards. You might therefore ask yourself:

- How can I use this activity to benefit my work or produce future benefits?
- Can I pass on my learning to others - e.g. write an information note, give a talk, run a discussion session with colleagues?
- Can I put my learning into practice or develop some new ideas from it? Often this is more beneficial - and results in more permanent learning - than if you just write up notes about it.

Learning preferences

Not everyone learns most effectively in the same way. You may have noticed that some people who didn't get on very well at school are nevertheless good at thinking on their feet and learning from practical situations, while others are good at detail and technical matters, but don't enjoy or learn very much when the focus is on people's feelings and opinions. Most people develop preferences for different kinds of situations and activities, and learn more from these. Understanding how you prefer to learn can help you to choose activities that make use of your strengths, as well as enabling you to experiment with activities and approaches that you might normally avoid.

The following may be helpful when exploring how you can best learn in a work-based context:

- List the types of activities and experiences you have learned most from. Also think whether there are any activities that you don't learn very much from, or find boring, frustrating or stressful. In both cases how much was your reaction due to the activity, and how much due to how interested you were in what you were learning?
- How much do you like to be in charge of what you do and how you do it - or would you rather follow a programme set out by someone else?
- Do you have any preference for planning activities out in advance, with clear goals, or for exploring and leaving things open-ended?

- Do you prefer to find out what works through experimenting, perhaps reflecting on what you did later, or following instructions or theory and only experimenting when you are confident that you have got it right?
- How much do other people feature in your learning - e.g. through discussing things with colleagues, or perhaps making use of a colleague as a mentor or coach? Could you make more use of others, or do you prefer to work things out for yourself?
- Do you like:
 - working on the detail, or getting an overview?
 - seeing how different parts relate into a bigger picture, or working from general ideas to specific detail?
 - looking for things in common, or finding differences and inconsistencies?
 - drawing on the theory relevant to your specialism, or applying ideas from one area into another?
 - having a clear plan, or letting things fall into place as you go along?
 - learning step-by-step, or getting involved and working things out by experiment?
 - writing down your reflections, discussing them with others, or thinking them through yourself?

Thinking through these kinds of questions can help you identify areas where you have strong likes and dislikes, and those where you don't have strong views one way or another. It's important to remember that while you will have preferences, these don't mean you can't go outside these in designing your programme. However, if you have some strong dislikes or activities you don't find help you learn, it would be foolhardy to make them central to your programme.

The opposite danger is relying on only one approach to learning. Some learning theorists depict learning as a cycle of planning, doing, reflecting and concluding or theorising, and show that while some people prefer one or two stages of the cycle, more is learned by moving around the whole cycle. As discussed above, this means that much of the value of one-off learning activities is lost if they are not used or reflected on.

Further guidance

You will be able to discuss work-based learning opportunities with your university tutor.

There is also a complementary support resource on **Learning from Doing**.

If you have access to the LtW On-line Learning Resources you may find the following useful:

- **Personal Effectiveness**
- **Working and Learning: an introduction to Higher Education and the Work place**

Self assessment and peer feedback

What is self assessment?

Self assessment is about you making judgements about how successful your learning has been. This involves more than deciding whether you are satisfied with it, but whether it meets acceptable standards of good work. As it is often difficult to know if you have done a good job, especially if you are new to an area, other people have an important part to play. In self assessment other people become involved in assessment when you invite them to do so, not when they decide. This is in contrast to the normal assessment practices in most courses and is more akin to what happens in workplaces.

Why do we need peer feedback as part of self assessment?

Why is peer feedback needed as part of self assessment? Simply because feedback from others is needed to ensure that we do not fool ourselves into thinking that aspects of our work are satisfactory when it is not, or not adequate when it is sufficient. When we are unfamiliar with an area, it is easy to persuade ourselves we have grasped something when we have not or do something well when it is not satisfactory. We need other people to give us a broader perspective—other people who don't have the same personal involvement in the work as ourselves.

Who are our peers? Sometimes they are fellow workers who have particular expertise in the area we are interested in, sometimes they are other learners who may not be experts in the same way, but can tell if we are blinding ourselves to something important.

Why is self assessment important?

Surely there are experts in the university who will mark my work, why bother with self assessment? The answer to this is that there are such people and they will be assessing your work to ensure it meets the standards of the university. But that in itself doesn't leave you better equipped to make judgements about the quality of your work when the experts are no longer there and so take full responsibility for your learning after the course has ended. Most of the time, in most workplaces, there are not people who will continually supervise your work in fine detail. It is rare to have someone check on everything we do. Day to day we have to be the judges of what is good work and have to meet those standards in what we do.

We cannot make these judgements in isolation. We need to find out what are the features of good work and see how we emulate them. Sometimes there are objective standards readily specified we can check against, more commonly we have to find out what are the appropriate standards and apply them. This may often involve us in formulating our own standards, perhaps

involving co-workers or co-learners. Learning how to self assess can be a more important and longer lasting outcome of an educational programme than the particular topic being studied.

What is involved in making an assessment?

In essence, all assessment, whether undertaken by oneself or others, involves the following stages:

1. Determine what is being assessed
2. Find the standards and criteria that distinguish good work of this type
3. Apply these to the work involved, getting assistance from others as necessary
4. Make judgements about whether the work is satisfactory or needs improvement

Self assessment follows the same pattern.

There are many different ways of going about self assessment. The particular process chosen depends on many different factors: These include:

- ♦ the type of work being assessed
- ♦ the availability of existing standards and criteria
- ♦ the reasons for making the assessment
- ♦ the access one has to experts and other learners
- ♦ the degree of confidence one has in one's own judgements

A typical process

While there are many ways of conducting self assessment, the following is a common process you might find useful. To illustrate how it can be used in a real workplace learning through work situation we can use the following as an example.

Imagine you have been involved in a learning project in which you have studied the work flows in your place of work in order to find out how they can be improved. You will have read about theories of work flow, devised ways of observing and monitoring how decisions are made about work when it comes in and have completed a small study which has come up with some interesting results. Your evidence is presented in the form of a report to your site manager which you are also submitting as part of the Learning Through Work programme. How would you go about self assessing this?

1. Determine what is being assessed

While it might be obvious in many cases what is being assessed, it is not always so. Is it the final outcome of the work or something intermediate? Is it a report or the action that flows from its

adoption? Often, it takes too long to judge the final outcome and you may not be given the chance to implement it.

In our example, the item being assessed is the report. It is not improved workflow as such. We also have to decide whether it is the report to the manager or the same report submitted to the university. Although it is may up of the same pages, it might need to be judged differently when used for different purposes. The manager may, for example, be interested in whether you have made a strong case for changing work patterns with minimal disruption. The university tutor may be interested in whether you have taken into account the latest findings in the literature on improved workflow.

2. Find the standards and criteria that distinguish good work of this type

What are standards and criteria? Standards are the yardsticks against which work should be measured. Criteria are the specific factors to be taken into account. Sometimes these are easily located in references material and professional standards manuals, sometimes they have to be inferred from the context and purpose of the work. It may be necessary to get a group together to brainstorm criteria or discuss criteria with someone more experience than yourself. At this stage, more heads are often better than one. Always it is necessary to make interpretations of criteria and standards so they can be meaningfully applied to the particular work under consideration.

In the example, one of the standards the report must meet is acceptability to the manager. The particular criteria associated with this might be: is it presented in a style that can be read easily? Does it have a strong argument supported by evidence? Does it take into account the effects of possible disruptions to workflow created by introducing a change? Criteria acceptable to the university might also include these factors. But they may need to include others: Is there evidence of reading current sources of information? Are all sources acknowledged? Is it properly referenced? When the same report is being used for two purposes it might not be possible to satisfy both sets of criteria simultaneously. Different versions may need to be produced or a supplement to the original report may need to be produced to demonstrate performance of the full set of criteria.

3. Apply these criteria and standards to the work involved, getting assistance from others as necessary

While the ways in which the criteria are to be applied relate to the nature and purpose of the work, is it important to be systematic about the application of criteria. The key question to be addressed is: in what ways does this work exhibit the qualities of 'good' work as described by the criteria?

One strategy for doing this is to:

- (a) list the standards you wish to meet and the criteria that are relevant to them;

- (b) ask one or other people familiar with what you are doing to check your list to see if it is as complete as is needed and the items are worded appropriately;
- (c) go through and apply each item to the work which you are assessing. Make a short note about the extent to which your work meets each criterion. Keep your account descriptive not judgemental. Be specific and avoid global judgements such as good or bad—without access to the thinking which goes behind these judgements you can't hope to improve;
- (d) show your work and your description to the person or persons helping you and ask them to give you specific feedback on where they agree or disagree with you. Ask them for details of their reactions, not just overall impressions.

It is often useful to ask work colleagues to assist who are also familiar with the demands of academic work and have had experience of the kinds of task you are engaged in. Not everyone is good at giving feedback, so don't be discouraged if the first person you ask is not as helpful as you would want.

In the case of the report, you might give one or more colleagues a copy of the report and a sheet of paper on which your analysis of your work against the criteria is summarised. Get them to tick where they agree with you and write a short explanation about points where they disagree. Ask them to be frank about doing this, they are not judging you, just one particular piece of work you want to improve. If you appear defensive about asking for this, they may tend to be guarded in order to protect your feelings.

4. Make judgements about whether the work is satisfactory or needs improvement

You now have a lot of useful information to consider. Work through it carefully and thoughtfully and note what action you need to take in the light of it. In some cases you will want to make changes before you produce a final version, in others you may decide to reject a particular comment because it misses the point, or you decide it is only applicable in different circumstances. This is *self* assessment and you are the final arbiter.

Returning to the report, it might be useful to summarise the information you have and the judgements you have made in a table (see the end of this document). This table can be used throughout as a way of managing the self assessment and peer feedback process.

Self and peer assessment table

	Description of the extent to which the work meets the criterion	Comment of peer (is comment supported or do you wish to state it differently?)	Agree/ disagree with peer?	Action to be taken
Standard				
Criterion 1				
Criterion 2				
Criterion 3				
Criterion 4				
Criterion 5				

Producing a narrative argument

Introduction

It is likely that there will be several points during your studies where you need to produce a convincing narrative (written) argument. These might include:

- Showing that your experience and learning to date equip you to undertake a programme at the level proposed (in the 'Your experience' part of your learning plan).
- Showing that your proposed learning plan is coherent and will result in benefits for yourself and / or your organisation (in the 'Purpose and rationale' part of your learning plan).
- Showing how the evidence you put forward for assessment meets the requirements of the qualification or credit you are enrolled for.
- Work-based reports or other papers you write during your programme. Examples include putting forward arguments for introducing a particular change, funding a project, developing a new product, adopting a recommendation you have made, or for finance or support for something you want to develop or become involved in

What is a narrative argument?

A narrative argument is a persuasive, written argument or 'case' based on evidence and reasoning. It will normally pull together relevant facts and experience appropriate to the case, and put forward a reasoned case for doing whatever it is that you are arguing for.

As well as showing how you arrive at your conclusion from the information you have, the argument will normally also describe the benefits that would result. While it's not usual to think of an academic narrative as 'selling' anything, an argument is in effect selling an idea to the reader; it needs to explain why they should take up your suggestion.

Example

Getting employer support for a higher education programme

Janine is a computer programmer in a medium-sized software company. She is increasingly becoming involved in managing projects, and thinks that she - and her company - would benefit if she learned more about project management; she also sees it as an opportunity to 'upgrade' her HND to a degree.

She writes a short paper for her team leader and the company's personnel manager. It describes some of the problems she has encountered with project scheduling (most projects have run over time and budget to some extent), as well as her own experience in managing projects and her relevant education and training. She continues by arguing that both she, and her team, would benefit from a more structured approach to project management which she could gain through a Learning through Work programme. Her report outlines both the cost of the programme in terms of money and time, and the benefits that it would bring.

How should a narrative argument be written?

How you construct your argument depends to some extent on what you are putting forward; for instance, your review under 'My experience' in your Learning through Work learning plan will be written in a different way from a paper designed to persuade a board of directors to accept a recommendation. However, there are some basic principles that apply, and you would want to include:

Possibly, a short **summary**. In an academic narrative this would summarise the issues involved and your conclusions, with a brief outline of the reasoning involved. In a company report it is likely to start with (and emphasise) the benefits, followed by a short statement of costs and other implications.

An **introduction** (in a short narrative this could be a sentence or short paragraph), describing what you are arguing for.

Your **evidence** - what are you basing your argument on? This could be data or facts, or an outline of your or others' experience that leads you towards particular conclusions. You may want to draw on other reports or published material to back up your argument, if appropriate.

Your **reasoning**. How have you moved from your evidence to your conclusions?

Your **conclusions**. This may have already been covered in the Introduction, but you may need to repeat what you are arguing for, what the benefits are, and what the costs and risks are. In a commercial report, decision-makers will be weighing up the benefits against the costs and risks, so more emphasis is likely to be needed here than on your reasoning.

If you are writing an academic argument, you will need to follow basic academic conventions; a separate Learning through Work support resource is available on this.

Examples

Proposing a Learning through Work plan

Peter is writing the 'Purpose and Rationale' section of his learning plan for a higher education diploma.

He starts with a short statement on why he wants to develop a Learning through Work plan, and how it fits in with his experience and previous qualifications. He then describes different aspects of his work and career aspirations, explaining how the programme will benefit in each.

Peter concludes with a short summary of the benefits of the plan and the opportunities he thinks it will bring.

Developing a small business

Ray is writing a report for his bank, to raise finance to develop a new enterprise within his small business. He will also use the report as part of the evidence for his Learning through Work plan.

He starts with a summary stating what he aims to do, how much finance is needed and over what timescale. He also summarises why he thinks the venture is a good idea.

After outlining his proposal in a short introduction, Ray includes sections on the current state of his business, the market relevant to his new product, and how he will draw on his current expertise and gain new skills to manage the enterprise. He includes two success stories from similar enterprises in other parts of the country.

He then goes on to explain why he is in a good position to make the business work, and appends a short business plan, market assessment and cashflow statement.

He concludes by outlining the risks and showing how they can be kept to a minimum.

Arguing for a change in practice

Helena is arguing for a change of practice in the way her organisation works with clients. Her paper will also be used as evidence for her programme.

Her report starts with a short description of the change she wants to introduce, along with her two main lines of reasoning - a relatively poor success rate in international terms, and the presence of research to show that there are better methods of working.

She then outlines the main evidence she is drawing on, providing comparisons with other countries and summarising relevant points from recent research (and providing the references). Her report continues by outlining an approach she thinks her organisation should adopt, and explaining how and why she thinks it will work.

Finally, she provides a short discussion of alternatives and discusses some of the implications for her organisation. She concludes by proposing that the organisation runs a trial for the next year.

Things to think about

- Have you considered how appropriate your argument is in terms of what it will achieve? What are its implications for you, for your organisation, and for other people who will be affected?
- Have you considered alternative views and implications? It may strengthen your argument to show that you have considered them, but think your proposals have more merit or are equally workable. This doesn't mean dwelling on them or discussing them at length, but showing that you are aware of them.
- Sometimes you may need to argue things that you know intuitively, but can't explain particularly well. You will need to show that you have checked them out against the information you do have, and they look sensible and convincing.
- Who is your argument intended for, what do they need in order to be convinced, and how willing are they to take risks? This will influence what evidence, benefits and line of reasoning you emphasise, as well as whether you concentrate on logical reasoning, potential benefits, or minimising what could go wrong.
- How convincing is your argument? Read through it from the perspective of the intended readership, and ask someone else to read it. Is your argument likely to capture the reader's attention, create interest and persuade them to act?

Further guidance

- Take a look at the sample learning contracts on the Learning through Work site, and if possible read reports at work that present narrative arguments.
- There is also a complementary support document on **using academic conventions**.
- If you have access to the on-line learning resources try dipping into 'Working and Learning: an introduction to higher education and the workplace'. This will provide detailed support on writing for different audiences. You might even want to work through this module in its entirety.

Assembling and preparing evidence

What is 'evidence'?

You will need to put evidence forward for assessment for each module of your programme, including if you are making a claim to have previous learning taken into account (APEL).

'Evidence' is anything you produce which can be assessed to show you have met the criteria for your programme module (the level indicators and learning outcomes you agreed in your plan). Examples include:

- reports, plans and other documents prepared as a normal part of your work
- reports, assignments and other documents prepared specifically for your programme
- records relating to your work
- photographs, video and audio recordings which demonstrate your work
- statements by other people about your work, including 'peer assessment'.

These forms of evidence can usually be put in electronic format and submitted on-line or electronically. In addition, some programmes need to have 'live' evidence examined in your workplace by an assessor or 'expert witness,' because it would not be possible for an assessor to make an adequate judgement from on-line materials. You may need to include the assessor's or witness's report or observations as part of your on-line evidence.

When you are considering evidence to include in your submission, concentrate on essential items that demonstrate the points you want to put across. Think about how your evidence links together to demonstrate that you have met the criteria. In particular, avoid:

- materials that don't add anything to your case
- repetitive evidence illustrating the same point
- trivial items (the collections of forms, memos, letters etc sometimes presented in NVQ portfolios will rarely be appropriate for a university level programme).

You can include materials not produced by yourself if they are necessary to explain or illustrate points you want to make, but you must credit their authors or clearly indicate that they are not your work.

Assembling evidence and using a narrative

In assembling and preparing your evidence, you need to provide the university with a coherent, easy-to-follow account that demonstrates your learning and shows that you have met the criteria for the module for which you are being assessed. The criteria consist of your own intended learning outcomes, and the level indicators agreed for the module being assessed: you need to show that you have achieved what you set out to achieve, and that your work is at the right level for the award involved.

Most submissions require a narrative report of some form, to pull together the evidence and put it into the overall context of your programme. The narrative also allows you to reflect on your learning, including any unplanned or incidental learning that came out of the process.

Examples

Some different approaches to evidence and narratives are given below.

Examples

A collection of reports

Peter is a gardens supervisor at a historic house. For the project module of his Diploma in Higher Education, he presents a survey, management plan and implementation report for his estate, along with three short reports he has written up from research and investigations he has carried out before developing the plan. He adds a narrative of around 4000 words which describes why he prepared the plan, where the different reports fit in, what he has learned and how he intends to use the learning to further his career. The narrative also includes, as an appendix, a table showing how Peter's learning outcomes have been met and how his work meets the criteria for level 5 (HE level 2).

A portfolio of evidence as an annexe to a report

Kemal is a safety officer for a transport company. His degree-level Professional Diploma concerns improving safety practice in his company. His evidence includes records of safety inspections, incident reports and investigations, and technical reports prepared for his company. He presents this as an annexe to his main report. Kemal's report is a 10,000 word narrative in which he writes up his findings and conclusions, referring to the individual items of evidence where relevant. In an appendix to the report he reviews his learning from the programme, and briefly indicates how his learning outcomes and the level indicators have been met.

Using a portfolio approach to doctoral work

Maria has been working as a consultant to a multiple retailer to help it to develop a new strategic marketing strategy. Her doctoral portfolio consists of four main parts: a project narrative of around 25,000 words describing the project and discussing the process and results and the wider issues arising from them; a portfolio of client reports and materials; a portfolio of materials written for publication (professional and academic journal articles and a chapter for a book) and a personal narrative of 5,000 words reflecting on her development and implications for her consultancy business. An appendix to the personal narrative shows how she has met her learning outcomes and the doctoral (level 8) level indicators.

In Peter's example the evidence is assembled around one main work product (the management plan), and the narrative is a relatively short paper for his diploma that explains the background to the plan and associated reports, and his learning from the process. Kemal is drawing on a wider range of materials, so his main report or narrative forms the 'backbone' of his submission, supported by his work-based evidence. He will use his report at work, but without the appendix. Maria, on the other hand, has written two reports specifically for her programme, but the bulk of the work she submits consists of work reports and material for publication.

Examples

Drawing on a reflective diary (1)

Julie is a staff nurse in a geriatric ward. Her degree project concerns improving the quality of nursing practice and patient care. The main tool for her action research is a reflective diary which spans personal practice, incidents on the ward and how they are responded to, and discussions with colleagues and hospital managers. She presents three main documents: a 12,000 word project report which will also be used as a work report, a shorter personal narrative, and an edited version of her diary, which is extensively referred to in the project report.

Drawing on a reflective diary (2)

Dermot is a manager in a light engineering company. His postgraduate certificate relates to improving his staff management skills. He has kept a log of problems and incidents and his reactions to them over a period of six months, and uses this as the main basis of his evidence. His submission takes the form of a single report starting with some background to the issues he is aiming to address and finishing with a discussion of how his practice has improved, what he has achieved as a result and his plans for future development. The main body of his report consists of a lightly edited version of his log, with a short commentary and discussion opposite each entry. He also includes the results of a '360 appraisal' as an appendix.

These two accounts use reflective diaries in different ways: Julie has used hers as the basis of a fairly conventional action research report, while Dermot has built his narrative around the log. Because Dermot's 'project' is about his personal learning and performance, he can build his personal narrative into it. On the other hand, Julie's report will be used as a work report as well as for her programme, so she has included a separate narrative for her degree submission.

Example

Including site-based practical work

Jan's master's degree is based around her work as a conservator of archaeological objects, drawing particularly on finds from a recently-excavated Roman settlement. Part of her evidence concerns the practical tasks of stabilising objects and preparing them for display. She agrees with the university the services of a specialist assessor from her professional body, who visits the site and examines her work. The evidence she submits for this aspect of her degree consists of her own reports, the assessor's report, and digital photographs of the objects at various stages of conservation.

This example shows how site-based evidence can be 'captured' to submit as part of a portfolio. A similar approach could be used for evidence of live performance, with the added possibility of digital video or audio recording.

Putting your evidence on-line

If it is straightforward to do so, evidence should be put into an electronic format and transmitted on-line. Where possible, this normally means creating or capturing the evidence in an electronic format. If you have evidence that is not in electronic format, you may be able to scan or convert it. You can transmit files through the LtW system, either as attachments to dialogue messages or at the request of your tutor through the 'activities' part of the system. Further guidance on these processes can be found in the on-line Learner Guide.

If you have evidence that cannot be put into electronic format, for instance physical objects, books or other items that can't be captured digitally, you will need to contact your tutor and discuss the best ways of presenting the evidence. It may be necessary to send the evidence to the university, or negotiate for an assessor to come out to see materials on site.

If you use 'expert witnesses' to report on your work, ensure they provide contact details that the university can use to contact them if necessary.

Finally, ensure that your university can handle the formats you propose to use. This is unlikely to be a problem in the case of commonly-used office software and file formats, but if you are using specialised software or have recordings and documents that have been converted professionally, check that your university can handle them.

Further guidance

Your university may have its own guidance materials on presenting evidence, projects etc. for assessment.

There are also support resources on:

- **Developing a narrative argument,**
- **Accreditation of prior learning,**
- **Self and peer assessment,** and
- **Using academic conventions** which is useful if you want to improve or refresh your knowledge of writing research, project and assignment reports.

Using academic conventions

Introduction

Work that is written specifically for a university, such as narratives and project reports, needs to follow a number of basic academic conventions. While they may not apply in quite the same way to reports produced for work and used as part of your evidence, the principles are useful for any 'serious' piece of writing.

The main conventions to be aware of are:

- organising your report or narrative according to a logical structure, including
 - using appropriate methods of presenting information, e.g. tables, 'boxes', graphs and diagrams where relevant
 - separating out background information and data from the main text, e.g. by using appendices
- writing in a clear, concise and accurate style
- acknowledging sources of information you are drawing on (using references, quotes and acknowledgements).

The way you need to interpret these conventions will depend on the purpose of your report or narrative, and the specialism or discipline you are working in.

Organising your report or narrative

There is no set format for a report or narrative, and which elements are included and how much emphasis they are given will depend on what you are writing about. Principal components, and the order in which they normally appear, are:

A **summary or abstract**, particularly if you are writing a long report or narrative. In most cases this will not be more than a side of A4, and it may be just a few lines saying what the report is about and summarising the main findings or conclusions.

A **contents list** if your report is more than a few pages long. You will also need to ensure the pages are numbered; you can choose whether to number sections of a report, but as a rule don't exceed two levels of numbering (e.g. 2.1, 2.2 etc, or A1, A2 etc) or number individual paragraphs.

An **introduction**. This usually introduces the purpose of the report or narrative, and it may give some background information and describe methods or processes involved, if these are not presented in separate sections.

Background and methodology or process. In short reports and narratives these may be incorporated in the introduction, but in a long report or more formal research report, separate sections

are likely to be needed. The background section could describe the background or history of the project or what is being discussed, or include a literature review. A methodology section might describe detailed research methodology, or for instance the process of developing a new product, changing ways of doing things or creating organisational change.

Findings or 'what happened.' This part of the narrative will normally give a factual account of research findings or a description of what actually happened, with analysis where appropriate.

Discussion or comments. This section enables you to discuss, comment on and draw out questions, issues and ideas from the 'findings' stage.

A concluding section. This could include conclusions, implications, or recommendations, or it could draw out questions arising from your report, or include a combination of any of these things.

References and if needed a list of acronyms (initials); see the later sections on references and writing style.

Appendices if needed. These enable you to include information that you want to refer to but would be too bulky or not sufficiently relevant to include in the main text.

Clearly, not all reports and narratives will follow this format, but in general you will need to organise your narrative in a sequence that starts with an introduction, moves through what happened and what the results were, and finishes by drawing out the points you want to make from the report.

Using tables, graphs, diagrams and 'boxes'

Some kinds of information are better represented as tables or graphics than included in the main text. Some examples are given below. Each table, figure etc should be numbered so that it can be referred to from your text (e.g. 'see figure 3'). The tables etc. can either be positioned at the appropriate points in your report or narrative, or collected up at the end.

Figure 4
Estimated change in workforce 2001 - 2005

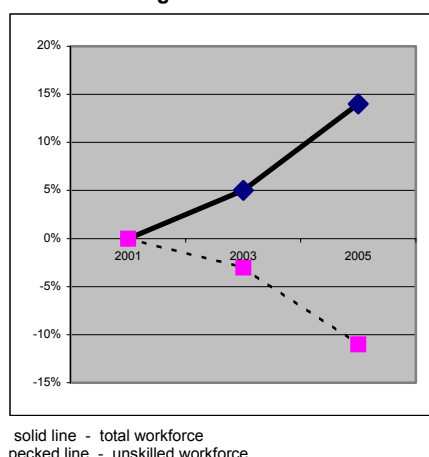


Table 3. The Beaufort scale

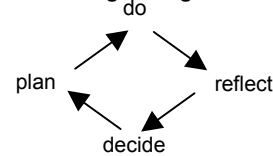
No	Term	Wind (kts)	Wave ht (m)
0	Calm	< 1	--
1	Light air	1 - 3	--
2	Light breeze	4 - 6	0.15
3	Gentle breeze	7 - 10	0.6
4	Moderate breeze	11 - 16	1.0
5	Fresh breeze	17 - 21	1.8
6	Strong breeze	22 - 27	3.0

Box 1

Case study: Bassetshire Alloys Ltd

Bassetshire Alloys employs 27 people and currently has a turnover of £5 million. By 1997 it had made a loss for three years running and was close to bankruptcy. Drastic measures were taken to cut costs, staffing was reduced to 50%, and a new managing director was appointed from

Fig. 7. **Learning through Work cycle**



Note that there are specific conventions that apply to presenting and labelling graphs; guidance can be obtained from your university.

Using footnotes and endnotes

Footnotes and endnotes¹ allow you to put explanations and brief additional information in your narrative without disrupting its flow. While they can be useful, extensive use of footnotes and endnotes is not normally encouraged; many books and articles also prefer endnotes to footnotes.

Using appendices and annexes

Appendices and annexes are used to include information and data that is relevant to the main narrative or report, but isn't essential to have in the body of the narrative. Examples include extensive statistical data (summaries or graphs might be included in the report); large diagrams; associated information such as technical specifications, lists, and organisational information; examples of questionnaires or other research instruments; and copies of, or extracts from, supporting documents. Appendices are typically anything from a page to a few pages in length. Annexes are normally longer, and can be complete copies of other reports and documents.

As a rule, information should be included in an appendix or annex if it would disrupt the 'flow' of the main document, or clutter it with unnecessary detail.

Writing style

Academic writing aims to report, discuss and put forward arguments in a clear, accurate and balanced way. Avoid writing in a way that is exaggerated, emotional, or makes claims that aren't backed up by evidence or clear argument. Your style will also normally reflect the purpose of your report, so for instance reports on technical, scientific or financial matters will tend to have a detached and factual feel, while reports about human issues may contain more interpretation and personal judgement; if you are reporting on people's experiences, your writing could have more of the feel of a story than that of a scientific report.

¹ Footnotes are positioned at the bottom of the page, like this; their numbering normally starts at 1 on each new page. Endnotes are collected up and put at the end of the narrative, or at the end of the chapter in a large report.

Your writing style also needs to be clear and reasonably concise. You can assume you are writing for someone with a reasonable knowledge of your area of work - but do explain specialised terms, and avoid technical slang, or jargon that's only used in your organisation. If you need to use an organisational term, explain what it means the first time it is used.

Try to avoid peppering your writing with abbreviations and acronyms (initials). If you need to use them, spell out the term in full the first time it is used, with the acronym in brackets - e.g. Learning through Work (LtW). If your report or narrative contains more than four or five abbreviations, it is useful to include a list at the back.

References

References are used to show the source of statements, ideas, research or information that you quote in your report or narrative. References serve at least three purposes: they acknowledge other people's work; they provide the reader with a source of further information; and they also indicate that you have read around the field you are working in. It's not necessary to have references for every assertion you make (your writing will also be drawing on your experience, research and ideas), but it is essential to use references to make it clear when you are drawing on others' ideas or research.

The Harvard system

The most widely used way of quoting references is called the Harvard system. This involves putting the name of the author(s) you are quoting in the text together with the date of publication, then giving full details of the references in an alphabetical list at the back of the document. For instance, if you are discussing a technique described by Cohen in a 1988 publication, your text might look something like:

'The technique of surface stabilisation described by Cohen (1988)...', or alternatively,
'The technique of surface stabilisation (Cohen 1988)...

If there are two authors these are quoted as e.g. 'Lewis & Shah (1967)'; if more than two, the convention is to use 'et al' (and others), e.g. O'Reilly *et al* (1999). For some publications, individual authors are not named and the 'author' will be the name of an organisation, e.g. 'Department for Trade and Industry (2001)'. If more than one publication is quoted from the same author in the same year, the different publications are distinguished by adding 'a', 'b' etc to the year, e.g. Sadler (1994a), Sadler (1994b).

Listing references

When Harvard-type references are listed in full, the following formats are used. Different books and journals have slightly different preferences, e.g. some may have the author's name in capitals or bold type, or underline the title instead of using italics.

Books and reports:

- Law, J (1994) *Organizing modernity* Oxford, Blackwell
- Lester, S, Thomson D J & Zoob S (1999) *Women in agriculture* Newton Abbot, S Devon & Dartmoor LEADER (internal report)

(Note that the format is author/s, year of publication, title, place of publication, and finally the name of the publisher or the organisation that the report was written for).

Articles in journals:

- Cohn, E (1991) "Clinical reasoning: explicating complexity," *American Journal of Occupational Therapy* 45 (11), pp969-971
- Golzen, G (2001) "Eastern premise," *People Management* 22nd March, pp36-38

(The title in quote marks is the title of the article; the title of the journal is in italics).

Conference papers:

- Hoyle, E (1972) "Creativity in the school," OECD conference, Estoril, Portugal

(If the conference has a name, it would be put in italics like the title of a journal).

Chapters in books or papers in conference proceedings:

- Anderson, B (1993) "The case for learner-managed learning in health professionals' education" in N Graves (ed) *Learner Managed Learning* Leeds, Higher Education for Capability / World Education Fellowship

Using footnotes for references

In some reports it makes for easier reading to number references in the text (rather than insert authors' names and dates of publication), and provide the Harvard reference as a footnote or endnote. The preferred way of doing this is to put the author's name and year of publication in the footnote, then list all the references in the normal way at the back of the document.

Quotes

Quotes, both from sources such as books, articles and reports, and from research interviews or questionnaires, can be useful or essential to include in your text. The general rule to follow is to quote only as much as is necessary, and cite its source - including the page number if relevant. Brief quotes can normally be included in the text, provided this doesn't disrupt its flow: in a "normal piece of academic writing" (Walters 1998, p3) there's no need to start short quotes on a new line. However,

for longer quotes, whether from published sources, discussions or research sources, it's normal to separate them out like the examples below.

Quotes from reports, articles, books and other written or published works are cited exactly as they are printed, with the author and page number cited. If you need to make additions for clarity, these should be in brackets, and omitted words shown by dots; these changes should not alter the sense of the text. For example:

"A worse-than-average sickness absence rate was one of the factors that recently led (the council) to revisit its flexible working practices, established in the 1980s."
(Cooper 2001, p32).

Where interview records, consultation or survey responses etc. are quoted, the same rules apply, although the individual concerned would normally be identified by a pseudonym or code. Again, short quotes can go in the text, longer ones separated out:

"It's a job to know if anyone's got a career (in agriculture)... it's hard work. I will probably take the farm over... a long time yet... but I will have to employ more as there are three of us (family members) at the moment putting our time in" (CM).

Including acknowledgements

It is customary to acknowledge people who contributed in one way or another to the work described in the report. These may include tutors, mentors, work colleagues and others involved in the process, who can be named individually if they have no objections, as well as making wider acknowledgements such as to all research participants or staff of a particular organisation. In long reports, acknowledgements are normally included at the front of the report, before the introduction; in shorter narratives they can come at the back, between the conclusions and the references.

Further guidance

Your university will provide more specific guidance on preparing written work. It is also useful to look at the style of other reports, journal articles and conference papers in the area in which you are working.

There are also complementary information support materials on **producing a narrative argument and an introduction to research**.