ABSTRACT
        This report examines how the "good practice" model of
work-based learning (WBL) and its tools can be used with students
having learning difficulties and disabilities. The model is a
partnership model involving three prime partners: production
professionals (employers), learning professionals (trainers and
teachers), and the worker-learners. Although developed for use in the
workplace, the model can be used with full-time students in settings
which involve work experience or practical assignments. The way that
the model addresses the need for vocational qualifications is briefly
outlined. Various learning routes available in the community are
listed and the specific functions of the learning professional in
guiding the process are explained. Eight appendices include: a
definition of WBL, the Individual Development Plan, a list of
strategies for structuring learning in the workplace, the job
competence model, the WBL core skills, an assessment matrix, and
suggested resources and references. (Contains 12 references with
annotations.) (DB)

# Mendip Papers

# Vocational qualifications and SLDD learners – a work based learning approach

## Margaret Levy

# Vocational qualifications and SLDD learners – a work based learning approach

Margaret Levy

The Staff College

## About the author

Following employment as a technician and research assistant at Birkbeck College, Margaret Levy taught O and A level maths and science in Southwark College from 1958 to 1978. In 1976 she initiated the first UK 'Return to study science' course, aimed especially at mature women who had little or no school science and were therefore unlikely to get employment in 'technical' fields, and the first access course in science in the UK. In 1979 she joined the FEU as their first Regional Development Officer. In 1981 she was head-hunted by the MSC, was in charge of YTS design and content, and initiated and directed the Core Skills Project funded by the European Social Fund (1982-85). From 1986 to 1988 and 1988 to 1990 she directed the Training Agency funded Work Based Learning Projects, based with The Staff College. Since July 1990 Margaret Levy has continued with the development of work based learning on a consultancy basis.

# Vocational qualifications and SLDD learners – a work based learning approach

Margaret Levy

## Contents

## Background

Over the past few years various Staff College conferences (on work based learning and vocational qualifications) have raised issues regarding the implementation of work based learning and the acquisition of vocational qualifications for students with learning difficulties and disabilities (SLDD). This paper seeks to clarify how the 'good practice' model of work based learning and its tools can be used successfully with SLDD learners along with any group of learners.

## Introduction

The Work Based Learning Project developed the 'good practice model' of work based learning for companies, trainers and off-job providers. The model offers an operation definition for work based learning (WBL), together with strategies, tools and techniques for all the participants. The good practice model is a partnership model and has three prime partners: the *production professionals* (employers, managers, supervisors, etc.), the *learning professionals* (trainers, teachers, tutors, etc.) and the *worker-learners* (employed workers). There is also a group of support partners, the *guidance professionals* (personnel officers, careers officers etc.).

The work based learning good practice model has a 'tool kit' of publications associated with it (see appendices for a brief overview of the tools).

Although developed for training in the workplace, the WBL tool kit can also be used with full-time

learners in institutional settings (as opposed to employed workers) in any learning programme containing work experience or practical assignments/experience as a feature. For example, sandwich courses; social work, caring, nurse training; teacher training, articled teacher training, developmental teacher appraisal; employee induction, training, re-training; accreditation of prior learning; work experience in schools, FE, TVEI; project work, assignment work in general. The WBL tools were trialled in a number of these areas and reports are available.

Very little direct field work has been undertaken with students with learning difficulties and disabilities but in The Staff College publication **Individual Development Plans in BTEC First and National Diplomas** (Worley 1993 – a case study on the introduction of work based learning approaches and tools to BTEC students) the field worker had two students from her college's special needs teaching unit who were being integrated into the BTEC First Diploma in leisure studies and with whom she used core skills and WBL action planning.

In the partnership model, all the partners need to have tools, strategies for learning and curricular processes which are accessible to them and can be understood by them. National (or Scottish) Vocational Qualifications (N/SVQs) and General N/SVQs both fulfil the function of accessibility since the intended outcomes of learning are fully and comprehensively described so that each partner, including the learner, knows what the outcome targets are, the range over which performance extends and the criteria for success. The level of understanding of the work based learning tools in the tool kit and their use will of course vary widely within and between partners, but practice in their use can improve this. For all learners an essential aspect of the curricular processes is to develop greater autonomy, responsibility and some management of their own learning, and in addition for SLDD learners, the focus must also be on developing their adult status. The fundamental need is to develop skilled learners and this is a partnership process and the responsibility of the three prime partners: production professionals, learning professionals and learners.

In the multi-agency situations which are likely to be the norm for full-time learners in institutional settings, the WBL approaches provide a framework that can be used across different college departments, different agencies, real work experience and simulated work experience. In the partnership model, all partners have to take some responsibility for developing the learner, and this requires tools that can be shared and used by all partners. The following sections illustrate some of the uses of the WBL tools in developing and delivering a programme of learning opportunities for an individual learner. It is assumed throughout that full college support mechanisms for SLDD learners are in place.

## The WBL tool kit

WBL tools are intended to be accessible to all partners (although practice in their use may be needed to gain familiarity). The tools include:

- the operational definition of work based learning;

- a list of 18 strategies for structuring learning opportunities in the workplace;

- the work based learning core skills;

- the job competence model;

- the individual development plan;

- the **Guide to work based learning terms** (Levy 1989);

- the assessment matrix.

The tools are summarised in the appendices to this paper. Appendix 8 gives details of the tools themselves, together with publications which explain them more fully and give guidance and examples of their use.

## Vocational qualifications

Vocational qualifications are obtained by providing evidence that standards in a specific number of *units of competence* have been satisfactorily achieved. The unit is currently the smallest part of the vocational qualification that can be separately assessed and accredited. Each *unit* has

```
Figure 1: The two routes in the delivery of vocational qualifications


                            Standard
                              /\
                    (element title with performance
                      criteria and range statement)

               /                                        \
              /                                          \
             ↙                                            ↘
        assessment                                     learning
```
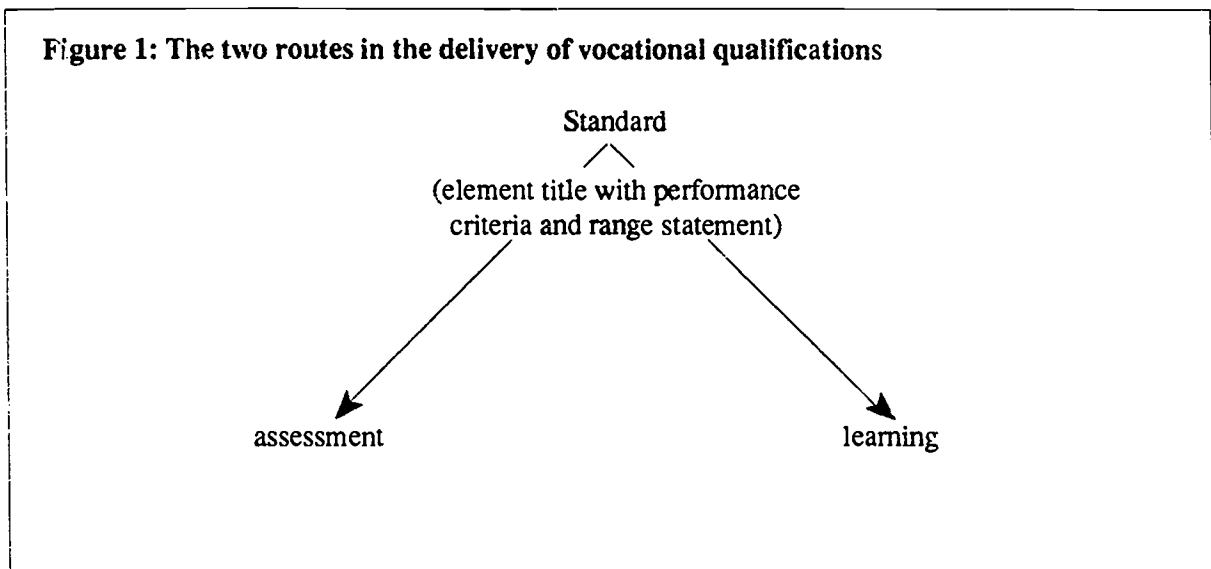
a number of *elements*, each of which has its own *performance criteria*, *range statements* and *suggestions as to evidence required*. Thus each element of competence is in itself a standard. Standards provide the detailed information about what has to be assessed and also what will have to be learned if the learner has not already gained the experience (and can provide evidence) at the particular level of performance and across the range required.

This means that two routes have to be considered in the delivery of vocational qualifications: the learning route and the assessment route. The WBL tool kit can provide support for both routes (see **Figure 1**), but this paper concentrates on the learning route. The assessment route has been well specified by the National Council for Vocational Qualifications (NCVQ).

## The learning route

### Learning opportunities available in the community

The learning professional will need to undertake an audit of learning opportunities generally available in the community or environment in which they and the learners find themselves. These opportunities can include:

- Employers offering work experience or employment opportunities – this needs to

be accompanied by some knowledge of the workplace resources (e.g. equipment, experience of workers in dealing with inexperienced learners, etc.), activities (e.g. what sector, what kinds of processes, etc.), and the interest and experience of the company in supporting the community. This information will often have to be culled over a period of time.

- Voluntary and community organisations/ agencies offering learning opportunities/ work experience.

- College departments/areas offering work simulation or work experience opportunities, for example, in catering, model office/college office, ground/college maintenance, etc. College staff in this role will be acting as production professionals rather than learning professionals.

- College resources in terms of classes available to learners, open learning with support, number/communications workshops, computer based learning facilities, etc.

### Learning opportunities required for an individual learner

The learning professional, often with the assistance of the guidance professional skilled in advising SLDD learners, will decide what sector is likely

to be appropriate for the learner. The outcomes of initial discussion and exploration of the learner's interests could be recorded using the **Individual Development Plan** (in part 1 sections A, B and C – see Appendix 2), with the final decision on aims and intentions and action to be taken recorded in section D. Following this, and using the published standards for that sector, the learning professional can consider which N/SVQ or GN/SVQ elements and units might be appropriate for the learner. The audit of learning opportunities (see above) will enable judgements to be made on whether work based or work related learning opportunities for these elements/units could be provided. For example, can the learner be placed with a supportive employer or get simulated work experience in the appropriate sector?

Using the standards for the elements of competence as a guide, the learning professional should be able to negotiate with a chosen sympathetic employer or college department offering work simulation (i.e. the production professionals), to identify and agree what work/work experience can be offered to the learner. This may cover one or more of the elements and range statements. This agreed schedule should take into account the first two components of work based learning (see Appendix 1) and should be entered into the appropriate parts of the content page of part 2 of the Individual Development Plan (see Appendix 2) together with a date for reviewing progress over the whole learning programme. The Individual Development Plan (IDP) is the major document for managing the planning, recording and reviewing of negotiated learning opportunities.

The learning professional should explain to the employer or college department about the three components of work based learning (see Appendix 1) so that they know what is expected of the workplace or work simulation (the N/SVQ standards link learning to the work role as a matter of course):

(i) in the first component (following the learner's initial induction) the employer is getting productive work undertaken, while the learner is intended to gain experience, practice skills and develop self-confidence as an independent worker. This means the employer is gaining an extra pair of hands for a period of time.

(ii) in the second component the learner is getting some on-job training relating to the job. This will be with a more experienced worker or company trainer and can include providing structured feedback on the learner's work, formal reviews and/or collection and discussion of evidence relating to achievement, in addition to direct training. This component thus requires the employer to use his/her resources on the learner rather than on productive work. It will be important to ensure that an appropriate balance is kept between the first and second components so that it is not too expensive for the employer to offer a placement to a learner.

(iii) the third component (off-job learning) is unlikely to cost the employer anything for SLDD learners, but the employer might be interested in making suggestions as to what off-job learning opportunities might contribute to the learner's performance in the workplace, e.g. communication skills, number skills, etc.

The next step for the learning professional is to identify and agree where and within which college programme/course off-job learning opportunities might be provided both to support the learner in the way suggested by the workplace and/or to complete the element or unit chosen. This agreed schedule should be entered into the off-job part of the content page of part 2 of the Individual Development Plan. It is important to remember that at the time of writing the unit is the smallest part of a vocational qualification which can be separately credited, but this does not mean that all the elements have to be achieved in the same place (they do, of course, have to be linked by vocation).

In discussing with the workplace or work simulation provider what kinds of learning opportunities might be provided, the learning professional might find it helpful to introduce them to '18 strategies for structuring learning opportunities in the workplace' (see Appendix 3) and 'the job competence model' (see Appendix 4) to help unpick the kinds of workplace activities which might be available to the learner and also the kinds of skills which could be learned. For example, organising a number of tasks, learning to cope with breakdown in routines and so on.

There are a number of examples of the 18 strategies in the recommended publication (Matthews *et al.* 1992). Some learners, once they have experience of a specific workplace, may also be able to use these tools to suggest what opportunities they would like to have in the workplace they are in.

While still at the discussion stage with the workplace or work simulation provider (i.e. the production professionals), it is a good idea to talk them through part 2 of the IDP (see Appendix 2) and explain that every learning opportunity agreed will be recorded on the content page and will then be reviewed in detail with findings recorded on the review page. It should be explained that the review process for the first two components may involve the learner, the production professional and the learning professional, depending on circumstances (the provider will want to know how much time the production professionals would have to spend on this). The first review may be quite early on for a new placement, e.g. two weeks, but subsequent reviews will depend on circumstances. The provider must also know that the learning professional can be contacted readily if needed. It is also a good idea to let the provider as well as the learner see the assessment matrix (see Appendix 7), which will act as a learning diary and assist the process of collecting evidence for assessment. The provider will also want to know how he/she is expected to contribute to the evidence collection and what time this will take up for him/her or their workers.

The learning professional may want to undertake quite a lot of the reviewing process with the learner during the off-job learning opportunity. For some SLDD learners this component may be the largest part of their learning programme. Each agreed learning opportunity will have to be reviewed together with unexpected opportunities which presented themselves by chance. This is a good time to introduce the work based learning *core skills* as a tool to interrogate with the learner the activities he/she has engaged in over a period of time to find out what skills they used, or found they didn't have. The analysis process using WBL core skills (core analysis) can encourage a fruitful dialogue about activities people have engaged in (there are many field work examples available, see Appendix 8).

If the SLDD learner is trying to achieve NCVQ core skill units, using WBL core skills to interrogate activities the learner has engaged in, can help point the way. For example, the learner can be asked, 'Did you have to work out numerical information?' (WBL core skill 1.2). In discussing the answer to this with the learner it should be possible to pull out information relating to performance criteria and range for NCVQ core skill application of number, level 1 element 1.1 'gather and process data at core skill level 1'. This can lead in turn:

- to the recognition that evidence of the learner's performance is available; and

- to identifying specific learning opportunities needed to achieve the NCVQ element, e.g. conversion between different units of measurement.

In the communication field a learner could be asked 'Did you have to find out information from written sources?' (WBL core skill 6.2). The range and content covered by the written sources can be identified by further discussion e.g. the learner can be asked 'What kind of information did you have to find out? What kind of material (format) were you using?' The discussion following this can be related to the performance criteria and range for NCVQ core skill communication, level 1 element 1.4 'read and respond to written material and images in pre-set formats'.

The 103 WBL core skills (see Appendix 6) include 12 communication skills under the heading 'working with people' and a number of other skills which relate to working with people. Some of these could assist in the development of NCVQ core skills units, personal skills – working with others. For example, a learner could be asked, 'Did you discuss with other people in the workplace how things are to be done?' (WBL core skill 8.6). In following through with the learner any answer given to this, it might be possible to identify information relating to achievement in NCVQ core skill personal skills – working with others, element 1.1, performance criteria 'own activities are directed towards achieving collective goals and meeting own responsibilities'.

The self-reviewing processes that use of the IDP encourage in the learner, and which include interrogation using core skills (core analysis), can also make a useful contribution to the NCVQ core skill personal skills – improving own learning and

performance. It should assist in providing evidence for the performance criteria and range in both elements 1.1 'contribute to the process of identifying strengths and weaknesses and agree short term targets' and element 1.2 'follow given activities to learn and improve performance'.

The 103 WBL core skills are written in everyday language which makes it possible to interrogate learners at all levels and to discuss particular aspects of their performance and activities. The language can be used for jointly discussing performance by all partners – learning professionals, production professionals, guidance professionals and worker/learners. For learners at higher levels the discussion can be very sophisticated, for example, in number skills, discussion of statistical analysis techniques, so the WBL core skills language is not restrictive in encouraging discussion with learners who may have a range of abilities and interests.

## Conclusion

Learning to use new curriculum tools to deliver new qualifications is not an easy task and will initially take quite a lot of effort on the part of the learning professional. Working in a partnership model and using partnership processes in which responsibility for achieving learning outcomes is shared between partners will also be a new process for many. Practice in using the WBL tool kit and swapping experiences in using them with other learning professionals is highly recommended. Remember that the tools were designed for the whole range of learners post-16 and are not restricted to SLDD learners. This means that ideas can be exchanged across college structures and cohorts. In addition, the field work written up by learning professionals working in The Staff College Work Based Learning Project can provide many useful examples (a catalogue of publications is available from the publications department, address at the front of this paper).

# Work Based Learning

# A good practice model

## An overview of some tools and strategies

The Work Based Learning (WBL) 'good practice model' offers strategies, tools and techniques which enable cost effective, individualised learning programmes to be designed and delivered at all levels in the workforce (related to NVQs if required). An overview of six of these is provided in the following appendices.

For further information contact Margaret Levy on 071-229 1021. She directed development work on the good practice model which began in 1982 and was funded for over eight years, first by the European Social Fund, and then by MSC and Training Agency. For the full list of WBL publications call Publications, The Staff College Blagdon, Bristol BS18 6RG Tel 0761 462503.

# Appendix 1: Definition of work based learning (WBL)

In the good practice model, WBL is defined as:

*Linking learning to the work role.*

N/SVQ standards link learning to the work role as a matter of course. Work based learning has three inter-related components, each of which provides an essential contribution to the learning:

(i)    structuring learning opportunities in the workplace (allocated work activities which are productive and at the same time provide an opportunity for learning);

(ii)    providing appropriate on-job training/learning opportunities (sustained learning/instruction in specific aspects of the job which is carried out in the workplace but does not make a net contribution to productivity);

(iii)    identifying and providing relevant off-job learning opportunities (opportunities for learning away from where the worker-learner normally works and outside normal productive work activities)

For further explication and discussion on the three components and their use see **Strategies for structuring learning opportunities in the workplace and implementing work based learning** (Matthews *et al*. 1992) and **Work Based Learning – a good practice model** (Levy 1991).

## Appendix 2: The Individual Development Plan (IDP)

The IDP is a means of specifying and reviewing a programme of learning for an individual learner. It offers processes and a format together with detailed guidance on 'action planning' which can be used in all sizes of company, all industrial and commercial sectors, and for worker/learners at all levels.

Part 1 is intended to encourage learners to reflect on and record the following:

– where am I now? (Part 1 Section A – my current situation);

– what have I done so far? (Part 1 Section B – my past experience – employment/training/ qualifications/awards);

– what skills and qualifications have I got? (Part 1 Section C – skills I have gained from my past/ current situation);

– where do I want to get to? (Part 1 Section D – my aims and intentions); and

– how do I get there? ((Part 1 Section D – how I will work towards them).

Part 2 provides a detailed record of the negotiated, individualised learning opportunities agreed between the production professional, learning professional and the learner (Part 2 – content page), and provides for detailed reviewing and recording of progress in the agreed learning opportunities (Part 2 – review page).

The Staff College publication **Using Individual Development Plans – the work based learning approach to action planning** (Hunt *et al.* 1991) explains the concepts and use of the IDP. See Appendix 8 for details of the publication and how to order it.

# Extract from Using Individual Development Plans – the work based learning approach to action planning

---

**PART 1    Section A – my current situation**

---

**Summary of my current situation                Date:**
**regarding work, learning, etc.**
*(full- or part-time jobs, school/college courses including day-release or evening classes)*

---

**My other activities**
*(e.g. paid or unpaid responsibilities in the home and/or community)*

---

**Other things I wish to record**
*(which may affect my plans – e.g. how far I can travel, what hours I can work)*

---

**PART 1    Section C – my skills**

---

**Skills I have gained from my past experience and my current situation**

*My current situation*

*My other activities*

*My previous employment*

*My education and training*

---

**PART 1    Section B – my past experience**

---

**My previous employment                          From – To**
*(including part-time or seasonal jobs and work experience)*

---

**My education and training                        From – To**
*(including qualifications gained)*
*(at school/college, at work and elsewhere)*

**Other qualifications and awards**

---

**PART 1    Section D – my future**

---

**My aims and intentions**
*(long-term career goal(s), objectives both personal and operational, ways to progress in current employment and/or short term intentions)*

---

**How I can work towards my aims and intentions?**
*(skills I need to develop, courses I should study, experience I wish to gain)*

---

# Extract from Using Individual Development Plans – the work based learning approach to action planning

Each learning opportunity on the content page has to be reviewed in detail on the review page.

| | |
|---|---|
| **PART 2 – My agreed learning schedule until the next review**<br>Content page no. [ ]     Date content agreed:<br><br>**1. Learning in the workplace** *(allocated work activities which are productive and at the same time provide an opportunity for learning)*<br><br><br><br>**2. On-job training** *(sustained learning/instruction in specific aspects of the job which is carried out in the workplace but does not make a net contribution to productivity)*<br><br><br><br><br>**3. Off-job learning** *(opportunities for learning away from where the worker-learner normally works and outside normal productive work activities)*<br><br><br><br><br><br><br>Date fixed for next review: | **PART 2**<br>Review page no. [ ¡<br><br>**1. Learning in the workplace** *(allocated work activities which are productive and at the same time provide an opportunity for learning)*<br><br><br><br>**2. On-job training** *(sustained learning/instruction in specific aspects of the job which is carried out in the workplace but does not make a net contribution to productivity)*<br><br><br><br><br>**3. Off-job learning** *(opportunities for learning away from where the worker-learner normally works and outside normal productive work activities)*<br><br><br><br><br>Date review        My               Facilitator's<br>agreed             signature        signature<br><br>Note· before review is finished you should complete next content page, fix next review date and transfer anything achieved to the appropriate record of achievement |

**BEST COPY AVAILABLE**

# Appendix 3: 18 strategies for structuring learning opportunities in the workplace

---

*Learners' location in the organisation*

Placing the learner in a particular department/office

Placing the learner to work with particular personnel

Placing the learner to observe or shadow particular personnel

Changing the learner's location

---

*Allocation of activities and learning opportunities*

Sequencing the learner's activities

Choosing between available activities

Seizing learning opportunities as they arise

Changing the learner's activity

Creating learning opportunities which would otherwise not occur

Using work based projects and other learning materials/activities

---

*Scope of learner activities*

Changing the extent and type of supervision

Changing the discretion given to the learner

Increasing or decreasing the range of activities engaged in by the learner

---

*Learner awareness of skill and performance*

Providing clear feedback to the learner

Providing opportunities for reflection

Providing opportunities for debriefing

Helping learners to analyse their activities and to be aware of the skills involved

Making explicit the competences and skills required in the learner's work role

---

See publication: **Strategies for structuring learning opportunities in the workplace and implementing work based learning** (Matthews *et al.* 1992)

---

# Appendix 4: The job competence model

The job competence model identifies four components which make up job competence. It was this model that formed the basis of functional analysis used to develop NVQ standards. Each component has particular kinds of *skills* associated with it. The components of job competence are:

- tasks;

- task management;

- contingency management;

- job/role environment.

## Task skills

Skills that are used routinely in well defined tasks or technical activities, and have a definite outcome or conclusion (e.g. collating a report, typing a batch of correspondence, carrying out a haematology analysis, sorting and collating dental radiographs, etc.).

## Task management skills

Skills used in handling or organising a number of different tasks (e.g. maintaining an efficient work sequence) or where the job includes additional responsibilities which intrude on routine tasks (e.g. responsibility for monitoring the office stock cupboard, maintain seasonal records of propagation and planting, etc.).

## Contingency management skills

Skills of responding to irregularities and breakdowns in routines, procedures, or sequence of activities (e.g. disruption of work flow, equipment failure).

## Job/role environment skills

Skills which reflect the fact that the worker is affected to a greater or lesser extent by his/her social and physical environment. Skills of working directly with other workers and people from outside the workplace, particularly customers, clients and members of the public: also skills used in responding appropriately to high criticality in terms of cost/value of equipment, safety of others, and in working environments with known health and safety hazards.

See publications **Job competence – a description for use in VET** (Mansfield and Matthews 1985a) and **Occupational standards – job competence and the measurement of achievement** (Mansfield and Matthews 1985b)

# Appendix 5: The work based learning core skills

The work based learning core skills are defined as 'those skills which are common in a wide range of tasks and which are essential for competence in those tasks'. They are work related and underpin the concept of skill transfer. They aid the analysis of work activities (known as core analysis) and perform a number of functions in implementing vocational education and training (VET).

There are 103 work based learning core skills arranged in the four core areas of number, communication, problem solving, and practical, with these further sub-divided into 14 skill groups. A listing of the 103 core skills is available inside the back cover of every WBL publication.

Core skills have been used in a number of ways, for example, to:

- provide a new language of skill for describing occupational competence;

- assist with the accreditation of work based learning;

- assist with the design of work based learning throughout VET;

- develop learners' awareness of transferable skills and their own ability to use them to tackle new tasks;

- provide approaches in VET which encourage autonomy of learning and develop personal effectiveness;

- assist selection by providing a broader base of information for selectors in employment and further and higher education (FHE);

- assist with workplace analysis to identify the competences required by an individual worker in a specific workplace;

- assist with the diagnosis of individual workers' training needs.

A number of techniques have been developed for using work based learning core skills in the ways described above (this includes APL). The field work has been written up and is available in the following Work Based Learning publications (see Appendix 8 for details): **The flow chart for core analysis: a technique for analysing work activity** using work based learning core skills; **COMPET2 program manual for core analysis: a technique for analysing work activity using work based learning core skills** (with IBM compatible disk); **Supporting transition: curriculum vitae for workers changing jobs; A work based learning approach to selection and training** (with British Gas); **Work based learning core skills in Employment Training: a case study; Individual development plans in BTEC First and National Diplomas.**

---

*The four core areas and their skill groups*

**number**

    operating with numbers

    interpreting numerical and related information

    estimating

    measuring and marking out

    recognising cost and value

**communication**

    finding out information and interpreting instructions

    providing information

    working with people

**problem solving**

    planning: determining and revising courses of action

    decision making: choosing between alternatives

    monitoring: keeping track of progress and checking

**practical**

    preparing for a practical activity

    carrying out a practical activity

    finishing off a practical activity

---

18

# Appendix 6: The Work Based Learning core skills: quick reference list

## NUMBER

**1 Operating with numbers**
1.1 Count items singly or in batches.
1.2 Work out numerical information.
1.3 Check and correct numerical information.
1.4 Compare numerical information from different sources.
1.5 Work out the cost of goods and services.

**2 Interpreting numerical and related information**
2.1 Interpret numerical data or symbols in written or printed form.
2.2 Interpret diagrams and pictorial representations.
2.3 Interpret scales, dials and digital readouts.
2.4 Identify items by interpreting number colour, letter codes or symbols.
2.5 Locate places by interpreting number, colour or letter systems.

**3 Estimating**
3.1 Estimate quantity of observed items or materials.
3.2 Estimate quantities required for a process.
3.3 Estimate portions or shares.
3.4 Estimate dimensions of an observed object or structure.
3.5 Estimate weight, volume, or other properties.
3.6 Estimate the time needed for an activity.
3.7 Estimate the time an activity has been going on.
3.8 Estimate the rate of use of items or materials.
3.9 Estimate the cost of goods and services.
3.10 Estimate and compare shapes or angles.
3.11 Estimate the size of gaps or holes and the fit of items.
3.12 Estimate required sizes of containers or covering materials.
3.13 Estimate size or shape for the purpose of sorting.
3.14 Estimate settings for tools, equipment, machinery.

**4 Measuring and marking out**
4.1 Measure the dimensions of an object or structure.
4.2 Mark out required dimensions and shape.
4.3 Measure weight, volume or other properties.
4.4 Measure out a required weight or volume.
4.5 Measure the time a process or activity takes.

**5 Recognising cost and value**
5.1 Compare the cost of different goods and services.
5.2 Compare the relative costs and benefits of buying or using goods and services.
5.3 Recognise the value of items in order to take appropriate care of them.

## COMMUNICATION

**6 Finding out information and interpreting instructions**
6.1 Find out information by speaking to other people.
6.2 Find out information from written sources.
6.3 Find out information by observing.
6.4 Interpret spoken instructions.
6.5 Interpret written instructions.
6.6 Find out the needs of other people in the workplace.
6.7 Find out the facts about things that have gone wrong.
6.8 Find out the needs of customers and clients.

**7 Providing information**
7.1 Provide information by speaking to other people in the workplace.
7.2 Provide information by speaking to customers and clients.
7.3 Provide information in writing and by means of tables and diagrams.
7.4 Provide information by demonstrating to other people.
7.5 Provide information by answering questions in the course of the job.
7.6 Provide information by explaining to others about problems that have occurred in the job.

**8 Working with people**
8.1 Notice when to ask other people in the workplace for assistance.
8.2 Ask other people in the workplace for assistance.
8.3 Notice the needs of customers, clients, and other people in the workplace.
8.4 Offer assistance to other people in the workplace.
8.5 React appropriately to requests from other people in the workplace.
8.6 Discuss with other people in the workplace how things are to be done.
8.7 React appropriately to complaints from other people in the workplace.
8.8 Offer assistance to customers and clients.
8.9 React appropriately to requests from customers and clients.
8.10 Converse with customers and clients in order to establish or maintain appropriate relationship.
8.11 React appropriately to complaints from customers and clients.
8.12 Notice where people behave exceptionally and whether action is required.

## PROBLEM SOLVING

**9    Planning: determining and revising courses of action**
9.1   Plan the order of activities.
9.2   Plan who does what and when.
9.3   Plan tools, equipment, machinery, and stock and materials needed for a task.
9.4   Plan the arrangement of items.
9.5   Plan how to communicate for a particular purpose.
9.6   Plan how to present information.
9.7   Plan how to find information.
9.8   Diagnose a fault.
9.9   Plan how to deal with hazards and difficulties that might arise.
9.10  Plan how to deal with things that have gone wrong.

**10   Decision making: choosing between alternatives**
10.1  Decide when action is required.
10.2  Decide which category something belongs to.
10.3  Decide between alternative courses of action.
10.4  Decide how to make the best of an awkward situation.
10.5  Decide on a correct response when accidents or emergencies occur.

**11   Monitoring: keeping track of progress and checking**
11.1  Check that he/she is performing a task to standard.
11.2  Monitor a process or activity.
11.3  Monitor the availability of stocks or materials.
11.4  Check the quality and condition of equipment, materials or products.
11.5  Check written information.
11.6  Monitor the safety of the workplace.
11.7  Notice that things have gone wrong, and that action is required.

## PRACTICAL

**12   Preparing for a practical activity**
12.1  Locate the place where work is to be carried out if it is not the usual one
12.2  Identify or locate:
12.3  Handle, lift or transport:
12.4  Check and adjust or clean:
12.5  Arrange for safe and easy working:

*tools, equipment, machinery, materials, stock or items, animals*

12.6  Carry out start-up procedures.
12.7  Adjust heating, lighting, ventilation.
12.8  Check for potential hazards in the work area.
12.9  Carry out health and safety procedures.

**13   Carrying out a practical activity**
13.1  Adopt safe working practices.
13.2  Lift or transport objects or materials.
13.3  Manipulate objects or materials.
13.4  Operate and control or adjust tools, equipment, machinery or instruments.
13.5  Set up, assemble or dismantle equipment, machinery, instruments or products.
13.6  Adopt safe practices in the event of accidents or emergencies.

**14   Finishing off a practical activity**
14.1  Carry out procedures to turn off or hand over: TOOLS, EQUIPMENT, MACHINERY
14.2  Check products or results of activity for quality and accuracy.
14.3  Carry out procedures for cleaning or routine maintenance.
14.4  Carry out procedures to hand over products or results of activity.
14.5  Carry out procedures to store or return: TOOLS, EQUIPMENT, MACHINERY, MATERIALS, STOCK OR ITEMS, ANIMALS
14.6  Restock for future requirements if necessary.
14.7  Check for potential hazards in the work area.
14.8  Carry out health and safety procedures.

## Appendix 7: An assessment matrix to help with the collection of assessment evidence

| where? / who with? | workplace | on-job | off-job | special project | open learning | other |
|---|---|---|---|---|---|---|
| supervisor | | | | | | |
| experienced worker | *on Monday I worked in the canteen with Sally helping to dish up meals* | | | | | |
| company trainer | | | | | | |
| off-job tutor | | | | | | |
| open learning tutor | | | | | | |
| learner alone | | | | | *on Wednesday morning I worked through a maths worksheet* | |
| other | | | | | | *I helped in the garage on Saturday* |

The learner can be provided with the above m 'trix which acts as a learning diary, to encourage them to record, on a regular basis (this could be once a day or once a week depending on the learner) what experience they have had and with whom. It is difficult managing individualised learning programmes, especially when the learner is in a variety of learning situations. It is very easy for evidence of activity and achievement in that activity to be lost without some kind of informal record of what has happened to the learner.

The matrix can form one of the bases of discussion when reviewing achievement or evidence collection with the learner. The work based learning core skills can be used to interrogate the experience, say in the garage on Saturday, to find out more precisely what the activity consisted of and what skills were used and whether from this experience there could be a contribution to evidence for a particular element of competence.

The matrix can encourage greater learner participation in his/her learning programme and in the learning processes they are engaging in. This in turn encourages learner autonomy and independence.

# Appendix 8: Resources and references

Burden, Ken, Tim Oates and Ron Watson (1991) **Supporting transition: curriculum vitae for workers changing jobs**. Reference number 2816. ISBN 1 85663 037 4 £4.50 A4 26pp

> This report describes work undertaken by the Work Based Learning Project in conjunction with Newham Community College and the London Borough of Newham during 1988 and 89. The report shows how a new approach to curriculum vitae (CV) construction can help workers to recognise their skills, make the best use of retraining opportunities, recognise where they might redeploy their skills and improve their self-esteem. As a guide for those interested in using CV construction as part of their provision for adults in transition, the report gives a comprehensive description of the processes and approaches used, offers example documentation and draws out general lessons and principles.

Cunningham, John (1991) **Work based learning core skills in Employment Training: a case study**. Reference number 2836. ISBN 1 85663 022 6 £4.00 A4 34pp

> This publication relates to field activities set up in West Glamorgan Skillcentre Employment Training programmes for unemployed adult workers. Core analysis is a process enabling previous or current experience in work to be analysed to give the core skills used and also the occupational context of their use. Use of core analysis by worker-learners of all ages helps to develop awareness of the skills they have and how these might be used to tackle new work activities. This case study illustrates one of the techniques for core analysis. It presents the outcomes of core analysis undertaken during their induction by 15 ET trainees with varied occupational experience.

Grundy, Robert (1991) **A work based learning approach to selection and training** (British Gas/ WBLP). Reference number 2830. ISBN 1 85663 087 0 £4.50 A4 33pp

> Written by Robert Grundy with British Gas plc (Eastern) and the Work Based Learning Project this report describes the work undertaken in designing a selection document for use when appointing adult trainees in craft operative posts. A WBLP process – core analysis – was used to generate a job-specific supplement to the standard application form. The innovatory feature was the use of the work based learning core skills as a common language for describing the skills and experience needed. This language was accessible to all candidates, no matter what their backgrounds. The selectors were then able to explore the match between the skills necessary for competent performance of the job and the skills possessed by the candidates. This publication describes the design and trialling of the supplementary sheet. There is also a step by step commentary to assist readers who might wish to design a similar selection document for use in their own workplaces.

Hunt, Martha et al. (1991) **Using Individual Development Plans: the work based learning approach to action planning**. Reference number 2820 ISBN 1 85663 057 9 £7.50 A4 53pp

> The Individual Development Plan (IDP), which was developed by the WBLP after extensive field work, provides a means of specifying and reviewing a programme for an individual learner. It comprises two parts: Part 1 says who the learner is, what experience and training they've had, what they can do in skill terms rather than only job activities, and looks at how they need to manage change within their present or future employment. Part 2 is concerned with planning learning content and reviewing progress on a rolling basis. This publication provides a format with comprehensive, clear instructions on how to complete it; raises staff training issues; and gives two full examples from field work. It also identifies ways IDPs could be used: for managers studying for higher qualifications; in developmental staff appraisal schemes; for higher education students on sandwich courses; for upskilling/retraining workers; in vocational courses for full- or part-time students; and for unemployed adults on education/training schemes.

Hunt, Martha *et al.* (1992a) The flow chart for core analysis: a technique for analysing work activity using work based learning core skills. Reference number 2813. ISBN 1 85663 005 6 £8.50 A4 43pp

The Work Based Learning Project (WBLP) generated a process known as core analysis to help workers develop new kinds of workplace skills. Core analysis enables workers to gain insight into the skills they have and use, to be aware of the context of that use, and to recognise how they might apply their skills to new contexts. The **Flow chart for core analysis** provides a manual for the flow chart technique of core analysis. It includes notes for supervisors/tutors/trainers; learners' guide; learners' core analysis workbook; and notes on and examples of various ways of presenting the results of core analysis. The flow chart has been used in a variety of ways by supervisors, tutors and trainers working with different groups of learners including employed adults, full-time students on work experience/BTEC courses and people on programmes for the long-term unemployed.

Hunt, Martha *et al.* (1992b) **COMPET2 program manual for core analysis: a technique for analysing work activity using work based learning core skills** (with IBM compatible disk). Reference number 2826 COMPET2 Manual ISBN 1 85663 015 3   A4 47pp   Price for the manual with disk £17.50 COMPET2 Disk   ISBN 1 85663 010 2

COMPET2 is a computer program (based on **The flow chart for core analysis**. It offers a technique for core analysis and provides a structure which helps the analysis to be carried out methodically so that important aspects of skilled performance are not left unexamined. It offers a structured approach to analysing occupational performance which is not confined to specialists but can be used by supervisors/tutors/trainers and by worker-learners. This document provides a manual for the COMPET2 technique of core analysis. It includes notes for supervisors/tutors/ trainers, learners' guide, learners' core analysis workbook, notes on ways of presenting the results of core analysis, and examples of ways of presenting the results of core analysis.

Levy, Margaret (editor) (1989) **A guide to work based learning terms** ISBN 0 907659 63 2 £8.50 A4 135pp

The guide contains definitions and commentary on 96 terms from vocational education and training (VET) where there has been an explosion of specialist language over the last few years. The commentary attempts to identify differences in the use of traditional and new terms, and to clarify current usage. The guide will be of interest to trainers and tutors, employers, personnel managers, careers advisers, administrators and policy makers including those in industry bodies and training and enterprise councils. It has sections on aims, methods, and assessment and certification in VET.

Levy, Margaret (1991) **Work based learning – a good practice model**. Reference number 2845 ISBN 1 85663 008 0 £2.00 A4 6pp

This document provides an introduction for UK companies and off-job providers interested in using the partnership model of work based learning (WBL). It identifies the possible aims and outcomes of WBL for employers and employees and provides an overview of strategies, tools and techniques available to raise the quality of WBL practice.

Mansfield, Bob and David Matthews (1985a) **Job competence – a description for use in vocational education and training.** ISBN: 9 097659 34 9 £2.00

This introductory leaflet explores the nature of job competence as it has been highlighted by the use of core skills in analysing work activity. The model of job competence promoted here has since been further developed and now forms the basis for functional analysis, one of the major tools used on the development of NVQ standards. This leaflet should be read in conjunction with the leaflet on occupational standards (see below).

Mansfield, Bob and David Matthews (1985b) **Occupational standards – job competence and the measurement of achievement.** ISBN 0 907659 35 7. £2.00

> This introductory leaflet raises questions about the nature of occupational standards and their function, and investigates whether the job competence model might offer a basis for defining and using occupational standards. An extended and refined job competence model is now being used to develop and define occupational standards. This leaflet raises important issues about the functions of occupational standards and qualifications which still need to be addressed nationally. This leaflet should be read in conjunction with the leaflet on job competence (see above.)

Matthews, David, Tim Oates and Margaret Levy (1992) **Strategies for structuring learning opportunities in the workplace and implementing work based learning.** Reference number 2828 ISBN 1 85663 077 3 £6.00 A4 48pp

> The WBLP has developed a good practice model of work based learning. This has learning as its prime aim. It is a partnership model, the partners being production professionals, worker-learners and learning professionals. Guidance professionals have a support role. The major characteristic of the good practice model is linking learning to the work role. This focuses the learning on the worker doing a job and ensures that the learning is seen as relevant both to employer and worker needs. Part 1 of this publication provides an introduction to the good practice model and to the strategies, tools and techniques that employers, trainers, line managers and off-job providers can use to help improve the quality of current work based learning practice. Part 2 details, with examples, a particular set of strategies designed to help with the structuring of learning opportunities in the workplace. It offers suggestions about how the learning which can take place through experience in the workplace can be more effectively identified and managed to promote a technically competent, versatile, adaptable workforce.

Worley, Sheila (1993) **Individual Development Plans in BTEC First and National Diplomas.** Reference number 2825 ISBN 1 85663 072 2 £6.00 A4 61pp

> This publication follows the progress of a class of BTEC students at Cornwall College whose tutor (Sheila Worley) used work based learning materials (particularly IDPs and cores skills analysis) to enhance the delivery of their course. This extensive field work influenced the eventual design of the materials and, as such, has been invaluable.

# About the Mendip Papers

The Mendip Papers are a topical series of booklets written specially for managers in further and higher education. As managers and governors take on new responsibilities and different roles they face new challenges, whether in the areas of resource and financial management or in the pursuit of quality, the recruitment of students and the development of new personnel roles. The Mendip Papers provide advice on these issues and many more besides.

Some of the papers provide guidance on issues of the moment. Others offer analysis, providing summaries of key recent research studies or surveys. The authors are experts in their areas and offer insights into the ways in which the fields of post-school education and training are changing.

Mendip Papers provide up-to-date information on important current issues in vocational education and training, as well as summaries of research studies and surveys, along with informed and sometimes controversial perspectives on the issues. Managers need Mendip Pape 3 to keep abreast of current developments and to deal with key problems and challenges. Staff development officers and trainers will find them invaluable as a basis for in-college management training and staff development activities.

The list of Mendip Papers is growing steadily. If you have tackled a particular piece of research or conducted a survey in the fields of further, higher or adult education, or have undertaken an innovative management initiative which would be of interest to other managers, please contact the series editor, Lynton Gray, at The Staff College with a view to publishing your work and disseminating it throughout the post-school education system.

# Titles in the series

## Curriculum management

| | | | |
|---|---|---|---|
| MP073 | Putting the learner first: support through flexible learning<br>Jean Bolton | 1994 | £3.50 |
| MP 071 | Learning difficulties and the power of labelling in ABE<br>Sue Bergin and Andy Johnson | 1994 | £3.50 |
| MP 060 | Explaining non-completion rates in Scottish universities<br>Alan Woodley | 1994 | £3.50 |
| MP 058 | A flexible approach to learning: articulating courses<br>J E McLachlan and Vivienne Wood | 1994 | £3.50 |
| MP 019 | Solving the problem of mathematics<br>Sir Roy Harding CBE | 1991 | £2.50 |

## Further education and vocational education and training

| | | | |
|---|---|---|---|
| MP 072 | Vocational qualifications and SLDD learners – a<br>work based learning approach<br>Margaret Levy | 1994 | £4.00 |
| MP 067 | Raising quality in a competitive environment:<br>the Dutch experience<br>Jan Maas | 1994 | £4.00 |
| MP 066 | Raising quality in a competitive environment:<br>the New Zealand experience<br>Margaret McCall and Bob Willyams | 1994 | £4.00 |
| MP 065 | Raising quality in a competitive environment:<br>the Canadian experience<br>Robert Gordon and Bill Sinnett | 1994 | £4.00 |
| MP 064 | Raising quality in a competitive environment:<br>the British experience<br>Geoffrey Melling and John Graystone | 1994 | £4.00 |
| MP 056 | 'Funding learning' and all that: a synopsis of six reports<br>Bob Kedney and Alison Scott | 1993 | £5.00 |
| MP 047 | Prison education's role in challenging offending<br>behaviour<br>Paul Ripley | 1993 | £3.00 |
| MP 046 | Preparing and presenting project reports in<br>education management<br>Lynton Gray | 1992 | £3.00 |

| MP 043 | Post-16 participation: the success story<br>David Pardey | 1992 | £5.00 |
|---|---|---|---|
| MP 022 | Prison education in England and Wales (revised)<br>Paul Ripley | 1993 | £2.50 |
| MP 011 | Essential acronyms in further, higher and adult<br>education (revised June 1994)<br>John Graystone and Margaret King | 1994 | £3.50 |

## Human resources

| MP 069 | A focus for human resource management in FE<br>Andrew Betts | 1994 | £3.50 |
|---|---|---|---|
| MP 063 | Strategic evaluation of staff development<br>Jonathan Simmons | 1994 | £4.00 |
| MP 052 | Investors in People in the college context:<br>the Weymouth College experience<br>Caroline Cheeseman and Anne Tate | 1993 | £4.50 |
| MP 051 | Coping with incapability<br>Bob Saunders and Bob Kedney | 1993 | £5.00 |
| MP 050 | Job evaluation in the FE corporation<br>Bob Saunders | 1993 | £6.00 |
| MP 040 | Power, authority, autonomy and delegation:<br>a discursive journey round some big words<br>Colin Turner | 1992 | £4.50 |
| MP 039 | Soft-systems methodology: an approach to<br>problem-solving in the management of<br>education<br>Jorji Kowszun | 1992 | £3.50 |
| MP 037 | Job analysis and the preparation of job descriptions<br>Bob Saunders | 1992 | £4.50 |
| MP 035 | Leadership and its functions in further and higher<br>education<br>Derek Marsh | 1992 | £4.50 |
| MP 033 | Motivating staff<br>Colin Turner | 1992 | £3.50 |
| MP 027 | Creativity and management<br>Colin Turner | 1991 | £4.00 |
| MP 013 | The role of the new vice-principal<br>Christine Megson | 1991 | £3.50 |

# Legislation and governance

| | | | |
|---|---|---|---|
| MP 042 | Reviewing the college disciplinary procedure<br>Bob Kedney and Bob Saunders | 1992 | £5.00 |
| MP 041 | Governance and incorporation: style and strategy<br>Bob Kedney | 1992 | £4.00 |
| MP 038 | The effects of employment legislation on collective bargaining<br>Bob Saunders | 1992 | £3.00 |
| MP 036 | Governing corporate colleges (revised)<br>John Graystone | 1992 | £6.00 |
| MP 032 | FE incorporation checklist for managers (revised)<br>John Graystone | 1992 | £5.00 |
| MP 025 | FE funding and delegation schemes – an exegesis<br>David Atkinson | 1991 | £4.00 |
| MP 018 | Effective meetings<br>John Graystone | 1991 | £3.00 |
| MP 016 | Education reform legislation in the UK: a summary<br>John Graystone | 1991 | £4.00 |

# Organisational theory

| | | | |
|---|---|---|---|
| MP 015 | Structures – fact and fiction<br>Colin Turner | 1991 | £5.00 |
| MP 008 | The perception of threat and the reality of decline in organisations<br>Colin Turner | 1991 | £3.50 |
| MP 007 | Organisational culture<br>Colin Turner | 1990 | £4.50 |
| MP 006 | Socialisation into organisations<br>Colin Turner | 1990 | £2.50 |
| MP 005 | Responding to change: the need for flexible college structures and practices<br>Colin Turner | 1990 | £2.50 |

## Planning and marketing

| | | | |
|---|---|---|---|
| MP 061 | Strategic planning in FE: the impact of incorporation<br>Rick Dearing | 1994 | £3.00 |
| MP 057 | Using market research to aid educational decision-making<br>Peter Davies | 1993 | £4.50 |
| MP 055 | Towards parity of esteem? Marketing Advanced GNVQs<br>Peter Davies | 1993 | £5.50 |
| MP 049 | Academic planning in the corporate college<br>Alison Scott, Bob Kedney and Lynton Gray | 1993 | £4.50 |
| MP 048 | The competitive positioning of further education<br>colleges<br>Ali Bakir | 1993 | £4.50 |
| MP 031 | Establishing customer needs and perceptions<br>Bert Roberts | 1992 | £5.00 |

## Quality and performance

| | | | |
|---|---|---|---|
| MP 070 | A framework for quality management<br>Edward Sallis | 1994 | £5.00 |
| MP 059 | Equal outcomes – equal experiences?<br>Edited by Sue Brownlow | 1994 | £5.50 |
| MP 045 | The Northern Ireland further education quality<br>assurance survey<br>Gerard Devlin | 1992 | £3.00 |
| MP 034 | Management and accountability in professional organisations<br>Society for Research into Higher Education;<br>editor Dr Helen Brown | 1992 | £5.00 |
| MP 028 | Developing common PIs and assessing effectiveness<br>and quality<br>Peter Allsop | 1991 | £3.00 |
| MP 020 | College quality assurance systems<br>Ed Sallis and Peter Hingley | 1991 | £5.50 |
| MP 010 | Performance indicators and adult education<br>Pablo Foster | 1991 | £4.50 |
| MP 009 | The National Quality Survey<br>Ed Sallis | 1990 | £4.50 |

# Resources and technology

| | | | |
|---|---|---|---|
| MP 068 | Learning and technology in the further education sector<br>eds. Lynton Gray and Ann-Marie Warrender, with a<br>contribution from Sir Gordon Higginson | 1994 | £4.50 |
| MP 062 | Funding flexibility<br>Bob Kedney and Sue Brownlow | 1994 | £5.50 |
| MP 054 | 50 or more ways to reduce costs:<br>opportunity analysis and selection<br>Bob Kedney and Trefor Davies | 1993 | £5.00 |
| MP 053 | Designing a college accommodation strategy<br>Bob Kedney | 1993 | £5.50 |
| MP 044 | The management of resource-based learning<br>Jeff Cooper | 1993 | £3.00 |
| MP 029 | PCFC funding: the first three years<br>Tony Jeans | 1991 | £3.50 |
| MP 025 | Accommodation planning – one polytechnic's<br>experience<br>Michael Murphy | 1991 | £5.00 |
| MP 004 | Management staff ratios and unit costs<br>Bob Kedney | 1991 | £3.00 |