This document on the United Kingdom (UK) is one of a series of five monographs published by the European Centre for the Development of Vocational Training (CEDEFOP). The document includes seven chapters, three appendices, and a section of case studies. The first chapter describes small and medium-sized business enterprises in the UK. Vocational training options available in the UK are described in the second chapter. The third chapter provides a national context for distance education and training. The fourth chapter describes the objectives and methodology of the CEDEFOP study of distance education and training. A summary of the training needs and attitudes of small firms is provided in the fifth chapter. The sixth chapter discusses training provisions for small firms. Conclusions are reported in the seventh chapter. Appendix 1 provides the descriptive form sheets for five distance education and training projects. Appendix 2 identifies the organizations and persons contacted in the UK. Appendix 3 provides a 19-item bibliography. The concluding section of the report provides five case studies of UK distance education and training projects. (CML)
Distance education and training for small firms
United Kingdom
Distance education and training for small firms
United Kingdom

This report has been prepared by
Ian Dey and Jean Harrison
in cooperation with the Open University
September 1987

First edition, Berlin 1988

Published by: CEDEFOP
Director: Dr Ernst Piehl
Deputy Directors: Corrado Politi
and Enrique Retuerto de la Torre
Project-coordinator: Duccio Guerra

CEDEFOP — European Centre for the Development of
Vocational Training
Bundesallee 22, D-1000 Berlin 15
Tel. (030) 88 41 20; Telefax: (030) 88 41 22 22; Telex 184 163 eucen d

The Centre was established by Regulation (EEC) No 337/75
of the Council of the European Communities
Introduction
The important role of small medium-sized undertakings in the economy has created a growing interest in this sector.

At a time of recession, their flexibility has served as an economic buffer and, with economic revival, that flexibility is a decisive factor in their development.

The European economic area, indeed, is to a great extent made up of a close-knit fabric of small industrial firms, whose vital contribution to the creation of employment and wealth is clearly apparent from the statistics. It is hardly surprising that in formulating Community policies specific attention has been devoted to launching ventures in support of small industry, as typified by the programme of action for Small and Medium-sized Undertakings (SMUs) adopted by the Council in 1986 and by the European Regional Development Fund, the European Social Fund and the setting up of a task force within the Commission of the European Communities to promote and administer a series of development and service measures to support SMUs.

There are many difficulties in setting up measures in favour of SMUs, the first being how to "define the field". The parameters that have been used in the past to define small and medium-sized enterprises are no longer adequate, mainly because the dividing line between large and small concerns is based on the size of the work force or the amount of invested capital.

Measures pertaining to vocational training are particularly complex to implement, for various reasons:

- Firstly, it has not yet been fully realised that small firms are not a replica of large concerns in miniature, and that measures aimed at the latter will not be equally effective in meeting the training needs of the former;
- In second place, investment in training implies programming and action in pursuance of medium-term corporate strategies, and such planning is sometimes beyond the capacity of small firms;
- Finally, small and medium-sized undertakings are rarely equipped to conduct their own internal training schemes, but at the same time they are by tradition wary of outside training.

The report presented here is based on a twofold assumption:
- that the success of the medium-sized and in particular the small firm depends to a great extent on the managerial abilities of the principal and the management staff, and therefore on their training;
- that, because small entrepreneurs are reluctant to be involved in collective training measures and have little time to devote to training themselves, distance learning might be a highly suitable method of training for this type of user.

In these circumstances, we felt that an effort should be made to find out about any distance learning that is targeted at a specific group such as the principals and management of small and medium-sized business and craft industry firms.

The purpose in so doing has been to "measure" not so much the volume of the training that is available (we harboured no illusions as to its extensiveness) as the quality of that training, and above all the potential demand for and supply of distance learning.

Finally, we have sought confirmation for our belief that the avenue of transnational cooperation within the Community should be explored with far greater determination, especially as regards the use of distance learning for training.

The report, therefore, is part of a programme covering five Community Member States: Spain, France, the Federal Republic of Germany, the United Kingdom and Italy.

We see this first programme as the first step towards a whole series of measures designed to promote and support cooperation in the Community in the field of distance learning.

Duccio Guerra
Project manager
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Small and medium enterprises</td>
<td>1</td>
</tr>
<tr>
<td>1 Vocational training</td>
<td>10</td>
</tr>
<tr>
<td>2 Distance education and training: the national context</td>
<td>18</td>
</tr>
<tr>
<td>3 The study: objectives and methodology</td>
<td>21</td>
</tr>
<tr>
<td>4 The training needs and attitudes of small firms</td>
<td>23</td>
</tr>
<tr>
<td>5 Training provision for small firms</td>
<td>37</td>
</tr>
<tr>
<td>6 Conclusions</td>
<td>54</td>
</tr>
<tr>
<td>7 Appendices</td>
<td>57</td>
</tr>
<tr>
<td>7.1 Case study details</td>
<td></td>
</tr>
<tr>
<td>7.2 Organisations and persons contacted</td>
<td></td>
</tr>
<tr>
<td>7.3 Bibliography</td>
<td></td>
</tr>
</tbody>
</table>
0 Small and medium enterprises

The importance of the small firms sector to the United Kingdom economy has been recognised for many years but over the last decade there has been a sharp increase in interest, led by the Governmental attitude to this sector of the economy.

The present Government is committed to the encouragement of enterprise and sees the small firm sector as the seed corn for future economic prosperity with the potential to offer new employment, as a force for innovation and offering economic diversity.

This close and detailed scrutiny and encouragement of the small firms sector is a relatively recent phenomenon.

It was only in the 1960’s that the Government began to recognise that small firms might face problems and have needs different from those of large firms and it was in 1964 that small businesses began to be discussed seriously.

All this concern came to a head with the setting up of a 'Committee of Inquiry on Small Firms' in 1969,
under the chairmanship of J.E. Bolton, which eventually reported to Parliament in November 1971. ([3])

The presentation of this report is the most significant event in the history of the small business sector in the United Kingdom, marking as it did, a turning point in attitudes towards small enterprises, and the Bolton Report as it has become known, remains remarkably influential among those interested in the small business sector. Virtually every contribution to small business research can trace its origins to the Bolton Report.

How did the Bolton Report come to be so influential? The report, itself, gives a clue to the answer.

"Our terms of reference were deliberately drawn very widely, so as to restrict the field of Inquiry as little as possible. ...But it was made clear to us that the major purpose of the Inquiry was a long-term one - the collection of information on the place of small firms in a modern economy as a basis for recommendations about future policy toward them. Prior to the appointment of this Committee there had never been a comprehensive
study, official or otherwise, of the small firms sector in the United Kingdom. This important area is little researched and poorly documented, and the formulation of industrial policy has inevitably proceeded without adequate knowledge of the functions performed by small firms, of their efficiency and of the likely effects upon them of the actions of Government." ([3])

The strength and value of the Bolton Report is that it achieved what it set out to do, so that the current study reported on here will also have to refer to the Bolton Report, beginning with a definition of the small firms sector in the United Kingdom.

"On any reasonable definition, small firms account numerically for the vast majority of all business enterprises. Their diversity is even more striking than their number. Small firms are present in virtually every industry and the characteristics they share as small firms are sometimes not apparent because of the differences arising from the contrasting conditions of different industries."
A proper understanding of the whole small firm sector therefore requires study of many industries.

There is also extreme variation within the sector as regards efficiency, methods of operation, the nature of the market served and the size of the resources employed. Thus a manufacturing business employing up to 200 people has very little in common with a small shop owned and run by a married couple. Were it not for one characteristic of prime importance, it would be difficult to point to any similarities between them. The all-important characteristic which is shared by these highly disparate enterprises, and by all small firms as we are using the term, is that they are managed by the people who own them. Our first decision was that our terms of reference should be interpreted in this sense, and that our proper concern was the owner-managed business."

The characteristic of prime importance mentioned above, that a small firm is one which is managed by the people who own the firm, is developed into three features which distinguish a small firm from a large one. The idea was to produce a definition of a small firm which emphasised those aspects
which make their performance and problems significantly different from those of large firms. The three features are, first that the firm has a relatively small share of its market, second, that it is managed by its owners in a direct way, and thirdly, that it is independent and does not form part of a larger enterprise in that owner-managers are free from outside control in taking their principal decisions.

For statistical purposes, it was still necessary to produce some form of numerical definition and the Bolton Report, in applying its analysis of the distinguishing features, came up with different numerical definitions for different business sectors.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>200 employees or less</td>
</tr>
<tr>
<td>Retailing</td>
<td>turnover £353 000 or less</td>
</tr>
<tr>
<td>Wholesale Trades</td>
<td>turnover £1 413 000 or less</td>
</tr>
<tr>
<td>Construction</td>
<td>25 employees or less</td>
</tr>
<tr>
<td>Mining/Quarrying</td>
<td>25 employees or less</td>
</tr>
<tr>
<td>Motor Trades</td>
<td>turnover £707 000 or less</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>turnover £353 000 or less</td>
</tr>
<tr>
<td>Services</td>
<td>5 vehicles or less</td>
</tr>
<tr>
<td>Road Transport</td>
<td>All excluding multiples and brewery-managed public houses</td>
</tr>
<tr>
<td>Catering</td>
<td></td>
</tr>
</tbody>
</table>

These figures have been adjusted for movements in retail prices and inflation to March 1986 from those given in the Bolton Report.
This definition also excludes Agriculture, Fisheries, Horticulture and Professional and Financial Services, as does the whole of the Bolton Report, on the grounds of simplifying their report and that the problems of these sectors are highly specialised. Later studies have included these sectors, particularly in estimating the economic contribution of small firms.

All our enquiries about small and medium enterprises sooner or later led us back to these definitions in the Bolton Report and it is the one we have adopted here. There is very little choice of definition, particularly if economic statistics on the importance of the small firms sector are sought as all published data works from this Bolton Report definition.

The Bolton Report also highlights the difficulty of examining the role and contribution of the small firm sector to the economy.

Their proposal was to identify the small firms' share of employment and of output and the proportion of small firms amongst all firms. The figures available to Bolton were for 1963 and the most recently available from the Department of Employment relate to 1976. These are given in Figure 1. In total the small firm sector accounts for 96% of all firms, 19% of all turnover and 25% of all employees.
## Figure 1 The relative importance of small firms 1976

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number (thousands)</th>
<th>% all firms</th>
<th>turnover (£m)</th>
<th>% all firms</th>
<th>Employees (thousands)</th>
<th>% all firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>150</td>
<td>95</td>
<td>4500</td>
<td>57</td>
<td>420</td>
<td>60</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>100</td>
<td>95</td>
<td>8000</td>
<td>18</td>
<td>1575</td>
<td>23</td>
</tr>
<tr>
<td>Construction</td>
<td>290</td>
<td>97</td>
<td>7000</td>
<td>25</td>
<td>715</td>
<td>43</td>
</tr>
<tr>
<td>Transport</td>
<td>60</td>
<td>92</td>
<td>1450</td>
<td>17</td>
<td>245</td>
<td>38</td>
</tr>
<tr>
<td>Wholesaling</td>
<td>75</td>
<td>94</td>
<td>8400</td>
<td>16</td>
<td>315</td>
<td>37</td>
</tr>
<tr>
<td>Retailing</td>
<td>235</td>
<td>98</td>
<td>9000</td>
<td>26</td>
<td>990</td>
<td>40</td>
</tr>
<tr>
<td>Finance</td>
<td>20</td>
<td>92</td>
<td>1250</td>
<td>2</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>Property</td>
<td>35</td>
<td>90</td>
<td>2240</td>
<td>23</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Professional Services</td>
<td>50</td>
<td>91</td>
<td>1670</td>
<td>19</td>
<td>275</td>
<td>47</td>
</tr>
<tr>
<td>Catering</td>
<td>100</td>
<td>95</td>
<td>4240</td>
<td>63</td>
<td>530</td>
<td>64</td>
</tr>
<tr>
<td>Motor Trades</td>
<td>50</td>
<td>91</td>
<td>3600</td>
<td>19</td>
<td>190</td>
<td>40</td>
</tr>
<tr>
<td>Other Services</td>
<td>105</td>
<td>93</td>
<td>2650</td>
<td>31</td>
<td>550</td>
<td>58</td>
</tr>
<tr>
<td>All Others</td>
<td>35</td>
<td>95</td>
<td>3000</td>
<td>24</td>
<td>280</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1300</strong></td>
<td><strong>96</strong></td>
<td><strong>57000</strong></td>
<td><strong>19</strong></td>
<td><strong>6210</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>
In the absence of complete official statistics since 1976 a number of studies have had to make inferences from published data. For example the NEDC study, Lending to Small Firms, ([19]), uses VAT returns to show that the number of registered small businesses changed from 1,288,000 at the end of 1979 to 1,435,000 at the end of 1984. This figure will not include those with a turnover of less than £21,000 or those zero-rated, such as bookshops. A more recently quoted figure is that there are 1,600,000 small firms registered for VAT, with a further 2,700,000 self-employed in the United Kingdom at the end of 1986, ([18]).

These figures suggest substantial growth in the small business sector and this is probably so, but hidden in the data are some significant changes. The VAT registrations for 1983, ([19]), show a turnover of about 22% in registrations with 176,549 new registrations and 134,549 deregistrations.

A survey undertaken for Trends Business Research of 7,000 successful small firms which grew by 15% a year or more between 1983 and 1986 shows significant industry sector and geographical variations, north to south. ([11])

The proportion of manufacturing firms in the successful small firms sector was 34% of all small firms whilst manufacturing represents only 9% of all firms. The South East has the highest concentration of small firms based on population
compared with the North of England. The net result, according to this survey, is that the North is suffering from an ever-declining indigenous population of successful small firms.

In summary, the small firms sector is an important part of the United Kingdom economy, probably slowly increasing in overall size, but also facing extreme volatility at a detailed industry level. Bolton himself, writing ten years after the publication of the Bolton Report, was able to say "that a great deal more remains to be done", ([4], page x), not least in improving the accuracy of our knowledge of the size of the small firms sector.
1 Vocational training

A full appreciation of the training provision for owner/managers of small businesses in the United Kingdom requires some understanding of the totality of vocational training opportunities available. This section, therefore, includes a brief description of that provision and some comments on general employers attitudes to training.

Vocational training can begin within the school system and, at the time of writing, significant changes are taking place with a shift of emphasis towards technical and vocational education and an increase in basic science provision as part of a core curriculum.

This shift is seen, in part, as a response to employers attitudes referred to below, and as part of a process of improving the general level of vocational skills within the population.

Within the United Kingdom schooling is compulsory up to the age of sixteen and over 90% of schooling is within the state system. It should be remembered that the educational systems in Scotland and Northern Ireland are different in certain important respects from that in England and Wales and most of the following remarks apply to England and Wales, though the general principles apply throughout the United Kingdom.
State education is organised through Local Education Authorities (LEA) with statutory responsibilities laid down by Parliament. Compulsory education is divided into primary/junior for the age range 5 to 11/12 and into secondary thereafter.

For an individual reaching the age of sixteen there is a range of choices each of which can lead to additional education, training and qualifications.

* stay on at school
* take a further education course
* join a youth training scheme

The first of these options is chosen by those preparing for entry to higher education, at the age of eighteen, or by those wishing to work towards the Certificate of Pre-Vocational Education. This is a one year full-time programme of study related to different areas of work so that students learn through practical experience how business and industry operate.

The system of Further Education colleges, run by Local Education Authorities, provide the bulk of the training opportunities in the United Kingdom and cover the complete range of vocational qualifications. The majority of these courses lead to qualifications validated by three organisations in particular.
The Business and Technician Education Council (BTEC) awards cover occupational areas which include agriculture, business and finance, computing and information systems construction, design, distribution, hotel and catering, leisure services, engineering, public administration and science. Programmes are of up to 3 years duration by full-time or part-time study for Certificates and Diplomas.

The Royal Society of Arts (RSA) courses have a strong practical bias and lead to certificates for all types of office work. The RSA was the originator of commercial and technological examinations in this country and is the largest provider of certification to those who wish to work in office-based occupations including general business studies, computers, secretarial skills, modern foreign languages and commercial studies.

The City and Guilds of London Institute (C and G) offer full and part-time courses leading to a wide range of qualifications in over 200 subjects including engineering, construction, motor vehicles, community care, retailing, printing, textiles, travel, hotel and catering, hairdressing, computers, woodworking, welding, electrical trades.

The third option, The Youth Training Scheme is open to all sixteen and seventeen year old school leavers and every school leaver at those ages can be guaranteed a place. There are no entry qualifications, nor are there any formal qualifications offered at the end of the scheme. The
programme provides experience of different types of work so that the individual can practice skills and gain confidence in a real work environment. There is the chance to do off-the-job training, usually at the local further education college, and to gain a vocational qualification. At the end of the scheme each individual receives a record of achievement describing the training programme, qualifications acquired and experience gained.

The number of validating organisations and the range of qualifications on offer, provided scope for confusion to potential employers. As a result in 1986 the Government set up a new framework of national vocational qualifications in England, Wales and Northern Ireland to be developed and supervised by a new National Council for Vocational Qualifications (NCVQ).

The framework provides for a progression of levels, operating initially with four.

**Level I**
Occupational competence in performing a range of tasks under supervision.

**Level II**
Occupational competence in performing a wider, more demanding range of tasks with limited supervision.

**Level III**
Occupational competence required for satisfactory responsible performance in a defined occupation or range of jobs.
Level IV

Competence to design and specify defined tasks, products and processes, and to accept responsibility for the work of others.

The qualifications offered by BTEC, RSA and C&G will fit within this scheme, but so will many other courses including those with a high level of experiential learning content.

What has been described above could be called initial vocational training as it is geared specifically to follow the period of compulsory schooling. This however leaves a substantial part of the population, the adults, who require, and seek, training opportunities.

The range of possible sources of training is, if anything, wider than that for initial vocational training though there is much less formal structure to the provision.

First, there is the provision of Adult Education (AE) closely allied to the Further Education provision provided by the Local Education Authorities. The provision covers the same ground that has already been referred to with courses validated by the same institutions BTEC, RSA, and C&G.

Training provision for adults is also available from the Higher Education sector though it is often only a peripheral part of their activities.
There is also a range of commercial provision from private companies and organisations, for example in the management training area, where courses are perceived to be extremely valuable even though they do not lead to any formal qualification.

In addition, many of the large companies provide training programmes for their employees and current developments suggest that some of these courses could lead towards the new vocational qualifications referred to above. Another source of training provision is the professional associations, such as accountants and engineers, who provide training leading to professional recognition.

Again, over the last decade Government has focussed more sharply on training.

The Industrial Training Act of 1964 established a basic framework within which training was to be carried out in the greater part of industry and commerce. There were three main objectives within the Act.

* to ensure an adequate supply of properly trained men and women at all levels in industry.

* to ensure an improvement in the quality and efficiency of industrial training.
to share the cost of training more evenly between firms.

The Act led to the creation of 28 Industry Training Boards who impose a levy on firms above a minimum size within that sector and then develop training programmes for that sector.

From the beginning there was dissatisfaction with this system and there are now fewer of these boards remaining with substantial training programmes. There was particular dislike of this system by the small firms sector.

The current Government position is expressed through its Adult Training Strategy.

* changing attitudes about the value of adult training
* encouraging increased investment in efficient and effective training
* improving information on training
* encouraging wider use of new training technology
* ensuring that programmes are geared more to local labour market needs

A number of programmes to implement this strategy have been developed by the Manpower Services Commission (MSC) and include the following:
Management Extension Programme
This programme pairs unemployed managers with small firms to inject specialist knowledge and experience.

Business Enterprise Programme
This programme is for those thinking of setting up a new business and involving a one-day introductory course followed by a training programme of six days duration spread over five weeks.

Private Enterprise Programme
A sequence of 12 one-day seminars about business management skills.

The use of this provision is reflected in the attitude of British management to training.

"Few employers think training sufficiently central to their business for it to be a main component in their corporate strategy: the great majority did not see it as an issue of major importance." ([17])

This attitude follows through to the reality. For example in 1984 on average £200 was spent on training each employee - only 0.15% of turnover, and 69% of employees had no training in the previous 12 months.

If this is the general picture of the use of vocational training opportunities by industry, business and commerce, in general, in the United Kingdom, then the picture for the small firms sector is even more bleak, as we shall see later.
2 Distance education and training: the national context

There is no doubt that distance education and open learning have caught the imagination of a large number of people within the United Kingdom, from those who have studied through The Open University, The National Extension College, Open Tech or Open College, to those in Government who perceive advantages from the methods and techniques of distance education and open learning as an effective measure for dealing with the massive problem of retraining and updating the relatively badly trained workforce in a cost effective way.

The immediate origins of the concepts in the United Kingdom can be traced back over 25 years with a number of initiatives linking course work to radio and television broadcasts, with many of these initiatives taking place under the aegis of the National Extension College in Cambridge.

However the most significant impetus to the use and understanding of distance learning in the UK was the creation of The Open University in 1969. This institution was set up primarily to offer first degrees to mature adults studying part-time at home, but it quickly became apparent that the methodology could be applied much more widely. This led to a rapid expansion of provision by The Open University itself, and by The National Extension College. In 1982 the Government, through the Manpower Services Commission,
established the Open Tech unit with the aim of making it as easy as possible for adults to acquire and update their skills using a variety of open learning methods, with concentration on two vital levels of skill, technicians and supervisory management. The Open Tech is principally an initial funding agency encouraging the production of courses and packages, hopefully to financial self-sufficiency. The latest Open Tech directory covers over 600 pages and represents over 30,000 study hours of material produced, in the main, by the Further Education colleges throughout the country. Broadly speaking the range of provision discussed in the section on Vocational Training is available in an open learning format.

The Open Tech was set up deliberately with a limited life, but it became clear that what was also needed was some coordination of provision and marketing against national objectives.

The Open College is the unit that has now been set up to provide that coordination and overview. The Open College has a key role to play in changing attitudes to continuing education and training, and has to develop learner-centred opportunities to meet the needs of as wide a range of students as possible. It has been set the target of reaching 1,000,000 students within the first five years. The Open College will have a particular interest to those seeking to retrain or to broaden, improve or update their vocational skills. Another key audience will be those for whom
provision is of a kind not always perceived of as being directly vocational, recognising that vocational competence in a fast changing world depends on personal competence and the ability to transfer competencies to new tasks. The Open College has also to cater for the important group of those currently not seeking education training opportunities of any kind. This group must be drawn back into training if the aim of improving competence throughout the population is to be achieved. So in particular The Open College should develop a highly sophisticated marketing organisation whose expertise lies in understanding skill training needs as well as commissioning specific material to meet those needs.

The Open College will not itself award qualifications but prepare students for existing qualifications, such as those listed in the section on Vocational Training.

The United Kingdom distance education picture, then, is one of wide-spread and growing provision across a range of subjects, some of which is applicable to the small firms sector.
3 The study: objectives and methodology

This report is part of a study into Distance Education and Training being undertaken by the European Centre for the Development of Vocational Training (CEDEFOP), a research organisation funded through the European Economic Commission (EEC).

The basic framework to the study is the observation that in a period of rapid and widespread social and economic change there is a need for more, and varied, vocational training. The hypothesis to be tested is the belief that distance education and training can provide the quantum jump in the scale of provision necessary, particularly for the owner/manager of small businesses.

The aim of the study is to identify, analyse and describe the supply of, and demand for, distance education and training by the small firms sector. The study is to identify a number of specific cases which demonstrate the types of distance education and training available and to subject these cases to a detailed analysis on the basis of a matrix prepared by CEDEFOP.

The study includes a collection and review of existing relevant literature as well as interviews and contact by letter and telephone with individuals and organisations concerned with distance education, vocational training and the small firms sector.
Studies according to the same basic framework are being undertaken in France, Italy, Spain and West Germany.

The United Kingdom study took place over the period January to September 1987 and contact was made with those listed in the Appendices. Short details of the specific cases studied are also included in the Appendices.
4 The training needs and attitudes of small firms

As part of the data collection for the Bolton Report, studies were commissioned on the problems and needs of small firms in various industries and a strikingly consistent picture emerged. The following areas were identified as those where small businessmen could improve their performance.

"Finance. Small firms frequently lack knowledge of the appropriate sources of development finance and working capital and are unaware of the advantages of different methods of raising capital. They are also unskilled in presenting a financial case to potential investors or lenders.

Costing and Control Information. Cost control and costing data are often so poor that management frequently learns of an impending crisis only with the appearance of the annual accounts or following an urgent call from the bank. Lack of costing data may make it impossible to gauge the effects on profits of different levels of activity or courses of action.

Organisation. Poor organisation of the routine and administration of the business, in such matters as office procedure, delegation of duties and job specification, can leave the manager no time for longer term planning.
Marketing. Most small manufacturers are product-orientated and they are inclined to concentrate on the design and production of goods rather than on the crucial marketing function. In consequence opportunities for expansion and for specialisation or diversification may be missed. In the service trades the small firm is often slow to exploit new techniques and seize new market opportunities.

Information use and retrieval. Ignorance or mistrust of developments in this field, make it difficult for some small businessmen to follow the detailed progress of their own firm, and their failure to use published information reduces their ability to plan effectively for the future.

Personnel management. Personnel selection and provision for management succession cause great problems, and most managers are concerned about the quality of the labour they are able to recruit.

Technological change. Small firms find it difficult to keep abreast of technological change, partly through lack of qualified staff and partly through failure to make use of published technical data.

Production scheduling and purchase control. The lack of these skills frequently make it impossible to meet delivery dates, avoid unnecessary "waiting time" and optimise stock levels." ([3])
Such classifications of management problems are somewhat over simplified and are not confined to the small business sector alone. The problems are inter-related and the individual manager will generally be more concerned about the business as a whole rather than about discrete functional difficulties.

One should expect there to be some impact on the efficiency of a small firm if the above areas are not being dealt with adequately, but this need not necessarily be the case. It is possible for a small firm to be efficient despite a low level of management skills simply because of the high ratio of management time to operating time. However small firms could be more efficient by the adoption of routine administrative procedures and delegation.

Fifteen years after the publication of the Bolton Report the picture has not changed significantly. A study in 1986, 'A Question of Survival, Business Results Through Training', ([16]), confirmed that the problem areas identified by Bolton are still of major concern to small businesses. This study compares their observations with those from other studies of that time and identifies significant features leading to problems for small businesses.

"Management. It is rare to find a small firm manager who readily admits to being a poor manager, except possibly in retrospect and almost all such managers thought that training courses were virtually impossible to attend once the firm was established, except on very
specific subjects using evenings and weekends.

In many cases the small firm owner/manager did not know what information to seek because he did not understand or recognise his problems sufficiently to start asking questions. As firms grow they tend to fragment into departments, and training needs increase with this growth. Small firms are loath to admit they have problems until a crisis becomes inevitable so they could derive benefit from regular contact with an outside person who would listen, ask questions and discuss management issues.

Products and Production. Most small manufacturers have considerable production experience but there is a need for technical information as a firm grows and diversifies its products or installs new equipment.

Finance. Many firms have difficulty in identifying and finding sources of finance and often seek finance only when a crisis point has been reached.

Most small firms managers do not have financial training and experience is acquired on the job. Difficulties can arise from an inability to forecast financial needs in advance coupled with a reluctance to ask continually for advice.
Markets. Many small firms have difficulty with promotion, market research, selling, advertising and obtaining new orders or contracts. There are difficulties with exporting and export documentation. The main burden of selling in a small firm falls on the owner/manager himself and if the owner/manager lacks selling and marketing experience such expertise has to be acquired quickly.

Premises. Various owner/managers indicated a degree of naivety about the complexity of moving, planning and building controls.

Employment. The recruitment of employees in small firms causes concern as does the handling of redundancy.

Legislation. Coping with VAT returns is a source of comment though there seem to be few difficulties with legislation with the details often being left to the accountant."

The actual problem areas identified fall into seven main groups, which should be compared with those identified by Bolton.

* Profitability
* Marketing/Increasing Sales
* Cash Flow
* Cost Reduction/Containment
* Stock Control/Inventory
* Improving Productivity
* Competition

"Profitability/Marketing. Profitability coupled with a wish to improve sales is a principal concern of the small business sector. Small firms tend to serve a local or regional market rather than a national or international one. They tend to have a limited market share and for any industry sector they are relatively small. Improved sales, provided they do not lead to over trading, can result in increased profitability.

Marketing in medium size firms tends to be a specialist function rather than featuring on part of the duties of the manager, as is the case of a small firm. Owner/managers often have a negative attitude to marketing, perceiving marketing as a cost, with distribution and selling treated as uncontrollable problems. Limited resources in finance, market knowledge or time contribute to a limited marketing activity. Traditionally the owner/manager is expert in his craft or production technique but is unlikely to be trained in any of the business disciplines.

As a small firm grows expertise is likely to be recruited to deal with finance and production before marketing. The small firm manager faces the dilemma, therefore, of wishing to increase profitability through increasing sales without the expertise, resources and in some cases inclination to do so.
Cash Flow/Finance. Easing the constraint of a limited cash flow is regarded by many owner/managers as a major problem. The problem of consistent cash flow generation is in some cases more important than overall profitability since it is upon such liquidity that the ability to continue operating depends. Specific areas where training is required include understanding cash flow, budgeting and costing. Managers in small firms need to appreciate that budgetary control is not the same thing as monthly accounting and a budget of cash flow can be more useful and easier to prepare than a budgeted profit and loss account.

Cost Reduction/Containment. Cost reduction or containment is considered to be a major issue, but all too frequently there is a tendency to concentrate on obvious areas, such as telephone costs, rather than to think strategically in terms such as overall cost control for materials or labour.

Stock Control/Inventory. Given the levels of cash that can be tied up in stock, stock control and inventory levels is generally felt to be another area of major concern. Improvements in this aspect of business can improve profitability, cash flow and cost containment. Advice on materials on stock recording and control, renewing stock by age, disposing of surplus or obsolete stock and concentration on purchasing aspects prior to the build up of excess stocks can lead to significant improvements.
Competition. The relative importance of competition from abroad or from companies in the United Kingdom clearly is influenced by the industry sector in which a small firm trades. For example, if a firm relies on a high level of imported raw materials then exchange rates can be critical for them. The more common pattern is of a small firm operating in a fairly localized market using home produced materials and so less concerned with exchange rates and overseas competition.([16])

Apart from slight shifts of emphasis, there has been remarkably little change in the perceived problem areas since Bolton, perhaps reflecting a lack of widespread training opportunities for helping small firms cope with those problems, or reflecting something intrinsic in the nature of owner/managers of small firms, and their attitudes towards training.

The nature of small firms owner/managers was commented on by Bolton who pointed out that the majority of chief executives of small firms do not have any formal post-school management educational qualifications, with variations between industry sectors. For example, in the manufacturing sector 21% have a degree or professional qualification with a further 8% having an accountancy qualification, that is a total of 29% are formally qualified in some way. In the construction industry the total is 43% whilst at the other end of the scale the figure for retailing is 18%.
The disparity between small and the very large firms is considerable. One study of chief executives of large firms found that 40% had been to University and 20% of those who had not were chartered accountants.

CURRAN and STANWORTH, writing in 1982,([4]), were able to say that, as Bolton suggested,

"small firm owner/managers are far from randomly drawn from the population. They tend to be relatively poorly educated and often running a small business as an alternative to conventional forms of achievement in society. This is increasingly equated with high office in a large organisation and has become greatly dependent upon qualifications in our credentialist society. For those who, for some reason, fail to obtain such qualifications, a small business is a major alternative path to success."

Other reports of that time make similar comments.

"There is empirical evidence that most small businessmen in the United Kingdom are less well-educated than their counterparts in Europe, and feel in need of additional advice and information." (Bannock 1984, quoted in [19])

"In a survey of small firms which survived the recession of 1977-82 and for which 46% had been established for between 10 and 24 years, 43% of owner/managers had qualifications at a level at or above that which is appropriate for entry to tertiary education, whilst 37% claimed to have no formal qualifications." ([12]).
WATKINS, ([9]), examines the background, education and training of a group of United Kingdom owner/managers of small firms with the objective of identifying factors which inhibit those owner/managers from engaging in appropriate management development. He makes a number of very interesting observations.

"Relatively few of the interviewees had any kind of formal professional qualification (64.8% did not). Of those who did, the formal professional competence was technical rather than managerial. 23.4% had some kind of technical qualification, including 7.4% with professional recognition within a branch of engineering. However, only 4.8% were qualified in accountancy, while a further 4.8% had professional recognition as managers per se, for example through the Institute of Marketing. Interestingly, more than twice as many chief-executives had qualified as a result of part-time study as had taken full-time courses. This tends to lend weight to the view that at least a significant number of owner-managers experience strong feelings of social marginality. However the impression is that the range of educational experience and professional expertise to which these firms had access was somewhat limited. It was in the field of work experience that this was most clearly demonstrated. Overall, a quarter of chief-executives had never worked outside their present business. Here there were major industrial variations, however, with only 53.3% of textile finishers having outside employment experiences on which to draw, whereas only 5.3% lacked this
managerial resource in the plastics firms. However, the extent to which direct experience of other firms might assist managerial performance in the present business was much more restricted than the basic data may suggest. Firstly, this experience tended to be quite old - more than 10 years in well over half the cases and in some instances, dating back before 1939. Secondly, many of those who had had previous industrial experience before joining or establishing their firm - 41.3% had gained their prior experience in firms employing 100 or less.

The inescapable conclusion is that in general none of the factors in the owner-managers’ prior experience not education nor professional studies nor work experience had been an appropriate or adequate preparation for the stewardship of one’s own business."([9])

It is tempting to suggest that these experiences account for the negative attitudes to education and training held by small firms owner/managers, and there is some suggestion that these attitudes are more strongly negative than those towards training held by all businesses, large or small. To quote WATKINS again, ([9]);

"Mention 'management training' to the boss of the typical British small firm and most of the replies will be unprintable. The roots of this communication
breakdown between small firms owner/managers and the suppliers of training are deeply embedded in the education and training system of the United Kingdom. In general, the people who do well at school in "academic" terms stay there, go on to further and higher education and then into bureaucratised large scale organisations. Many of the balance gravitate to small scale businesses, but by then the mistrust of formal education is deeply rooted. Nearly half of the owner/managers made it quite apparent that there was no way in which they wished to develop their own management competence."

This theme of the negative attitude to training can be picked up in the various studies from Bolton onwards. "Most of those we have met have rejected the idea that the use of advisory and management services would much improve matters. They are weary of receiving unsolicited advice on how their businesses should be run. Advice from Government employees is resented most of all." ([3])

The Confederation of British Industry (CBI) conducted a survey in 1986, ([14]) on management training for smaller businesses from amongst its members operating in the small firms sector and reached the conclusion from the responses that, as a subject for consideration, management training does not receive nearly such a high priority from smaller firms' managers as late payments of debts, probably because the latter has immediate implications for their cash flow.
This is a somewhat surprising conclusion from this particular study as it is reasonable to assume that the firms surveyed have survived for a long enough period to perceive benefits from membership of the CBI and so should have a wider, more confident, approach to advice and training.

In response to the specific question, have you been on a management training course, 76% responded positively, though less than 50%, and in some cases, less than 25% had been on courses in specific areas.

The gratifying conclusion from the training suppliers point of view, was that 77% of those who have attended a course felt it had been invaluable or worthwhile, with only 1% feeling it had been a waste of time.

Other studies produce the same kind of picture. In 1984 a study by the Durham Small Business Club, ([13]), showed that, 35% of owner/managers of small firms in the North-East of England were not interested in training for themselves, and, the 1986 report, A Question of Survival,([16]), in response to the question, what role do you think training has in addressing these problems, problems listed earlier in this section, produced the results that 20% thought there could be a major role for training, 40% a minor role, 20% an inbetween role, and 20% no role at all. This is in contrast to a response from larger firms to the same question where 80% saw training playing a major role in the resolution of problems.
However, there could be a shift in attitude taking place, a recent survey by the pressure group, Forum of Private Business, ([15]), shows that 74% of the responders are in favour of the Manpower Services Commission’s Private Enterprise Programme, with marketing, sales promotions and financial control as the top choice of subject areas. Doubts were expressed, also, in this survey over the costs of attending courses, particularly loss of earnings by their business.
5 Training provision for small firms

The previous section considered the major problem areas of concern to owner/managers of small businesses, and obstacles to the use of training to help deal with those problems. In a sense, we have been looking at the demand side and the articulation of demand.

In this section we look at the supply side, first by considering the nature of possible supply including criteria for those involved in developing provision. As part of this approach, we look at owner/managers views of the provision they would find acceptable. This section ends with a discussion of provision, including distance education provision and the case studies.

GIBB, ([5]), in an important paper from 1983, sets out a number of distinct propositions about the nature of management in small businesses and explores implications for training approaches. He notes that exploration of ways in which resources can be brought to bear to assist small firms in the United Kingdom remains at a primitive level and that provision is still at an inadequate level. Gibb explores what might be meant by management development in a small firm and observes that in a small firm company objectives will often be those of the owner/manager. One consequence of this is that, unlike a large firm where the company's objections
and problems can be analysed to produce a set of training objectives, in the smaller firm there is frequently no-one available to undertake the analysis necessary to identify behaviour changes associated with the changes in company objectives, and solutions to problems and to relate these to learning needs in terms of knowledge, skill or attitude requirements. Nor are there the resources to develop systematic programmes of action including training necessary to bring about the desired change. It is frequently the case that the small business owner comes direct to the trainer, cutting out the analytical process or does not come at all because he cannot see the link. When he does turn up his perception of his need for personal development or training may not always match that of his actual need so that he may be frustrated with the end result.

There are two major inferences that can be drawn for the external provider of education and training. The first is that the small firm owner/manager will be unlikely to be interested in education and training for its own sake. He is unlikely to see any gain in personal development, divorced from the needs of his company. He is therefore, likely to be impatient of inputs that are beneficial to him personally but do not appear to be relevant to the solution of his immediate organisational problems.

The second major implication is that he may be dissatisfied with what he finds because he himself has not analysed the problem adequately to identify the needs that he has for
inputs of knowledge and skill. This places a demand on the training provider to be aware of the possible lack of a relationship between his provision and the immediate needs of the participant.

The characteristics of, and differences between, small firms have implications for the design of materials and content of programmes, implications for the teacher's and trainer's role, and implications for the location and timing of programmes.

Implications for Design of Material and Content
The key implications for the design of materials and their content are to ensure that they are:

* As specific as possible to the needs of the company in terms of its industry and development needs
* Digestible and avoid the introduction of techniques that are not relevant
* Able to maximise the possibility of the owner/manager being able to take away and implement part of the programme in his own company
* Pitched in the right language to communicate, avoiding excessive jargon.
* In small doses (a critical incident approach as opposed to a complete case)
Attempting to start at where the owner/manager already is
Free of threat or assumed value systems
Providing a basis for people to articulate their own needs
As results-oriented as possible
Providing an integrated approach rather than one tied to a subject base

Implications for the Trainer’s Role
One of the major problems for a trainer faced with an audience of owner/managers is that of credibility.

In the training of professional managers credibility can frequently be derived from the role of subject expert. In the small firms such status is likely to rest on the teacher’s ability to demonstrate his relevant experience of the kind of business that is being discussed, and to communicate at the right level.

The major role that may be required of the trainer is that of facilitator for:

* Providing opportunities for group interaction so that they may learn from one another
* Helping problem-solving
* Analysing, bringing out needs and relating them to possible solutions
Teaching methods are likely to concentrate, therefore, on exercises, experimentation and experiential and peer group learning in an attempt to personalise the course objectives for the participants as much as possible. An effective small business trainer will have the ability to build fully upon the experience that the participant brings along with him; an ability to use contributions from participants and structure them within suitable frameworks to encourage systematic learning while retaining participant ownership of learning; the ability to introduce new learning in digestible amounts and in the right language; and an awareness of the need to start from where the participant is already in terms of knowledge and skill and work from there rather from his own standpoint. The ideal trainer might therefore have a sound analytical skill, good interpersonal skills, and wide frameworks of reference, not necessarily able only to restrict himself to a narrow subject area.

Implications for Location and Timing of Training
It is clear that the time the typical owner/manager can afford to invest away from the company on any one occasion is at most one or two days, so that training that demands regular evening or part-time commitment over a period of weeks is likely to be less effective than it should since such owner/managers may frequently find it difficult to meet every one of a sequence of sessions and, once having missed one, may well lose both continuity and motivation.
A local location helps in coping with the time problem but it is important also, given the attitudes towards education and training in general and particularly towards academic institutions, that there should be a good social and physical environment for programmes carried out away from the company base.

WATKINS, ([9]), also has helpful advice to offer to potential trainers.

"It seems appropriate to distinguish three levels of learning which may benefit small firm managers.

(a) taking in specific data.

(b) learning a new form of responsiveness that is, kinds of response appropriate within different kinds of situations and contexts.

(c) learning which makes an individual better at achieving type (b) learning.

Management development programmes not aimed specifically at small businesses usually focus on level (b), but in the United Kingdom our survey showed that those directed towards owner/managers are usually directed at level (a). However, the real needs of small businessmen can only be met at level (b), which normally requires an ongoing relationship between the individual and a trainer. The latter will also, hopefully, encourage type (c) learning since the demands on the time of the owner/manager is widely recognised as a major barrier to business development. The root of the problem is therefore to devise a system whereby owner/managers and others who enter the market for
management development at learning level (a) are encouraged by the quality of provision, the attitudes of the providers and careful persuasion to participate also in programmes at levels (b) and (c). The attitude and approach of programmes at level (a) therefore are more important than the content and this must be directed at improving managerial performance generally and be intensely practical, at least in the early stages until confidence has been developed."

The identification of needs analysis as an important problem in making training accessible to the owner/manager of small businesses was stressed also by the Small Firms and Tourism Division of the Department of Employment, the Government department with responsibility for education and training for the small firm sector. The Department also emphasises the need to provide training which is appropriate and meets the immediate needs of small firms owner/managers, which are accessible geographically as well as temporally.

Much the same kind of comment was made by the National Federation of the Self-Employed which stressed, in particular, the need for hands-on training.

The criteria for training programmes for the small business sector apply to conventional as well as unconventional delivery systems, so in particular, apply to open learning and distance education systems. In fact there are some decided advantages to distance education and open learning systems in attempting to meet the criteria.
This has been recognised by Government, "I am anxious to encourage small firms to consider relevant training opportunities of all types as a route to success. Open Learning methods have much to offer the small business sector in a number of areas including management training.

In the context of our request to focus adult training programmes more sharply on the needs of small firms and enterprise, we have asked the Manpower Services Commission to consider whether there is a need for additional open learning material to improve the management expertise of small firms, and whether more should be done to make small firms aware of the facilities available to them."

These messages have been picked up and developed by the Manpower Services Commission, particularly within their Training for Enterprise Scheme. Drawing on the experiences with the various enterprise programmes, the MSC have specified criteria for an Open Learning programme for Owner/Manager training.

* The programme must be problem centred
* The programme must be modular
* The modules must integrate into a total package with the linkages between modules clearly demonstrable
* Each module must contain open learning material, group work and individual group counselling
The group counselling work in each module should be contained within a half-day or evening session.

* The delivery network needs to ensure quality of provision.

* Content quality must be assured.

* Content must be kept up to date.

The importance of group and counselling work is stressed in a report by Kingfisher Consultants, ([10])

"Distance Learning, on its own, has significant disadvantages to the small business people because it is a solitary study method. Running your own business is a lonely existence. Opportunities to discuss problems with other business people, compare notes and 'bounce' ideas around are rare. It is also difficult to gauge your own success if you do not know how it compares with what others have achieved. Adding this isolation to a solitary study method does not make an attractive proposition. It is therefore important that it is combined with group discussions and counselling."

The first part of this section has considered policy directions to providers of training; a "top-down" approach. The alternative is to consider a "bottom-up" approach and look at comments from the small firms sector on the forms of training they believe to be acceptable.
The Durham Small Business Club’s report, ([13]), showed that owner/managers were more likely to undertake training if they could influence course content, choose the time of attendance, and that courses were short and practical. Overall interest in home based study was expressed by 60% of those surveyed. One of the main recommendations was that “there would appear to be an opportunity for further development of open learning materials within the region.”

The CBI study, ([14]), confirmed the above views and showed that between 30% to 40% would use training provision in at least one of the following formats.

- a day-release course
- evening or weekend classes
- home-based study

One policy implication identified was that the benefits of open learning courses should be better publicised.

We turn now to provision. Within the United Kingdom each university awards its own degrees by royal charter, but all other degree teaching institutions must have their courses validated by the Council for National Academic Awards (CNAA). In 1985 the CNAA commissioned a study designed to identify the nature and extent of small business teaching in undergraduate, postgraduate and post-experience courses in British polytechnics and universities ([6]). Prior to the Bolton report there were no such courses and the study
identified a still relatively limited range of provision, with most emphasis on starting up a business. From a total of 90 institutions surveyed only 20 offered small businesses as an option and only 8 as an option within an undergraduate programme. A variety of reasons are offered as to why there is not more on small firms in the courses concerned.

* the students have little interest in this sector and see their careers in big business
* a lack of staff expertise
* no room for it
* too demanding of staff resources
* lack of appropriate teaching material

There are, of course, a number of honourable exceptions to the above generalisations with specific mention of Stirling University, Trent Polytechnic and the Durham University Business School.

Overall, the conclusion that must be drawn is that the majority of Universities and Polytechnics still fail fully to recognise the role and importance of the small business sector, or indeed of the ways in which management of the small firm differs from that of the large firm, and that the educational sector has a considerable way to go in understanding, developing and integrating small business teaching.
This study was looking at small businesses as a component of courses mostly at the higher education level. The lack of interest identified implies that there is even less of a contribution, if any, towards training programmes specifically for owner/managers of small businesses.

There is, however, considerable provision available, if only the small firm owner/manager can find it.

The study by Ritchie, Asch and Weir, ([7]), of the provision of assistance to small and medium enterprises on Humberside, a region with over 16,000 firms with up to 500 employees, identified over 120 appropriate agencies, and Barrow,([2]), lists over 300 institutions offering courses in the new and small business field, the majority in the further education sector, which is a doubling of provision over the previous two years. However, amongst this provision only 6 are identified as being available through distance education, and of these 6 only one is specifically earmarked for the small firm sector.

More recent studies show distance education provision increasing dramatically with Airey and Goodman,([1]), identifying 28 major selected suppliers of distance education for industry, one of which is the Open Tech programme, though only 3 or 4 are specifically geared to the small firms sector. The latest issue of the Open Tech Directory, summer 1987, lists 5 suppliers of programmes to the small business sector, one of which is one of our case studies.
Of the five case studies investigated for this report only three are concerned with national distance education provision to the small firms sector and of these three, one is still under development with precise delivery arrangements yet to be agreed.

New Tech
This unit is based in North Wales and has produced a training programme "It's Your Business" specifically for small businesses. The programme aims to increase business profitability and efficiency and to increase understanding of marketing, finance and administration, thus boosting the owner/manager's confidence and chances of running a successful small business. It shows the participant how to identify objectives and produce plans. The programme is built round learning units that can be read in thirty minutes and completed in most cases in one hour. There are 180 such units arranged in ten blocks with each block containing a diagnostic guide taking about ten hours of study time. There are four blocks on marketing, two on finance, three on taxation, two on accountancy, two on personnel and one each on legal aspects, stock, premises, microtechnology, and starting a business. The material was prepared by the Small Business Unit based in the School of Management and Business at the North East Wales Institute and is now available through Newtech Business and Innovation Centre.
Open Learning for Small Businesses

Open Learning for Small Businesses was established in 1986, and expects to be fully operational by March 1988, to provide a focused organisation to bring the benefits of open learning to small businesses in the United Kingdom. There are four main activities.

* Provide a comprehensive range of open learning materials specially selected for proprietors, managers and their staff in small businesses.
* Warehouse and distribute open learning materials throughout the United Kingdom.
* Establish contact with small businesses through a national network of main agents who will advise on suitable programmes, supply these and give on-going support to the users.
* Promote open learning through its agents to smaller businesses throughout the United Kingdom.

The Open Learning for Small Businesses System

* selects and commissions open learning materials specifically suited to small businesses.
* Buys, warehouses and distributes the materials to ensure its immediate availability.
* Provides a personal support system for each user through its local agents who encourage the transfer of learning into improved business performance.

Diagrammatically

- Existing open learning material
- Commissioned open learning material
- Warehouse and distribution
- Main agents
- Introduction Agents
- Small business Users
Essentially Open Learning for Small Businesses is a marketing, warehousing and distribution system which selects and commissions material. They fill a clear gap in provision by selecting materials appropriate for small firms from the mass of material generally available, and they provide a focal point for distribution. Their current directory lists 86 titles and 103 main agents.

Small Business Development Programme
This programme is a very substantial joint venture between the Cranfield School of Management and the Open University, supported financially by the Manpower Services Commission, with the objective to improve the management capability of smaller businesses by producing materials which are:

* Problem based
* Modular with access to individual modules.
* Linked to local delivery network.
* Linked to a support network.

The programme is orientated towards the stimulation and control of growth in smaller businesses and will consist of up to 29 modules each of which, typically, will comprise video and audio cassettes, self-study guide and workbook, and will be of a total of four study hours duration.

Each module comprises a distance taught open-learning element followed by a group workshop. These will be situation-based with the user's activities being workbook led. Counsellor
support will be available but group workshops could also be organised on a local basis. Users could access the programme in whole or in part, with the whole programme representing approximately 30 days of training provision.

Two of modules are access modules to each of the key problem areas, "Getting a Business to Grow", and, "Controlling a Business", which adopt a checklist approach to enable owner/managers to identify their own specific problems. The remaining modules are linked with ten main modules and sixteen support modules, so, for example, someone interested in getting a business to grow might start with the relevant access module then move onto a main module, on financial growth say, and then onto a support module on business plans including financial and marketing plans.

Work has started on the production of this programme for completion in 1989.
6 Conclusions

The small firms sector is an important part of the UK economy with 96% of all firms, 19% of all turnover and 25% of all employees. Equally importantly the small firms sector is the seed corn for future economic prosperity with the potential to offer new employment, as a force for innovation and offering economic diversity. Large firms grow from small ones.

The UK economy needs a healthy small firms sector.

The problems faced by the small firms sector are well known and have not changed significantly over the last twenty years. These problem areas stem from the nature of small firms owner/managers which is significantly different from that of most professional managers in large firms. The specialist functioned areas, found as separate departments in large firms, are often all rolled into one in the person of the small firm owner/manager. As a consequence small firms often lack information on sources of finance, are often product orientated with a concentration on design and production rather than on marketing and there is often poor organisation of the routine and administration of the business.

Small firms owner/managers have problems different in kind and in scale of significance for the business compared with large firms.
The training and experience of owner/managers of small firms seems to reinforce a generally negative attitude to education and training.

"The inescapable conclusion is that in general none of the factors in the owner-manager's prior experience nor education nor professional studies nor work experience had been an appropriate or adequate preparation for the stewardship of one's own business. ([9])"

These attitudes and experiences make it unlikely that a small firm owner/manager will be interested in education and training for its own sake. There are, consequently, important implications for providers of training to the small firms sector.

Any training programme for the small firm sector must have a number of significant features.

* The programme must be problem centred.
* The programme must be modular.
* The modules must integrate into a total package with the linkages between modules clearly demonstrable.
* Each module must contain work materials, group work and individual group counselling.
* There must be flexibility in provision over time and place.
* Content quality must be assured.
* Delivery systems must assure quality of provision.
* Content must be up to date.

An analysis of current provision shows that distance education and open learning provision come closest to matching these criteria for a training programme. The case studies, in particular, show that the most successful programmes combine relevance and credibility of materials with group and individual support.

The key issue is to demonstrate that the problems facing small/medium sized organisations can be assisted by distance learning techniques. If this can be done successfully, the level of management ability in the UK should be significantly improved.

+++
## 7 Appendices

### CLWYD UP

<table>
<thead>
<tr>
<th>No.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### DESCRIPTIVE FORM SHEET

<table>
<thead>
<tr>
<th>1. PROJECT NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's Your Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. PROJECT COMMISSIONING PARTY (PARTIES)/PROMOTER (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manpower Services Commission</td>
</tr>
<tr>
<td>Open Tech Unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. FUNDING ORGANISATION, NAME AND ADDRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East Wales Institute</td>
</tr>
<tr>
<td>NEWTECH</td>
</tr>
<tr>
<td>Deeside Industrial Park</td>
</tr>
<tr>
<td>CLWYD CH5 2NU UK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. CONTACT (name, address, telephone, office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr R PICKERING</td>
</tr>
<tr>
<td>Unit Co-ordinator</td>
</tr>
<tr>
<td>Tel: (0244) 821085</td>
</tr>
<tr>
<td>Telex 617134 NEWTEC</td>
</tr>
<tr>
<td>NEWTECH</td>
</tr>
<tr>
<td>Fax: (0244) 822002</td>
</tr>
<tr>
<td>Deeside Industrial Park</td>
</tr>
<tr>
<td>CLWYD CH5 2NU UK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. PROJECT REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>National emphasis has been on Start-Ups and not on continuing business, hence there is a gap in provision for those businesses which are growing and expanding.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. PROJECT OBJECTIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The programme aims to increase business profitability and efficiency and to increase understanding of functional areas, leading to an increase in the owner/manager’s confidence and chances of running a successful small business.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. THE INITIATIVE IS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ STARTING</td>
</tr>
<tr>
<td>✓ UNDER WAY</td>
</tr>
<tr>
<td>□ OVER</td>
</tr>
</tbody>
</table>

---
The programme is built round learning units each of which can be read in thirty minutes. There are 180 such units arranged in ten blocks with each block containing a diagnostic guide taking about ten hours of study time. There are four blocks on marketing, two on finance, three on taxation, two on accountancy, two on personnel and one each on legal aspects, stock, premises, microtechnology, and starting a business.

The basic media used are written documents, workbooks, and audio cassettes. It is planned to add video-cassettes at a future date.

Not known as multiple use of packs after sale is possible.

Management and Chief Executives of small firms with vocational status ranging from graduates to no formal training since leaving school.
12. TRAINERS ASSIGNED TO THE INITIATIVE (tutors, revisers)

<table>
<thead>
<tr>
<th>TOTAL NUMBER</th>
<th>NUMBER OF TRAINEES PER REVISER</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

13. CERTIFICATION, RECOGNITION AND USEFULNESS

No formal certification or recognition available

14. FINANCING

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TRAINEE QUOTA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>£480,000 over first 3 years</td>
<td></td>
<td></td>
<td>now self-financing</td>
</tr>
</tbody>
</table>

Looking to European market. Material sold to Iceland and Singapore and negotiations currently underway over use in Northern Spain.

16. ASSESSMENT

There is no formal evaluation or assessment of the project.
1. PROJECT NAME

Open Learning for Small Businesses

2. PROJECT COMMISSIONING PARTY (PARTIES)/PROMOTER

Manpower Services Commission
Open Learning Unit

3. MANAGING ORGANISATION, NAME AND ADDRESS

Open Learning for Small Businesses
Standard House
15 High Street
Baldock, Hertfordshire  SG7 6AZ  UK

4. CONTACT

Mr C CONNELL
Tele: (0462) 895544
Fax: (0462) 892417
Standard House
15 High Street
Baldock, Hertfordshire

5. PROJECT REASONS

Small businesses find it hard to release staff to attend courses which are often aimed at large companies. Small businesses often have no training function which makes it difficult to locate courses.

6. PROJECT OBJECTIVES

To provide a focussed organisation to bring the benefits of Open Learning to small businesses in the UK. The main activities are to provide a comprehensive range of materials specially selected for owner/managers of small firms; to warehouse and distribute those materials; to form a network of agents in contact with UK small firms.

7. THE INITIATIVE IS:

☐ STARTING  ✔️ UNDER WAY  ☐ OVER
### 8. DISTANCE EDUCATION AND TRAINING CONTENTS AND METHODS

Open Learning for Small Businesses selects and commissions open learning materials from other suppliers, buys and warehouses materials for ready availability, and provides general support through the network of agents. The current directory lists 84 titles with the expectation that this will rise to 140 titles in the near future.

### 9. REQUIRED MEDIA AND EQUIPMENT

All varieties of media according to source of the material.

### 10. TRAINEES

<table>
<thead>
<tr>
<th>ENROLLED</th>
<th>ATTENDING</th>
<th>HAVING COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not known</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 11. TRAINING LEVEL AND VOCATIONAL STATUS OF THE TRAINEES

All levels
12. TRAINERS ASSIGNED TO THE INITIATIVE (tutors, revisers)

<table>
<thead>
<tr>
<th>TOTAL NUMBER</th>
<th>100 - 200 agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF TRAINEES PER REVISER</td>
<td></td>
</tr>
</tbody>
</table>

13. CERTIFICATION, RECOGNITION AND USEFULNESS

Certificates not currently available

14. FINANCING

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TRAINEE QUOTA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>£3000 000 per annum</td>
<td></td>
<td></td>
<td>to become self-financing</td>
</tr>
</tbody>
</table>

15. POSSIBLE EXTENSION OF THE INITIATIVE AT NATIONAL AND/OR EEC LEVEL AS A JOINT VENTURE

Current planning is only for the expansion of titles and the network of agents.

16. ASSESSMENT

No formal evaluation is planned.
1. PROJECT NAME
Small Business Development Programme

2. PROJECT COMMISSIONING PARTY (PARTIES)/ PROMOTER (S)
Manpower Services Commission
Training for Enterprise

3. PROJECTING ORGANISATION, NAME AND ADDRESS
The Open University
Open Business School
Walton Hall
Milton Keynes MK 7 6AA
Cranfield School of Management
Cranfield
Bedford
MK 43 OAL

4. CONTACT (name, address, telephone)
Open Business School
The Open University
Walton Hall
Milton Keynes MK7 6AA
Tel: (0908) 74066
Cranfield School of Management
Cranfield
Bedford
MK43 OAL
Tel: (0234) 750111

5. PROJECT REASONS
Small businesses are not large companies scaled down. They are at different phase of their evolution and as such operate with a different culture and within different operational constraints. Such businesses can fail through lack of management ability, even when trading profitably. Cost factors become important when seeking a massive increase in training provision penetration. Distance education allied to open learning can be cost effective.

6. PROJECT OBJECTIVES
The project objective is to improve the management capability of small businesses by providing a training package which is both attractive (ie practical) and easily accessed at the convenience of the user.

7. THE INITIATIVE IS:
☑ STARTING
☐ UNDER WAY
☐ OVER
The programme will include up to 35 modules, with access possible to each module but with the modules building up to a coherent training package. The modules will be linked to group training based on a local delivery network supported by a counselling/consultancy network. Modules will be of three kinds. Access modules are designed to enable owner/manager to define and analyse their own problems. Main and support modules will each be of 4 study hours duration and concentrate on functional areas such as Marketing, Accounting, Manager Resources.

Each module is a two-part training package: a distance-taught open-learning element followed by a group workshop. The open-learning element will typically contain a workbook/study guide, an audio-cassette and a video-cassette. The user’s activities will be workbook led, that is, the workbook will be the point of entry for the user and will serve both as an instruction manual and as a guide through the components which make up this part of the training.

Material still in production, trainee use will begin in 1989.

All levels, all statuses.
12. TRAINERS ASSIGNED TO THE INITIATIVE
(tutors, revisers)

<table>
<thead>
<tr>
<th>TOTAL NUMBER</th>
<th>NUMBER OF TRAINEES PER REVISER</th>
</tr>
</thead>
<tbody>
<tr>
<td>not known</td>
<td>12 to 20</td>
</tr>
</tbody>
</table>

13. CERTIFICATION, RECOGNITION AND USEFULNESS

Usefulness determined by achievement of objectives. Certification is not available at present.

14. FINANCING

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TRAINEE QUOTA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>£900 000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>for production only over 2 yrs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. POSSIBLE EXTENSION OF THE INITIATIVE AT NATIONAL AND/OR EEC LEVEL AS A JOINT VENTURE

Possible overseas extension to programme. Discussion under way with INSEAD.

16. ASSESSMENT

Assessment of the programme and each module is planned and will be carried out by the Manpower Services Commission/The Open University/Cranfield Steering Committee for the programme.
**PROJECT NAME**
Pilot Programme to use 'Open Tech' Material for Small Business Development

**PROJECT COMMISSIONING PARTY (PARTIES)/PROMOTER (S)**
Manpower Services Commission
Open Tech Unit

**EXECUTING ORGANISATION, NAME AND ADDRESS**
Kingfisher Management Consultants
Kingfisher House
The Fold
Rawtenstall
Rossendale, Lancashire, BB4 8EL

**CONTACT (name, address, telephone, office)**
Mr J CALWAY
Kingfisher Management Consultants
Kingfisher House
The Fold
Rawtenstall, Rossendale, Lancs. BB4 8EL

**PROJECT REASONS**
Kingfisher Consultants are confident that there are a growing number of small businesses in the UK that have potential for substantial growth. One major constraint is the attitude of the owner/manager. They are uncertain of the direction to take for the future and lack confidence to expand their business further. In 1985 Kingfisher Consultants became aware of the material being produced for Open Tech and wished to test the hypothesis that this material could be very relevant to the development needs of small businesses.

**PROJECT OBJECTIVES**
To select a group of owner/managers with reasonable prospects of long term success. To visit each business to assess their problems and growth potential. To explain to the participants how they can plan and construct a growing business and make it more successful.

**THE INITIATIVE IS:**  
- [ ] STARTING  
- [ ] UNDER WAY  
- [X] OVER

---

72
The objectives were to be achieved by a formal presentation of topics directly relevant to the participants, offering a wide choice of Open Tech material for the participants to select and study in their own time, by group discussion on topics based on the practical observation of the participants' businesses, and by providing opportunities for informed meetings between participants.

The Open Tech material eventually chosen was from NEWTECH, a description of which is given in Case Study 1.

<table>
<thead>
<tr>
<th>ENROLLED</th>
<th>ATTENDING</th>
<th>HAVING COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twelve</td>
<td>Six to eight</td>
<td>nine</td>
</tr>
</tbody>
</table>

Some participants with vocational skills, for example, as an electrician or graphic designer.
12. TRAINERS ASSIGNED TO THE INITIATIVE (tutors, revisers)

TOTAL NUMBER 4

NUMBER OF TRAINEES PER REVISER 3

13. CERTIFICATION, RECOGNITION AND USEFULNESS

No certification available

14. FINANCING

(check the corresponding box and, if possible, indicate the amount in national currency)

PUBLIC

PRIVATE

TRAINEE QUOTA

OTHER

£7 000 per group

15. POSSIBLE EXTENSION OF THE INITIATIVE AT NATIONAL AND/OR EEC LEVEL AS A JOINT VENTURE

Could possibly be extended given a knowledge of market opportunities.

16. ASSESSMENT

No formal evaluation under terms of contract, but informal interviews held at end of programme and 12 months later.
1. **PROJECT NAME**

Colchester Lathe Company Limited

2. **PROJECT COMMISSIONING PARTY (PARTIES)/PROMOTER (S)**

Colchester Lathe Company Limited

3. **JURISDICTION, NAME AND ADDRESS**

Colchester Lathe Company Limited
5 Station Road
Colchester
Essex CO2 8AE

4. **CONTACT**

Mr F SEAL
Training Manager
Tel: (0206) 865161
Colchester Lathe Company Limited
5 Station Road
Colchester, Essex, CO2 8AE

5. **PROJECT REASONS**

Colchester Lathe Company Limited were faced with a traditionally trained workforce time when the industry was moving substantially in the adoption of using computer controlled lathe equipment. The was to take on new people with the necessary high-tech skills - assuming there were any - or to build on the existing workforce. The company decided to retrain as many of its existing workforce as possible using open-learning material as the most effective and least disruptive method.

6. **PROJECT OBJECTIVES**

Retrain existing workforce in computer numerical control (CNC) techniques in order to build and use CNC lathes.

7. **THE INITIATIVE IS:** □ STARTING  ✔ UNDER WAY  □ OVER
8. DISTANCE EDUCATION AND TRAINING CONTENTS AND METHODS

The project used Open Tech materials from Eastek and was used as in-service material with trainees withdrawn from the shop floor during normal working hours to the training unit where the trainees could work at their own pace. The training staff were in attendance to help.

9. REQUIRED MEDIA AND EQUIPMENT

The media used covered written documents, audio cassettes and video cassettes and working with a BBC computer as a hardware simulator.

10. TRAINED

<table>
<thead>
<tr>
<th>ENROLLED</th>
<th>ATTENDING</th>
<th>HAVING COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initially 12 but a total of 170 could be eligible for training over a period</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. TRAINING LEVEL AND VOCATIONAL STATUS OF THE TRAINED

10% technical staff, 60% skilled workers, 20% semi-skilled.
12. TRAINERS ASSIGNED TO THE INITIATIVE (tutors, revisers)

<table>
<thead>
<tr>
<th>TOTAL NUMBER</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF TRAINEES PER REVISER</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

13. CERTIFICATION, RECOGNITION AND USEFULNESS

No formal certification, but possible BTECH certification under consideration.

14. FINANCING

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>PRIVATE</th>
<th>TRAINEE QUOTA</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>£100,000 for 60 trainees</td>
<td></td>
</tr>
</tbody>
</table>

15. POSSIBLE EXTENSION OF THE INITIATIVE AT NATIONAL AND/OR EEC LEVEL AS A JOINT VENTURE

There is a strong belief by Colchester Lathe Company Limited that this training package could have wider national and international usage.

16. ASSESSMENT

There is no formal evaluation, but normal line-management report were made on progress of the project.
## 7.2 ORGANISATIONS AND PERSONS CONTACTED

### 7.2.1 PERSONS

<table>
<thead>
<tr>
<th>Name</th>
<th>Initials</th>
<th>Title and Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASCH</td>
<td>D</td>
<td>Open Business School, The Open University</td>
</tr>
<tr>
<td>BURNS</td>
<td>P</td>
<td>National Westminster Bank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professor of Small Business Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cranfield School of Management</td>
</tr>
<tr>
<td>CALWAY</td>
<td>J</td>
<td>Kingfisher Management Consultants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rossendale, Lancashire</td>
</tr>
<tr>
<td>CARPENTER</td>
<td>J</td>
<td>Business Venture Club, Milton Keynes</td>
</tr>
<tr>
<td>CHEESMAN</td>
<td>R</td>
<td>Small Firms and Tourism Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Employment</td>
</tr>
<tr>
<td>CORNWELL</td>
<td>K</td>
<td>Colchester Lathe Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colchester, Essex</td>
</tr>
<tr>
<td>DALEY</td>
<td>M</td>
<td>Chief Statistician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Department of Employment</td>
</tr>
<tr>
<td>DOWSE-BRENNAN</td>
<td>A</td>
<td>Education and Training Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Federation of Self-Employed</td>
</tr>
<tr>
<td>HYDE</td>
<td>G</td>
<td>Adult Training Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Manpower Services Commission</td>
</tr>
<tr>
<td>PETERS</td>
<td>I</td>
<td>Small Firms Council, Confederation of British Industry</td>
</tr>
<tr>
<td>PICKERING</td>
<td>R</td>
<td>Unit Co-ordinator, NEWTECH, Clwyd, North Wales.</td>
</tr>
<tr>
<td>SEAL</td>
<td>F</td>
<td>Colchester Lathe Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colchester, Essex</td>
</tr>
<tr>
<td>STOREY</td>
<td>Dr DJ</td>
<td>Centre for Urban and Regional Development Studies,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The University of Newcastle upon Tyne</td>
</tr>
</tbody>
</table>
7.2.2 ORGANISATIONS

British Institute of Management

Business and Technician Education Council

City and Guilds Council

Confederation of British Industry, Small Firms Council

Cranfield School of Management

Department of Employment, Small Firms Service

Department of Trade and Industry

Institute of Small Business Management

Kingfisher Management Consultants

London Enterprise Agency

Manpower Services Commission

National Chamber of Trade

National Economic Development Organisation

National Enterprise Board

National Federation of Self-Employed

National Training Index

Royal Society of Arts

Small Business Management Education Association

The Open University, Open Business School

Trades Union Congress

Vocational Guidance Association
7.3 BIBLIOGRAPHY

1. AIREY F and GOODMAN M N
A survey of Distance Education in Industrial Training
Harbridge House February 1986

2. BARRON C
The Small Business Guide
British Broadcasting Corporation 1984

3. BOLTON J E
Small Firms - Report of the Committee of Inquiry on Small Firms.
Her Majesty's Stationery Office February 1971

4. CURRAN J and STANWORTH J
Bolton Ten Years On - A Research Inventory and Critical Review
In Perspectives on a Decade of Small Business Research Gower 1982

5. GIBB A A
The Small Business Challenge to Management Education
Journal of European Industrial Training
Vol 7, No 5, p 1-41 1983

6. GILLIGAN C, BALL M and THORNE P
Small Business Teaching in Great Britain: a study of the provision of courses at undergraduate, postgraduate and post-experience levels
Council for National Academic Awards 1985

7. RITCHIE D, ASCH D and WEIR A
The Provision of Assistance to Small and Medium Enterprises on Humberside.
Humberside College of Higher Education

8. TRIPP FIER D
Written Parliamentary Answer by the Small Firms Minister
Hansard, 21 January 1986
Answer 31

9. WATKINS D
Development, Training and Education for the Small Firm: A European Perspective
European Small Business Journal Vol 1, No 3, p 29-44 1983

11. Trends Business Report
As reported in 'Business Matters' The Daily Telegraph 16 June 1987

12. The Small Firms Survivors


14. Owner/Managers' Questionnaire on Management Training for Smaller Businesses
Confederation of British Industry. April 1986

15. Forum of Private Business
As reported in 'New Business Guardian'
The Guardian 27 July 1987

PA Management Consultants for Trainer Support Services January 1986

17. A challenge to Complacency: changing attitudes to training
Coopers and Lybrand Associates
A report to Manpower Services Commission and the National Economic Development Office. November 1985

18. Small Business Survey
Financial Times. 29 April 1987

19. Lending to Small Firms
A study of appraisal and monitoring methods
National Economic Development Council July 1986
<table>
<thead>
<tr>
<th>Contents</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1 New tech</td>
<td>2</td>
</tr>
<tr>
<td>2 Open learning for small businesses</td>
<td>8</td>
</tr>
<tr>
<td>3 The Open University/Cranfield school of management</td>
<td>17</td>
</tr>
<tr>
<td>4 Kingfisher management consultants</td>
<td>27</td>
</tr>
<tr>
<td>5 Colchester lathe company</td>
<td>34</td>
</tr>
</tbody>
</table>
0 Introduction

These case studies are part of a study into Distance Education and Training being undertaken by the European Centre for the Development of Vocational Training (CEDEFOP), a research organisation funded through the European Economic Commission (EEC).

The aim of the study is to identify, analyse and describe the supply of, and demand for, distance education and training by the small firms sector in the United Kingdom, France, Italy, Spain and West Germany.

A major part of the study is to identify a number of specific cases which demonstrate the types of distance education and training available and to subject those cases to a specific and systematic analysis.

This report contains the United Kingdom case studies whilst the Main Report contains full details of all aspects of the study together with conclusions.
1 New tech

1.0 Introduction
This, the first of the study cases, was chosen as a typical example of material provision and as best fitting the analytical methods proposed for the overall study. The materials are available throughout the United Kingdom under the title 'It's Your Business', and further details are available from:

Mr R PICKERING
Unit Co-ordinator
NEWTECH CLWYD LIMITED
Deeside Industrial Park
CLWYD
CH5 2NU
United Kingdom
Telephone (0244) 821085
Telex 617134 NEWTECH
Facsimile 0244) 822002

1.1 Background
Over the period 1983/84 there was a significant decline in job opportunities in the North Wales/Deeside region with the closure of major employers such as British Steel and Courtaulds. Job creation schemes following in the wake of these closures included alternative employment provision through the encouragement of new businesses. Ad hoc small firms training was available locally, but at a minimal level, and concentrated on 'Start-Ups' and the creation of new businesses rather
than on provision for continuing and growing businesses. This obvious gap in provision was spotted by the North East Wales Technical Institute and, with the encouragement of Open Tech who requested submissions, approval for a project was given in September 1984.

Work started on market research to identify local requirements and the results of two surveys were reflected in the materials.

However, during 1985, the importance of the small business sector to central government changed with the consequence that their detailed production submission was turned down pending a more 'up-market' version within a price limitation. The original submission had 300 titles compared with the current 180, and included audio, video, Computer Based Training as well as textual material. All these media, except textual material, were discarded as too expensive and not widely available to the market. The current project contains text only.

The revised project was eventually approved and funding made available with production starting in 1985.

1.2 Objectives
The overall objective was to provide training material relevant and useful to small businesses, taking into account the reluctance of small businesses to attend courses through a mistrust of the educational system or
time factors involved in running a small firm.

It aims to increase business profitability and efficiency, and improve understanding of marketing, finance and administration, thus boosting the owner/manager's confidence and chances of running a successful small business. It shows the participant how to identify objectives and produce plans - essential steps if the business is not to fail.

The programme is aimed at:

* the individual who is thinking about starting a business.
* the individual who is already in business, but has identified certain problem areas where help is needed.
* the individual in a successful business who wants to improve.

There is no specific business sector targeted by the programme and the training is open to a very wide range of trainees in terms of previous educational background. The programme covers the acquisition of specialised theoretical knowledge and technical knowledge.

1.3 Development

The materials were developed by the Small Business Unit in the School of Management and Business at the North East Wales Institute but are now marketed by NEWTECH
Clwyd Ltd through their NEWTECH Business and Innovation Centre.

The project was approved and funded by the Manpower Services Commission Open Tech Unit and there is a Steering Committee to co-ordinate liaison between the Open Tech Unit and NEWTECH.

As has been mentioned, at an earlier stage of planning, some market research was undertaken. First, research was carried out using companies on a starter course, as well as 90 other companies. The objective was to determine their training requirements and the results are reflected in the materials. Early versions of the materials were piloted by Bangor University in six regional centres.

The actual production started with 20-30 writers, the majority of whom were local with 20% from outside, such as the Small Firms Service. It was found quite early on that there were difficulties in producing the right sort of material and, as a consequence, the project finished with six writers, no subject specialists, and one editor. The small business background helped with eventual credibility in the market place.

The Design of the materials took about six months, with a further 18 months to write and edit. Ongoing activity includes adding and updating material.

In cost terms, the project was set up with a grant of
£480 000 over 3 years but now is self-financing, so that it can be said that 95% of funding is from public sources and 5% from sales. About 40% of the costs went on media production, 22% on non-trainers staff costs, 12% on running expenses, 15% on information and advertising and 11% on capital and accommodation costs.

It is estimated that the training materials cost about £1 000 per study hour to produce, showing the need for high volumes to reduce the cost per hour per trainee. The single unit for each of the 180 units is about £3.00.

1.4 Content
The programme consists of 18 blocks each of 10 units with one block on starting a business, four on marketing, two on finance, three on taxation including VAT, two on accountancy, one on legal aspects, one each on stock, premises and microtechnology, and two on personnel. Each unit can be read in about 30 minutes and in most cases completed in one hour, that is, the total programme contains about 180 hours of study material.

There is also a useful problem solving guide to help select the most appropriate unit. For example, under finance typical questions are 'Can you prepare a balance sheet for your business?', or, 'Do you know how to calculate your profits?' If the answer is no to any of these questions then the guide refers to the appropriate unit. Each unit is text based and it is
expected that about 50% of the study time will be spent reading and 50% on activities. Some use is made of audio-cassettes but other media were considered and rejected on the basis of the cost to the end user.

Trainers or tutors are not used within this programme nor is it known how many have used the materials as only sales figures are known.

1.5 Evaluation and Extension
There has been no formal evaluation of the programme, only responses from customers expressing satisfaction with the match between objectives and results.

However, the Kingfisher Management Consultants Case Study gives an interesting perspective on the use of these materials.

Entry into the European market is being sought but to date the material has been sold to Iceland and Singapore and negotiations are underway over the licensing of use of the materials in Northern Spain. It is felt that the usefulness of these materials in other cultures and contexts depends more on the approach than the content.
2 Open learning for small businesses

2.0 Introduction

One of the problems facing the owner/manager of a small firm is where to go for advice and information on the relevance of particular open learning training packages. The current Open Tech directory has over 600 pages of programmes and projects only some of which are applicable to the small firms sector.

This case study was chosen as an example of the attempts to find a way through the mass of materials. Open Learning for Small Businesses is a programme to bring the benefits of open learning to small businesses in the UK. The main activities are to provide a comprehensive range of materials specially selected for owner/managers of small firms; to warehouse and distribute those materials and to form a network of agents in contact with UK small firms. Essentially Open Learning for Small Businesses is a marketing, warehousing and distribution system which selects and commissions material.

Further details are available from:

Mr. C CONNELL
Open Learning for Small Businesses
Standard House
15 High Street
Baldock
Hertfordshire  SG7 6AZ
UK
Tel: (0462) 895544
Facsimile (0462) 892417
2.1 Background
This particular project was the brain-child of Mr C Connell in that in his former occupation he was having increasing difficulty in identifying suitable open-learning packages, he was convinced of the appropriateness of this open-learning/training approach for small firms to release staff and small firms have no training functional area to locate courses. Approaches to the Open Learning Unit of the Manpower Services Commission led to the establishment of Open Learning for Small Businesses in 1986 with developmental work leading to the programme becoming part operational in the Spring of 1987, with an initial range of materials and the first group of agents. It is expected that Open Learning for Small Businesses will be fully operational by March 1988.

2.2 Objectives
Open Learning for Small Businesses is established to bring the benefits of open learning to the small businesses widely scattered throughout the United Kingdom. Their sole purpose is to help small businesses start up, grow and prosper.

"In an era when new skills have to be learned quickly to cope with a rapidly changing business environment, traditional training methods are not always adequate or available. Open learning is the newly developed method which is of special value to people in businesses where time is short, open learning takes the learning into the practicalities of the
business.

In open learning it is the learner who is responsible for satisfying his own interests and meeting his own needs. He decides when and where he will study and how much time he can afford. It's the learner who agrees the type of training support which will suit him best.

Smaller firms can be in any sphere of business, and, whether they are starting a business or growing to the stage where they have to take on more staff and cannot control everything themselves, they need business skills. There is no room for the unskilled amateur in today's ruthless competition. They need good business ideas, but must back them with solid business skills to turn their ideas into projects.

We recognise the special needs of people involved in small businesses. They have little time for learning and have limited resources but they do have immediate needs to acquire and develop those skills which are vital for success in today's increasingly competitive and changing business environment." (Open Learning for Small Businesses, Explanatory Leaflet)

The dissemination of these benefits of open learning to the small firms sector is to be achieved through four main activities.
* Provision of a comprehensive range of open learning materials specially selected for proprietors, managers and their staff in small businesses.

* Warehouse and distribution of open learning materials throughout the United Kingdom.

* Establishment of contact with small businesses through a national network of main agents who will advise on suitable programmes, supply these and give on-going support to the users.

* Promotion of open learning through its agents to smaller businesses throughout the United Kingdom.

As has been indicated the project aims at a very wide target population, those working in small firms. There are no barriers to entry, for example in terms of educational attainment, nor is the project targeted at a specific industry sector. Essentially the targets will be self-selecting in that they will volunteer themselves into training, or will be helped to so volunteer.

It was suggested to us that the twin motivating factors will be fear and greed; fear for the future of their company, and greed as the desire for growth in profitability.
2.3 **Development**

The Open Learning for Small Businesses System:

* Selects and commissions open learning materials specifically suited to small businesses.

* Buys, warehouses and distributes the materials to ensure its immediate availability.

* Provides a personal support system for each user through its local agents who encourage the transfer of learning into improved business performances.

The system can be shown diagrammatically.
A look at this diagram will show that as a consequence of using existing open learning material there has to be interaction with the complete range of supply and suppliers of open learning such as commercial organisations, vocational and educational organisations, public and private, and trade associations. All these suppliers are, in a sense, partners in the project as without their materials being available for distribution the project could not have got off the ground.

In a more formal sense the Manpower Services Commission Open Learning Unit is an important ingredient in the project, in recognising the value of the initiative and in providing the initial financial support.

The diagram also indicates the important role that main and introductory agents will play in the enterprise. For most small businesses it will be the main agent who represents Open Learning for Small Businesses.

Main agents will undertake a positive role to contact and sell to small businesses in their area or sphere of interest. They are likely to have an existing interest in the development of small businesses and see Open Learning for Small Businesses as a significant aid to their work. Agents will be selected on both geographical and specialisation grounds and agents will be actively encouraged to form networks of introductory
agents so that they have a greater collective impact on their markets. Agents will be found among colleges and education bodies, business advisory/development agencies, business associations and clubs and commercial training organisations.

The main aid to these agents is a small business directory which describes the open learning materials available, lists the main agents and the services they provide. At the time of the interview (June 1987) the directory listed 103 agents and 140 titles though the eventual aim was a list of 200-250 agents covering the whole UK. Mention should also be made of a marketing hook for agents, itself developed in open learning format.

The project was set up with initial funding of 300 000 per annum for two years from national public funds provided by the Manpower Services Commission. This represents about 99% of the required funding with 1% coming from private sources. The pattern of expenditure for the first two years in percentage term is as follows.

<table>
<thead>
<tr>
<th></th>
<th>1986</th>
<th>1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating costs</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>Acquisition</td>
<td>55</td>
<td>33</td>
</tr>
<tr>
<td>Marketing</td>
<td>30</td>
<td>33</td>
</tr>
</tbody>
</table>
2.4 **Content**

Because most of the material available through Open Learning for Small Businesses is produced by other agencies the selection of content is mainly in the hands of those agencies. What Open Learning for Small Businesses did was to approach the selection of existing material for their project through the specification of certain criteria.

It was felt that the material had to be appropriate and practical for the small businessman, and not consist of reading alone. The material had to be interactive with the learner, but also tutor free, though the local agents do have the freedom to find appropriate tutorial support at an addition to the basic price. The materials selected had to be in regular supply and to provide a viable margin. The materials had to be professionally presented, typeset and not just photocopies. The materials have to describe their purpose and be of commercial benefit to the small firm using the material.

Consultants were used to assist in this selection process and the final selection covered general theoretical knowledge, specialised theoretical knowledge and vanguard technology, as well as the acquisition of practical capacities and skills.

The range of media used again depended on the media selected by the suppliers and covers the complete spectrum.
Open Learning for Small Businesses also identified a gap in provision for those involved with supervisory activities and for staff in small businesses as opposed to owner/managers. Consequently they have commissioned their own material to add to their lists.

The current directory lists 140 titles in the general areas of Marketing and Sales, Finance and Accounting, Management, Production and Operations, Personnel, Law, New Technology, Staff Units and Trade from at least nine different suppliers. Each entry lists the contents of the material, what will be achieved through study of that material, price, media used including the number of pages of text, the depth of the contents from concise to comprehensive, the suitability for type of user, Partner/Senior Manager, Manager, Staff, and type of business, existing or starting.

2.5 Evaluation and Extension

No formal evaluation of the project is planned but informal evaluation will be carried out by individuals and companies using the materials and Open Learning for Small Businesses will be carrying out the usual marketing analysis to assess their own performance. Possible extensions to the project could include a video library, bookshop and the sale of learning hardware. It is not seen that this project could carry over to other national contexts through overseas marketing though the concept could have wider applicability.
3 The Open University/Cranfield school of management

3.0 Introduction

This case study concerns the development of a programme for small firm owner managers which will not be available until late 1988 at the earliest. It is included here for a number of reasons.

First, it is the most elaborate programme of provision yet conceived in the UK and draws on all the experiences gained by the Manpower Services Commission through the Open Learning Unit and the Training for Enterprise schemes. It will be a programme which matches closely the criteria referred to in Section 5 of the Main Report.

Second, it will be produced by collaboration between two major educational providers on a scale not previously attempted. It will draw on the strengths of Cranfield School of Management in the Small Business area and The Open University expertise in distance and open learning and their knowledge of the most effective teaching and learning strategies.

Thirdly, it will make available materials of high quality using all available media.

The programme, called the Small Business Development Programme, resulted from a presentation by the Training for Enterprise division of the Manpower Services Commission, in mid-1986, to potential producers of open
learning materials on the need for a new approach to provision based on the criteria already referred to. Subsequent to that meeting invitations to tender were issued, and, though The Open University and Cranfield School of Management had attended that meeting, each in their own right, they did agree to produce a joint tender which was successful. The original tender was for the production and delivery of the materials but subsequently the Manpower Services Commission only issued a contract for production with delivery mechanisms still under discussion, including the possible use of The Open College. This separation of production and delivery caused a consequential delay in production.

Further details are available from:

Professor P Burns  
National Westminster Bank Professor of Small Business Development  
Cranfield School of Management  
Cranfield  
Bedford MK43 0AL  
Tel: (0234) 750111

or

Professor A Thomson  
Dean of The School of Management  
The Open University  
Walton Hall  
Milton Keynes MK7 6AA  
Tel: (0908) 74066
3.1 **Background**

We have referred above to the Manpower Services Commission criteria from the Main Report.

* A programme must be problem centred
* A programme must be modular
* The modules must integrate into a total package
* Each module must contain open learning material, group work and individual group counselling
* The group and counselling work should be contained within a half-day or weekend session
* The delivery network needs to ensure quality of provision
* Content quality must be assured
* Content must be kept up to date

These criteria developed from experience with the Training for Enterprise schemes, which have now been running for over 10 years, starting with about 36 students in the first year and having reached now over 100 000. The original market was the unemployed and it is only with time that schemes have been extended to the owner/manager market. The current aims of Training for Enterprise are:

* to increase wealth creation
* to cut business failure rates
* to be concerned with the knock-on effects of failure
Current start-up programmes have a market penetration of 25% whilst training for established companies has a market penetration of only 2.5%. Many of the reasons for this lack of market penetration are discussed in the Main Report.

There is a strong belief in the Adult Training Division of the MSC that existing materials will not succeed in increasing market penetration as they fail to match the criteria in some way or other. Only materials matching the criteria are likely to succeed and to succeed in a cost-effective way given the scale of the training requirement.

Reasons such as these led to the MSC invitation to tender.

Cranfield School of Management is part of Cranfield Institute of Technology and is one of the largest and most prestigious University Business Schools in Europe. Amongst its many departments covering all aspects of management are The Small Business Development Centre, The Enterprise Development Centre and The Entrepreneurship Research Centre together providing a focus for work in the small firms sector.

The Open University has pioneered distance-taught open learning in the UK for the last seventeen years and has produced many hundreds of courses and training packs. The Open University claims experience without equal in
the costing, development, assessment, production and delivery of open learning material. Through its Open Business School it has been acquiring experience of the effectiveness of these techniques for management training. Given that the two institutions are less than 10 kilometres apart geographically it was natural that they should come together for this project.

3.2 Objectives
The basic objective of the Small Business Development Programme is to improve the management capability of smaller businesses by providing a training package which is both attractive, practical and easily accessed at the convenience of the user. The target audience is primarily owner managers and key employees of small businesses with between 5-50 employees. These businesses should be capable of supporting growth. The programme is aimed at those small firms which need help in generating growth or controlling growth.

This leads to the educational philosophy of the programme being geared to deal with three problem areas.

1) Getting a business to grow as the owner/manager wants.
2) Facing and wishing to reverse a decline in sales.
3) Controlling the growth of the business.

In short, existing material is often based on the
difficulties of small businesses, whilst this programme tries to look at opportunities.

3.3 Development
The programme is a joint venture between The Open University and Cranfield School of Management funded by the Manpower Services Commission. The oversight of the project is in the hands of a steering committee including all three parties. The production follows the usual practice in The Open University of operating through a Course Team, whose membership includes academics from both institutions and joint chairmen, one from each institution. The Course Team also includes course manager support, editors, designers and BBC producers.

The production costs of £900 000 have been provided by the MSC. There are no firm details about the cost of delivery but, given a take up of about 10 000 modules the cost per module could be less than £80 with a trainer fee in the range £50 - £60 per module. However, at this stage all delivery costs are speculative.

3.4 Content
The design and content of the programme is heavily influenced by the MSC criteria and the analysis of known needs. The programme consists of a number of modules with each module designed round the following process described in figure 1.
Assimilation of module information

Analysis of business 'problem' situation

Group Work

Solution of business 'problem'

Counselling

Figure 1
Each module is a two-part training package: a distance taught open learning element followed by a group workshop. The task of the open learning element is to bring the user to a level of competence which enables him to apply the techniques and concepts of the topic area to his own situation. It will be interactive, making extensive use of the owner manager's own situation which will be developed during group work. The primary features will be integration of the various media components and access, at a distance, to a local counsellor.

The open learning element will be work-book-led with this work-book being both instruction manual and guide through the components. Audio and video components will reinforce points made in the text, provide illustrations or develop the discussion.

Typically, each module comprises video, audio cassette or floppy disk, self-study guides and workbooks and a tutor guide. The whole programme represents over 200 study hours of material with each module requiring about 4 hours of study.

The modules are of a number of types.

Access Modules are designed to introduce the owner manager to the need for training through role models and situations with which they can identify.
Main Modules are the teaching modules that provide the overall framework for further work.

Support or Application Modules take the study further into specific, detailed 'problem' areas.

Figure 2 lists currently suggested modules and interconnections.

It is expected that students on the programme will have access to video replay facilities and computer equipment.

3.5 Evaluation and Extension
Evaluation is planned but the precise format will depend in part on the chosen delivery system.

Similarly extensions to the programme are possible in the light of experience.
Small Business Development Programme

Module Plan

ACCESS

1. Strategies

MAIN

2. Marketing (2 units)
   - 2.1 Product Development
   - 2.2 Price
   - 2.3 Customer Service
   - 2.4 Promotion
   - 2.5 Selling
   - 2.6 Retail Selling
   - 2.7 Exporting & Importing

3. Managing Resources
   - 3.1 Design
   - 3.2 Improving Quality
   - 3.3 Purchasing
   - 3.4 Productivity and Technology
   - 3.5 Decisions
   - 4.2 Budgeting
   - 4.3 Bookkeeping and Control
   - 4.4 Accounting Control in Retail
   - 4.5 Taxation

4. Accounting for profit (2 units)

5. Leadership and Motivation
   - 5.1 Selecting Employees
   - 5.2 Employment law
   - 5.3 Office Management
   - 5.4 Time Management

SUPPORT

2.1 Product Development
2.2 Price
2.3 Customer Service
2.4 Promotion
2.5 Selling
2.6 Retail Selling
2.7 Exporting & Importing

APPLICATIONS

A.1 The Business Plan
A.2 Financial Planning Using Computers
A.3 Financing Growth

B.1 Controlling a Business
B.2 Stock Control
B.3 Debtor/Creditor Control
B.4 Accounting Control System Using Computers

Help, Advice Information Book

Figure 2
4 Kingfisher management consultants

4.0 Introduction
The three previous case studies have looked at versions of the supply of open learning to the small firms sector. The remaining two case studies consider the perspective from the users point of view. This case study looks at the details of a pilot study of open learning material run by Kingfisher Management Consultants for the Manpower Services Commission Training for Enterprise programme. Kingfisher Management Consultants are active in the area of advice, counselling and support to small firms in North Lancashire and it was natural for them to consider open learning provision as materials became available. This study looks in detail at the experiences of twelve people who tried the pilot programme. Further details are available from:

Mr J CALWAY
Kingfisher Management Consultants
Kingfisher House
The Fold
Rawtenstall
Rossendale
Lancashire BB4 8EL
Tel: (0705) 218850

4.1 Background
Kingfisher Consultants Limited is a professional business consultancy company specialising in providing
practical advice that is directly relevant to the needs of small firms. The five directors have between them a broad spectrum of qualifications, skills and practical experience of finance, marketing, production, personnel and general management matters. Their clients include a growing number of small firms that are successfully expanding their businesses and their profits through the introduction of improved business planning and control techniques. They are confident, from their experiences, that there is a growing number of small firms in the UK that have survived the trauma of startup, succeeded in developing gradually through the first 18 month of trading when the risk of failure is highest, and have the potential for substantial growth. In the last two years they have helped around 60 such companies.

Kingfisher Consultants became aware of the Open Tech in 1985 and soon realised that a considerable amount of the material being produced was very relevant to the development needs of small businesses. In March 1986 they submitted to the MSC a proposal for a pilot project designed to test the application of 'Open Tech' material to small firms around Rossendale, over a five month period between July and November 1986. The proposal was accepted by the MSC and is reported on here.

4.2 Objectives
The main programme objective was to test the applicability of Open Tech material for the small
business sector. This was to be achieved in the following way.

1. Selecting 12 owner/managers of small businesses that have reasonable prospects of long term success. The selection to be from the Rossendale area in order to test the hypothesis within a well defined geographical area.

2. Visiting each business to assess their problems and their growth potential. It was felt to be essential that first-hand knowledge of the participating firms was gained in order to tailor the programme to the participants' needs. The methods then become relevant which encourages group discussion and confidence building.

3. Explaining to the participants how to plan and control a growing business and make it more successful.

4. Convincing the participants that the application of simple business planning and control techniques are fundamental to the successful expansion of a small business.

These objectives were to be achieved through a programme which includes:

1. Formal presentation of topics that are directly relevant to the participants; these presentations
to be as brief as possible and directly relevant to their current needs.

2. Offering a wide choice of Open Tech material for the participants to select and study in their own time and at their own pace between the evening sessions.

3. Group discussions during which the consultant involved will develop the topic he has introduced by leading a discussion based on its practical application to some of the participants' businesses.

4. Providing an opportunity for the participants to meet informally to discuss their problems and plans.

The trainees were recruited through a process beginning in June 1986 and involving adverts in the local Rossendale free newspaper, the issuing of a press release leading to articles in the local press, the displaying of posters in prominent positions and by contacting relevant professional advisers, accountants, lawyers and so on. This resulted in 20 applications for 12 available places with 15 considered suitable for the programme. The 12 selected were chosen on the basis of being most likely to benefit from the programme. The unsuccessful 3 were given the option of joining a later programme. Of the 12 small firms selected all but three were employing three or less,
with the exceptions employing 10, 11 and 20 respectively. The firms covered a wide range of occupations and educational and training backgrounds. Four were from the catering and food supply sector, one runs a residential home for the elderly, one is a graphic designer, one a builder, one an electrician, one a vehicle mechanic, one a shoe manufacturer, one a shop owner and one an equipment manufacturer. All the businesses except two have been trading for at least one year but less than five, with the exceptions trading for 25 years.

4.3 Development
The project could not have got underway without financial support from the MSC. The MSC provided £7000 as the cost of the programme which was free to participants. The cost per trainee was £583. The breakdown of expenditure was 14% on planning and design, 21% on buying in materials, 36% on trainers wages, 7% on other staff costs, 14% on running expenses and 7% on information and advertising. There is a clear view that the cost per trainee could be reduced if the project were part of a three year rolling programme with trainees paying a fee of about £35.

The only outside organisation involved was the MSC, in the way described above.

4.4 Content
The programme started with an introductory session in early July 1986, followed by 10 fortnightly evening
sessions, ending in November. During December each of the participants was interviewed to obtain their reactions to the programme. Telephone counselling advice was available throughout the programme.

The topics covered in the 10 evening sessions included Self Management, Business Planning, Financial Control, Marketing and Personnel.

The open learning materials used were selected from the NEWTECH range as being most suitable for the programme and covered all the topic areas except Self Management. This was felt to be a serious omission as the most scarce and valuable resource for a small firm is the owner/manager's time, and it was surprising that it was not covered in the NEWTECH range. It was found that the NEWTECH units were pitched at the right level for the majority of small firms owner/managers.

Feedback from the group and counselling sessions showed that the units were being used and were deemed to be very useful by the participants.

The choice of NEWTECH units determined the media used.

The programme used four counsellors at different times as "trainers" and "training consultants", the most important feature in the selection of these "trainers" being their knowledge of running a small business and hence their credibility.
4.5 Evaluation and Extension

Kingfisher Consultants were required to report on the outcome of this pilot programme to the MSC, and it is clear that this report has been one of the influences on the MSC in the development of their criteria for open learning programmes for small firms.

All 12 participants started though 3 dropped out, one by the second session and two by the fifth.

Unstructured interviews were conducted at the end of the programme with the 9 completing participants feeling the programme had been worthwhile. They agreed that:

1. The topics covered were relevant
2. Duration, timing and venue of the evening sessions was satisfactory
3. The blend of group discussions, lectures, open learning units and individual counselling was about right. There was a strong preference for the practical rather than theoretical parts of each topic.
4. The NEWTECH units were felt to be very useful.
   They were appreciated because of their flexibility over time, place and pace of study.

Overall Kingfisher Consultants are satisfied that the basic concept and content of the programme are on the right lines and that open learning through distance education has a useful and effective role to play in the training of the small firm owner/manager.
5 Colchester lathe company

5.0 Introduction
This final case study looks at a particular company faced with a massive re-training problem and their use of open learning material to solve their problem. This example has been included as one which is at the medium end of the range of companies in the UK and which has successfully used open learning to upgrade the technological skills of its workforce.

Further details can be obtained by contacting:
Mr F SEAL
Training Manager
Colchester Lathe Company Limited
5 Station Road
Colchester
Essex CO2 8AE
Tel: (0206) 865161

5.1 Background
Colchester Lathe Company is a long established producer of industrial lathes. In the early 1980’s the company employed 1200 people, but the effect of the recession and overseas competition drastically reduced the workforce and at the time of this project they were employing about 500 people with the numbers still declining.

At the same time the company was faced with the need to change its product line with their competitors
introducing Computer Numerically Controlled (CNC) lathes. Colchester Lathe Company had to follow suit to stay in business. Not only had they to make the new type of equipment, they had also to learn to use it in their own manufacturing processes. The immediate problem was the need for a differently trained workforce, particularly on the shop floor.

A new Managing Director was appointed in January 1986 and he decided not to follow the traditional route of sacking employees and recruiting new staff trained in the new techniques, mainly because such trained staff did not exist in the numbers required. The decision taken was to build on the talents and abilities of the existing workforce with training to be completed before the arrival of the new machinery. The only possible solution was to use open learning distance education.

By February 1986 the decision to use open learning had been made and work on selecting the most appropriate materials had started. In March/April 1986 a pilot scheme was run with 9/10 people selected by the Training Manager at the end of which the scheme was advertised throughout the workforce on the shop floor and within 10 days over 25% of the 170 employees identified as the target population for the scheme expressed interest. By July 1987 over 60 trainees had been through the scheme which is still continuing. In 1986 CNC machines accounted for 11% of production and it is expected to rise to 24% by 1988.
5.2 Objectives
The objective for the programme was described above. The company sought to retrain its workforce to use CNC lathe equipment in the quickest and most effective way.

The target population was mainly those employed on the shopfloor, a total of 170 people. Of these 10% were technically trained, 20% semi-skilled and 60% skilled workers. This workforce was predominantly male, in the age range 25-55.

Potential trainees for the pilot scheme were screened by the Works Manager and the Education and Training Manager, who also determined how far each trainee would go. The programme started with 4/5 packages and now includes 8 packages. 95% of the trainees complete 4/5 packages.

5.3 Development
The decision to use open learning distance education was made by the Managing Director and this seems to have been a key influence on the success of the scheme as it eased the entry of the training section to the shopfloor and the withdrawal of employees for training.

Amongst the reasons for the choice of open learning were that:
* Training was wanted immediately and the materials were already developed
* Traditional methods of training are "long-winded"
* It is difficult to release employees for regular
There is resistance to the classroom approach by the workforce.

The workforce is at different educational levels.

There is a problem with supervisors being seen to be trained alongside the workforce.

Materials and packages from a number of sources were considered and those produced by the local college/Open Tech Unit, EASTEK, were eventually chosen.

The cost of the scheme to date is about 100 000 if wages and the hidden costs of lost production are included. These costs are on a par with the costs of off-site local college courses per person but the advantage of using open learning is that the training can begin immediately.

### 5.4 Content

The open learning packages were chosen from the EASTEK series of packages on computer numerical control.

Each package includes cassettes and computer software for the BBC microcomputer.

The first stage was for the Training Manager and his Chief Instructor to take part in a tutor-training workshop organised by EASTEK who also provided viewing and assessment of the open learning material prior to purchase. There are up to 8 packages in all, but each trainee is taken through one at a time, during working
hours, one day per week for a total of 8 hours per week.

The two trainers also act as counsellors and tutors, being available to support the trainees at any time.

The multi-media approach was felt to be essential and the choice of package was determined partly by the inclusion of a multi-media approach which in using written documents, audio-visual material and hardware simulators via the BBC computer.

5.5 Evaluation and Extension

So successful has this training approach been for the Colchester Lathe Company that they have extended the topic range to include electronics, electrical pneumatics and hydraulics.

There is no formal evaluation of the programme but normal line-management reports were made on the progress of the project.

Colchester Lathe Company have found that the match to their training requirements has been quite good and fitted in well. They have found that adult trainees respond more readily to the different media and that the whole approach has been accepted and supported by the Unions, who are now pushing for more training.
Distance learning and training for small firms
United Kingdom
Ian Dey
Jean Harrison

CEDEFOP Document
Luxembourg: Office for Official Publications of the European Communities
1988 — 118 pp. — 21.0 x 29.7 cm
EN, FR
ISBN 92-825-8497-6
Catalogue number: HX-53-88-132-EN-C
Price (excluding VAT) in Luxembourg: ECU 5