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A STUDY IN BRITAIN AND FRANCE OF THE DEVELOPMENT OF CROSS-CULTURAL IN-HOUSE SALES TRAINING USING DISTANCE LEARNING

VOL 1

DONALD ALFRED OSBORN

Doctor of Philosophy

THE UNIVERSITY OF ASTON IN BIRMINGHAM

December 1992

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A STUDY IN BRITAIN AND FRANCE OF THE DEVELOPMENT OF CROSS-CULTURAL IN-HOUSE SALES TRAINING USING DISTANCE LEARNING

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The thesis is concerned with cross-cultural distance learning in two countries: Great Britain and France. Taking the example of in-house sales training, it argues that it is possible to develop courses for use in two or more countries of differing culture and language.

Two courses were developed by the researcher. Both were essentially print-based distance-learning courses designed to help salespeople achieve a better understanding of their customers. One used a quantitative, the other a qualitative approach. One considered the concept of the return on an investment and the other, for which a video support was also developed, considered the analysis of a customer's needs.

Part 1 of the thesis considers differences in the training context between France and Britain followed by a review of the learning process with reference to distance learning. Part 2 looks at the choice of training medium, course design and evaluation and sets out the methodology adopted, including problems encountered in this type of fieldwork. Part 3 analyses the data and draws conclusions from the findings, before offering a series of guidelines for those concerned with the development of cross-cultural in-house training courses.

The results of the field tests on the two courses were analysed in relation to the socio-cultural, educational and experiential background of the learners as well as their preferred learning styles. The thesis argues that it is possible to develop effective in-house sales training courses to be used in two cultures and identifies key considerations which need to be taken into account when carrying out this type of work.

VOCATIONAL EDUCATION AND TRAINING TRAINING MEDIA
ANDRAGOGY OPEN LEARNING LEARNING STYLES

To Martine, Jimmy and Laura

.

I would particularly like to thank the following people who have given their precious help in the accomplishment of this study:

John Bailey, Peter Bryceson, Lise Georgeson, Henri Jolles, Bruno Carpentier, Christophe Brohart, Hugues Voreux, Paul Davies, Michel-Henri Pugens, Sylvain Richon, Pierre-Yves Houille, Catherine Laïrle, Jill Bailey, Gloria and Norman Lee, Florence Jovené, René François

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Chapter 1
An
Introduction

The aim of this introductory chapter is to give a factual account of the building of the research project from beginning to end. From this, it is hoped the reader will be able to see the experience gained by the researcher over a period of five years through what has been, in essence, an example of cross-cultural distance learning in itself.

1.1. The Genesis

I had been living and working in France for several years when I joined the Rouen Business School in 1985. During the preceding years, I had been involved in business education in a school of the Paris Chamber of Commerce and, through this experience, I had come to have a better understanding of the French system of education and training, often from the privileged position of an outsider looking in. In more senses than one, I had changed careers in mid-channel and had never, up to that point, been called upon to make any serious comparisons of the French and British learning environments.

During my first year in Rouen, I became involved in the negotiations that were then in progress between the University of Aston and the Rouen Business School concerning student exchanges. As the foundations for the exchange programme were laid, I was able to learn more of Aston's International Business and Modern Languages degree course at the same time as gaining a deeper understanding of the workings of a *Grande Ecole* in France.

There were apparent similarities between the IBML and ESC Rouen programmes. Firstly, the student population was drawn from the same age-group and both schools based their recruitment on minimum selection standards. Both institutions were looking to take steps towards closer links with schools and universities in Europe.

Both schools had strong links with the business environment and academics from both institutions were involved in company training. Both were situated in regions with a presence of large and small companies, although Aston had the advantage of being more heavily committed to business and training development and had special oncampus facilities for training company personnel.

There were, nevertheless, important differences relating to the teaching/learning environment. One of the inital problems to overcome in the planning stage of the student exchange programme concerned the requirements of the two institutions in terms of hours of lectures and tutorials. Whereas Aston students were used to up to 15 hours of courses per week, the Rouen Business School expected its students to have up to 30 hours (this, by the way, is typical of most French business schools.). During the rest of the time, Aston students were expected to accomplish a minimum of reading that the Rouen students were not used to. Any reading that the Rouen students had to do was generally presented in the form of course handouts and it was rare for them to be given a reading list from the school library. In Aston, the contrary appeared to be true. These basic differences seemed to point towards a contrast in approach to formal education between the two countries and, from this, I gained a certain interest

in trying to determine what influence, if any, this had on learning behaviour.

Another difference was in the field of degrees offered to the adult population. Whereas Rouen's further education programmes were limited to a handful of examinations leading to the diploma of the French equivalent of the Institute of Chartered Accountants, Aston was developing the distance-learning MBA programme and was already very involved in Tutored Video Instruction. The Rouen Business School was, at that time, contemplating the development of post-experience education but was no more than at an early stage of reflection on the subject.

In my first year at the Rouen Business School, I went on the first of two visits to the United States in order to visit a handful of universities which had been shortlisted as potential links. Among them was the Krannert School of Management at Purdue University, Indiana, who in 1981 had launched a two-year distance-learning programme, called the Krannert Executive Educational Program (KEEP), leading to an MSc in Management Studies. The programme was designed for practising managers who were offered the possibility of studying off-campus for the majority of the programme's duration. The learning support was print-based as well as computer-based using a network of electronic messaging. There were a total of six on-campus seminars programmed, each over a period of one week.

Having been introduced to the Krannert programme, I began to wonder how suitable such a programme might be in Europe. This was still in the early days of the potential European Single Market, but it seemed to me that both companies and business schools would soon be looking to develop a more European culture through training and educational programmes and, given the problems of distance and the growing need for executive mobility, it would be interesting to research the possibility of using such a distance-learning link between European countries.

At this time, I was unaware of the efforts that had already been undertaken in the field of multimedia distance education, but it seemed worthwhile to take two countries of the European Community and to try to uncover the problems of introducing a KEEP-type course for European business executives. As a French resident of British nationality, I had no hesitation in choosing the countries to be studied.

I originally broke the problem areas down under three headings:

- The technological aspect

The Krannert Electronic Link uses standard telephone lines to transmit data between the users and the centre. I rapidly discovered that, whereas American telecommunications travel over a fast, broadband system, in Europe the speed of data transmission, and therefore the amount that can be sent over a given period of time, is far more limited. This point is covered more fully in Chapter 4, but these initial findings pointed to a much higher programme cost.

- The cultural aspect

In America, post-experience education has been accepted in all circles of professional activity. However, it was reasonable to assume that each country had its own priorites and the support given to adult education and training was related to the country's cultural background and economic structure. The contrast between France and Britain showed up interesting differences in this domain. The idea of offering MBA-type courses to practising managers was not commonplace in France where a clear distinction exists between the period of life when one studies and the period when one works.

- The linguistic aspect

.

In the United States, there are 240 million people with one common language. The Western European context is completely different in as much as, for a total population of 320 million, there are 9 officially-recognised mother-tongues. The task of translating courses into so many languages would quite obviously mean increased programme costs. But, more importantly, how much of a message is lost in translation, how much of the source-country's culture is transferred in the translated course and what impact will this have on learning outcome in the target country? There are cross-cultural similarities among, say, consumer cultures. There are even some international life

styles. But there are many conflicting forces which continue to shape national cultures (Homma, 1991). A simple example will illustrate this. It is widely accepted that the North-American consumer expects a more direct form of product advertising than the European consumer. The message coming from an American training course in advertising techniques translated into French will not necessarily have the same learning impact on a population of French advertising trainees, whose consumers may expect something more subtle. Consequently, instead of writing courses with one target country in mind and then translating these into the various European languages, would it not be wiser to spend some time on careful reflection of cross-cultural programmes at the design stage? If the design of the training course is relatively neutral from a cultural point of view, it can then undergo a transfer into the target language with a lesser risk of losing its learning impact.

Throughout this thesis, I have chosen to use the term "cross-cultural" to describe training programmes developed in one country for application in another. These terms should be clearly distinguished from others, outside the interest of this research, describing ethnically diverse populations in education, often within the same country. These are described by Wakeling (1990) and include concepts such as "multi-cultural", "multi-ethnic", "multi-racial", and "intercultural".

During the early days of my research, I quickly discovered that, whilst there was a great deal of interest in distance education for management and professional learning in each European country, the work that was being carried out was limited to the frontiers of the country concerned and there was very little being done in a truly European context. Not only was this true on a national basis but, perhaps more surprisingly, even in-house training within companies present across Europe seemed to be the affair of each individual country. The development of distance-education courses was taking place independently in each country and it did not seem as though there was a great deal of transfer going on. It appeared to me then, as it still does today, that this situation leads to a tremendous waste of time, effort and money.

A second visit to the United States, in November 1986, gave me the opportunity to call back to Krannert in order to obtain more details relating to the technicalities of running the KEEP Electronic Link and I was able to complete a full report on the initiative for the Rouen Business School at the end of the year.

Although at this point in time there was little interest shown in the KEEP programme by my employer, the Rouen Business School, the contact established with Krannert led to a faculty exchange late in the 1987/8 academic year. At that time, Rouen welcomed a professor in Finance, Dr Herbert Moskovitch, a permanent faculty member of Purdue University who had also tutored on the KEEP E-Link Program since its beginning. His three-month stay in Rouen resulted in a visit by his immediate superiors at the end of 1988.

At this point, a tentative proposal was made by Krannert to ESC Rouen to study a possible launch of the KEEP Electronic Link in Europe under the joint administration of the two business schools. A member of the Rouen faculty team, a computer science expert, left for a visit to Krannert in the summer of 1989 and brought back recommendations for the establishment of a European programme.

In an attempt to determine interest in such a programme, a market study was carried out among major European companies during the 1989/90 academic year. Following positive feedback, the marketing of the European version of the KEEP E-Link Program began in the spring of 1990 under the name of IMaC (the Interactive Management Center). After a lukewarm initial reaction, the first IMaC programme began in January 1991.

It is still early days to have any substantial feedback on the IMaC programme from the present participants but there are indications that there is a high degree of satisfaction from the members of the group.

However, despite the fact that its participants came from a variety of European cultures, the IMaC approach was not really cross-cultural in its design, most of it being basically an adaptation of the American KEEP programme. The reasons for this approach are essentially market-led. IMaC is a relatively expensive programme for participants since its multimedia approach makes it capital intensive when compared to other, more traditional post-graduate programmes. Added to this, the cost of employing an international faculty is higher in both fees and travelling expenses. Employers who

wish to send participants on the course must therefore select people who will give a return on the investment and they are likely to come exclusively from the top members of staff. Furthermore, employers will expect a diploma of high calibre to be awarded at the end of the two-year course. On this level, a degree from one of the leading engineering universities in the United States gives IMaC a strong sales argument with the engineering executive it tries to attract. The Krannert School of Management at Purdue was not looking to join an entirely new European programme and it welcomed the opportunity of extending its already-established degree course into Europe through a reputed French business school.

In contrast, my research turned more towards the feasibilty of developing distance-learning programmes which were cross-cultural in design and the pages which follow attempt to highlight the various approaches to training supports and learning in Britain and France which may influence the cross-cultural course designer.

The first part of the thesis gives a state-of-the-art analysis of the areas affecting learning outcome in a cross-cultural environment. These areas have been divided into two chapters dealing with:

- the training context of the two countries under review.
- concepts relating to learning in a cross-cultural context,

The second part is concerned with the empirical research carried out in the two countries. It has been divided into four chapters concerning:

- the choice of training medium
- considerations concerning course design and evaluation
- the development of the courses used in the field tests
- the methodology used in the research

The two final chapters of the thesis present the results of the field tests, draw conclusions from these findings and look at the potential for the future development of cross-cultural distance-learning courses.

Since it has been designed to measure differences in learning outcome between trainees from France and Britain, the research initially considers differences in learning input, i.e. what the learner brings to the learning experience. It then considers the structural elements which will influence knowledge acquisition, i.e. the training medium, the course and the methodology. The following diagram may help the reader to understand the structure of the thesis more clearly.

Part 1	Part 2		Part 3
INPUT	 KNOWLEDGE ACQUISITION		LEARNING OUTCOME

is influenced by:

relates to:

THE CONTEXT
France
Britain

THE LEARNER
Learning concepts
Distance learning
Learning styles
The learner's
cultural background

THE TRAINING MEDIUM

COURSE DESIGN & EVALUATION

Course design

Evaluation

Investment Decisions

Investment Decisions Needs Analysis

FIELD TESTING

Methodology

Data Collection

The problems encountered

relates to:

THE RESULTS OF THE FIELD TESTS Interpretations of the findings

CONCLUSION

PART 1

LEARNING INPUT

Part 1 of the thesis considers the background to the learning experience or, in other words, what is brought to the learning situation through the training context and by the learner. The first chapter in this part deals with the contextual background of the study. The first section of the chapter looks at the current training situation in France. The second section considers the British training context and the final section attempts to draw out the differences between the two. In Chapter 3, there follows an overview of the concepts relating to learning, either conventionally or at a distance, in the cross-cultural environment.

The detail relating to the courses developed and to the field tests is covered in Part 2.

Chapter 2 The Context of the Research

This chapter sets the contextual background of the research by discussing the structure and approach to training in France and Britain.

Justification for the study of training within its national structure is given by Holden (1991:115) who points out the dangers of seeking solutions to training problems without giving consideration to the contexts and cultures from which they are drawn. Moreover, international studies comparing approaches to training indicate that important differences do, in fact, exist between Britain and France both at the state and corporate level. Both countries are undergoing a period of rapid expansion in the training sector, as can be seen in the following table which shows the rate of increase in training investment for four professional categories of employee between 1987 and 1990.

Professional Category	Britain	France
Managers	71%	70%
Professional and Technical	65%	71%
Clerical	47%	incl. prof. & techn.
Skilled, semi-skilled & unskilled workers	32%	67%

Figure 2-1: Increase in Corporate Training Investment by Occupational Group (1987-1990) (adapted from Holden, 1991:117)

However, as Barsoux and Lawrence (1991) point out, such straightforward comparisons can prove misleading. France, for example, spends less than Britain on training for manual workers since full-time apprenticeships and vocationally-based educational training are widespread and their cost is included in the national education budget.

Holden's 1990 study suggested that France leads Britain in expenditure on training with more than 70% of organisations interviewed claiming to have increased their training budget over the past three years. Nevertheless, it is important to remember that the 5000 companies interviewed were mainly drawn from Europe's larger organisations (typically with more than 200 employees). In the small-business sector, the picture seems to be appreciably different. A 1990 quantitative study carried out among 700 small businesses in the *Ile de France* region (Paris and up to 50 miles around) showed that 27% had no idea how much they spent on

training and, of the 73% remaining, 30% underestimated the cost! (AGEFOS-PME, *Ile de France* in the *Journal de la Formation Continue* et de l'E.A.O., n° 254, 25.02.91).

Holden's study also indicated that 41% of British companies were unaware of, or unable to state, the level of their training expenditure. This compares with a mere 2% in France, but this is largely due to the fact that France has legislation which compels companies to spend a minimum on training and there is an obligation to account for the amount spent in the company's report and accounts. It is therefore hardly surprising to find such an awareness among French training managers.

In order to gain a true picture of training practices in France and Britain, these points should be borne in mind when reading the following pages.

2.1. Training in France

In-house training appears to be influenced by two principal sources: state policy and corporate policy. Where a company is nationally-based, its training policy will be developed within the rules and guidelines laid down by the state. In the case of a multinational organisation, training policy will come, to a varying extent, from its corporate base and will be adapted to meet the requirements of the state in which the training takes place.

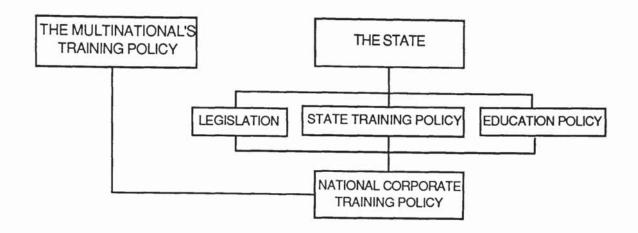


Figure 2-2: Sources of Influence on Corporate Training Policy

A detailed analysis of training practices in both countries is given below.

2.1.1. State Influence on Training in France

"One of the ways in which the inheritance of the Roman Empire perpetuates itself is through its legal systems." (Hofstede, 1980)

Hofstede's study into international differences in work-related values frequently contrasts business practices in Northern and Southern Europe, pointing out a country's preference for either an effective system of formal control through a unified legal system or a more informal, uncodified system based on societal norms (see Section 3.4.). This contrast is particularly relevant when considering training policies in Britain and France over recent years.

The French have been imposing the concept of training on their companies for well over 60 years. The law of July 13th, 1925 fixed a contribution of 0.2% of the total amount of wages and salaries of a company to be paid to a central fund designed to encourage the

development of youth training. Companies conducting technical training within their structure were exonerated, partially or totally according to their investment in training (loi de finance du 13.07.25, clauses 20-25). Given the French preference for codified law, all companies have been forced to participate in training through a series of statutes, the first being the law of July 1925, followed by important legislation in 1971, 1978, 1984 and 1985.

The influence of the more recent laws on the evolution of training in France can be seen in figure 2-3 below.

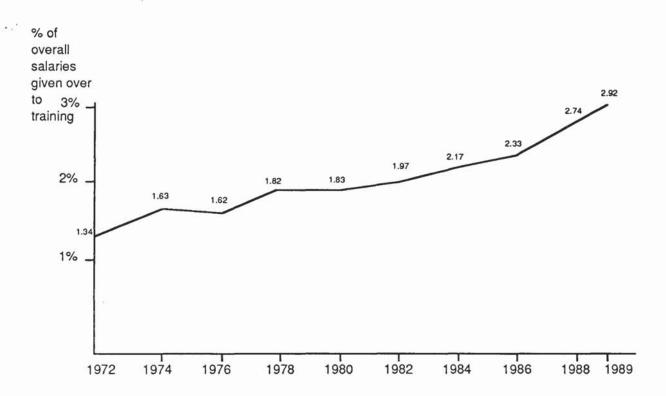


Figure 2-3: Participation in the funding of vocational education and training in France from 1972 to 1989. source - Actualités de la Formation Permanente n° 93 & CEREQ Statistique de la Formation Professionnelle Continue n° 2483 (1990)

The early 1970s saw a rapid rise in unemployment which led to a number of government initiatives being taken. The best-known initiative was a law voted in on July 16th, 1971 and modified in 1974. It became widely known as the "1% law" since it compelled all companies of over 10 salaried employees to devote 1% of their total salary cost to training. Despite feelings to the contrary, this was not a tax. Nevertheless, if the company did not invest a minimum of this amount in the training of their employees each year, the sum would be levied by the state through the tax system.

This law had both positive and negative effects on training in France; positive because it obliged the vast majority of businesses to integrate the concept of training into their corporate strategy; negative because, for a long time, companies were to consider their participation as a sort of tax and were therefore greatly discouraged from investing more than the strict minimum legal requirement in the training of their employees.

Three principle phases can be identified in recent training history in France (Bertin & Podevin, 1991):

- 1972 to 1978: a period which witnessed strong growth in training due mainly to companies adjusting to the law of July, 1971.
- 1978 to 1982: a breathing space in the growth of inhouse training brought about mainly through the effects of the post-1973 economic crisis. State intervention

focused particularly on youth training during this period.

- 1982 to present: a second period of rapid growth in the training sector, particularly in companies of over 500 employees. In these companies, training is seen more and more as an investment, playing an increasingly important role in overall corporate strategy.

Recent figures show that the average amount spent on training in French companies of over 10 employees is currently at 2.92% of total salaries and wages. Nevertheless, a closer look at the figures indicates that, particularly in the small-business sector, training is still nowhere near becoming a priority (Table 2-1).

voor	size of company - n° of salaried employees				TOTAL	
year	10-19	20-49	50-499	500-1,999	2000 plus	TOTAL
Market Committee	Sec. 19 52-52					
1972	0.47	0.62	0.92	1.5	91	1.35
1974	0.66	0.86	1.14	1.45	2.59	1.63
1976	0.71	0.88	1.17	1.50	2.50	1.62
1978	0.86	1.03	1.28	1.66	2.83	1.82
1980	0.96	1.09	1.32	1.72	2.78	1.83
1982	1.00	1.10	1.35	1.81	3.06	1.97
1984	1.13	1.20	1.46	2.02	3.47	2.17
1986	1.15	1.22	1.54	2.24	3.82	2.34
1988	1.34	1.42	1.88	2.71	4.43	2.74
1989	1.33	1.44	2.01	2.92	4.67	2.92
		L				

Table 2-1: Corporate Training Investment in France: 1972-1989

(as a percentage of total salaries)

source: Liaisons Sociales (1990)

The law of July 17th, 1978 changed the rate to 1.1% of total salaries and wages, the law of July 30th, 1987 increased it to 1.2% and in December 1991 it was increased once more to its current 1.4% level. In practice, under 1% is actually used for the training of company employees, 0.3% being reserved for youth traineeships and/or sandwich courses and 0.1% being given over to protecting the right of employees to follow individual training of their own choice.

2.1.2. La taxe d'apprentissage

Strictly translated, this means the apprenticeship tax. Created by the statute of July 13th, 1925, this law compels all companies of more than ten employees to pay an annual tax equivalent to 0.5% of its total labour cost either to an approved training centre or to an official tax-collection pool whose job it is to redistribute the money received to approved training centres. This tax is on top of the current 1.4% minimum investment described above. Since 1978, an additional "complementary tax" of 0.1% is levied, reserved exclusively to finance intiatives for the improved integration of young people into professional life (Dicoguide de la Formation, The idea behind the taxe d'apprentissage is to give 1989:69). financial assistance to those centres concerned with training in the field of the company's activities (Liaisons Sociales no 5655, 1985). In practical terms, a company involved in, say, the construction industry will pay over 0.6% of its total salaries and wages to an approved centre concerned with the training of construction personnel. Should the tax-paying firm so desire, it may choose to send the amount to an approved collection centre which will redistribute the funds to relevant training centres. For the purposes of this tax, companies are classified in three categories according to their activity. Figure 2-4 gives an indication of how the tax is shared out for the training of the different levels of professional hierarchy. The company is classified in one of three categories, A, B or C, according to its field of activity. Industries generally fall into category A and services into category C.

Although, strictly speaking, these percentages should be respected, a complex system of accumulating funds destined for the same training centre gives the system a certain degree of flexibility.

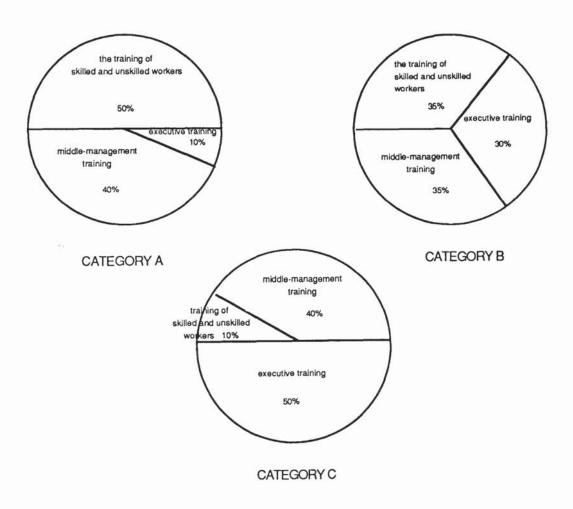


Figure 2-4: The Allocation of la Taxe d'Apprentissage`

The law of July 16th, 1971 renamed the "apprenticeship tax" la participation des employeurs pour le financement de la formation professionnelle et technique (employers' participation towards the funding of technical and professional training) in an effort to improve the image of the tax in the eyes of the reluctant and sceptical contributors.

2.1.3. The Organisation of Training in France

Despite the heavy reliance on the legislative system, the French state has taken steps to avoid developing a highly centralised and strongly bureaucratic system of encouragement for training. The framework for what the French term as la formation continue is decentralised and is under the responsibility of a number of state agencies, although the overall organisation and control of the system remains the pre-occupation of central government. The fact that the system allows for the co-existence of, on the one hand, legislation introduced by the government and, on the other, a consensus between management and employees is a direct result of the events of May 1968 which were caused by the co-inciding of political crisis and social unrest.

The first national inter-trade agreement on vocational education and training was concluded in July, 1970, just two years after the events of May 1968 and the law of July 16th, 1971 imposed, quite apart from the employer's minimum contribution and the right for an employee to take individual training leave, an obligation for

company management to consult the firm's staff committee on all matters of training.

The sharp increase in unemployment during the 1970s (2.8% of the working population in 1969; 6.3% in 1980) caused the state to give an even higher priority to training with the constitution of a Secretary of State for Vocational Education and Training in 1976.

State Agencies and Para-Public Institutions

The state fulfils a double role in the advancement of training in France:

- it supervises the enforcement of training legislation
- it gives the necessary overall orientation to the training system.

It is assisted in its mission by the Ministry of Labour, Employment and Professional Training, the State Department for Vocational Education and Training, a number of government agencies as well as the regional public authorities, various professional organisations, labour unions and private enterprise.

In order to avoid confusion when describing the highly complex system of state encouragement in training, only the essential agencies are mentioned below. Le Conseil national de la formation professionelle, de la promotion sociale et de l'emploi - Created by decree in 1981, the CNFP is a meeting point for representatives of employees, of state-designated training experts and of government ministers. Its role is essentially consultative and it is designed to advise the State in its efforts to coordinate training and economic development.

CSNFOR (National Council for Vocational Training, Social Well-Being and Employment) This council has an advisory function in the overall orientation of training in France.

Le Secrétariat général de la formation professionnelle (the General Office of Vocational Training) which prepares work- studies, papers and legal texts to assist the smooth running of the system.

l'Association pour la formation professionnelle des adultes
- This is a public organisation offering professional training and also carrying out studies into private training bodies on behalf of the government. Through the AFPA, which is attached to the Ministry of Labour, the state can exercise some control over the training market.

Agence Nationale pour le Développement de l'Education Permanente - l'ADEP was created in 1973 to contribute to the development of continuing education, particularly in the field of professional training. The agency plays a role in three areas :

- as a work-study office controlling the activities of public and private bodies involved in professional training
- as a decision-making body linking government inititatives to regional and local needs in the area of professional training
- as a promoter of international cooperation in professional training, particularly in the EEC.

However, le Monde of August 2nd, 1991 announced that Messrs Jospin (Minister for Education) and Guyard (State Secretary for Technical Training) had decided to wind up the ADEP at the end of 1991. They stated that the ADEP's original mission had been completed and that competition from the private sector suggested that the State no longer needed to assure the services it offered.

les Conseils régionaux - Since June 1st, 1983, state training programmes and budgets have been under the responsibility of the 22 regional councils, although the State reserves the right to intervene in certain domains. The regional councils have specific competence in the field of apprenticeships and continuing education through the Comité Régional de la Formation Permanente et de la Promotion Sociale et de l'Emploi and the Délégation Régionale de la Formation Permanente.

2.1.4. Other Para-Public Organisations

The French Chambers of Commerce and Industry - They are responsible for the administration of certain training bodies set up under their control. The CCIs also provide counselling services and technical assistance in the field of training.

Les Groupements d'Etablissements pour la Formation Permanente. These are regional establishments which are set up by public institutions of education for adult training and education. Their objective is to offer a wide range of training and education regionally.

2.1.5. Joint Initiatives

Les Fonds d'Assurance Formation (FAFs) - Created by the law of July 16th, 1971 to receive funds from companies, these joint assocations are run by employers, employer organisations and labour unions to act as intermediaries for their members, between the supply of and the demand for training. The FAFs were originally set up to manage the redistribution of the compulsory training participation of the 1971 legislation. Today, there are 90 such associations in France recognised by the state.

A study carried out by an independent group of consultants (AGEFOS-PME, 1991) in 1990 indicated that, of the 700 companies interviewed, only 18% rely on the local FAF. However, in certain

areas of France (the east in particular), up to 80% of local businesses use the services of the FAF. (le Journal de la Formation Continue et de l'E.A.O., 1991)

Today, FAFs are responsible for 3.5 million hours of training each year (Liaisons Sociales, 1990) and emphasis is placed particularly on the young.

One of the criticisms of the FAF initiative is that it tends to take the control of training orientation away from those involved in the strategic decision-making process of the firm. According to Roland (1989), small businesses tend to rely much more on the services offered by the FAFs, investing between 25% and 30% of their training budgets in this way compared to a mere 1% for companies of over 2 000 employees.

ASFO - Associations de Formation - Joint associations created by the Comité national patronal de France (the approximate equivalent of the CBI in Britain), professional organisations and French Chambers of Commerce. The ASFO has a double role.

- it is designed to stimulate, advise and give technical assistance to smaller companies in establishing and carrying out their training programmes
- it organises training according to company needs and offers a range of courses on the open market.

Although the state system of encouragement for training has the merit of leaving much of the choice of training to private enterprise, the need for a strict control over funds means that the whole area of training has become extremely complex. According to figures supplied by CEDEFOP (le Centre Européen pour le Développement de la Formation Professionnelle.), a total of 120 000 companies employing 9.5 million people contributed to continuing training in France in 1985. Companies contributed a total of 21.3 billion francs during the year (i.e. 2.25% of total salaries and wages, compared to 1.35% in 1972 (Liaisons Sociales, 1990).

Each year, 3 million people receive training in France (i.e. 15% of the working population). Between 1972 and 1986, the total amount spent on corporate training has risen from 2.8 billion francs to 23 billion (Alesandrini, 1989).

Since 1982, a major effort has been made to encourage smaller businesses to establish and develop training plans for their staff. The tendency is for these firms to make use of institutions such as the FAFs and the ASFO for the orientation and organisation of their training needs, whereas the larger firms tend to satisfy their needs either internally through their own training divisions or externally through public or private training bodies.

According to Meignant (1989), companies have one of four possible approaches to training:

- compulsory training: the 1.4% minimum is seen as a sort of tax which must be paid and is generally "lost", the firm offering very little or no training to its staff
- return training: the company will look to train its workforce as a sort of compensation for the funds it has been compelled to spend by law. This type of firm will generally not create an internal training division but will prefer to subcontract out in order to get rid of the training "problem"
- security training: this tends to be one of the solutions chosen by larger firms in order to retain social stability within their workforce. Frequently, this type of company will leave the choice of training to its employees. This is particularly the case where the market is less competitive and the need to retain competitive advantage through training is less evident
- investment training: This is the approach adopted by those companies who have integrated training into their overall corporate strategy. These firms will naturally be more directive in the training they offer their employees and they will frequently have a training division within their personnel department.

Despite the very complete framework in place on the French training scene, there are still many problems. The top-heaviness of the system is frequently criticised. Roland (1989) describes the present

organisation of vocational education and training in France as "frighteningly complex". In medium- to large-sized companies, he claims, it is necessary to employ full-time staff to manage the administrative work of choosing a training organisation, drawing up training contracts, ensuring trainee attendance at courses during the period of training, confirming attendance together with completion of the training to the state authorities, justifying to the state authorities the inclusion of the training session in the 1.4% legal minimum, etc. Roland goes on to suggest that such constraints account for the imbalance shown in Table 2-1 between the amounts given over to professional training in small, medium and large companies.

Another problem concerns the success of the training programmes that are offered to company employees. A study cited in Alesandrini (1989) claimed that 54% of salaried employees and 61% of blue-collar workers did not apply the training they had received to their work. However, it would seem that the data taken into account in the evaluation of training frequently remain almost exclusively quantitative.

Taking up the problem of applying the skills learnt in training in the workplace, the ADEP has put forward three recommendations concerning the evaluation of company training:

- it is improved competence in the workplace that should be measured and not, as is too often the case, the course itself.

- since corporate training should be part of the overall strategy of the firm, it should be measured exactly as any other capital investment would be.
- the training effort of a company cannot and should not always be measured in terms of costs, benefits or value added.

The evaluation of investment training is also taken up by Weimare (1989), the President of CSNFOR. He claims that the establishment of a training-evaluation process must pass through two stages:

- the objectives aimed for must be clearly defined from both a quantitative and qualitative point of view.
- once these objectives have been defined, the company must determine how it intends to measure the effects of training. Here, the author lists three categories of indicators:
 - technical indicators which measure the trainee's capacity to perform a certain task
 - economic indicators which quantify performance in terms of turnover, ratios, percentages, market shares, productivity, increase in profits, decrease in costs and time gains
 - socio-human indicators which attempt to measure results in a total quality context.

In 1987, a small committee of specialists in training evaluation conducted a study in 200 French companies with the aim of gaining a fuller understanding of how they evaluated their training. Their findings showed that, while the cost of training was easy to determine, the measurement of the benefits coming from the training investment remained uncertain. The working group found that a plan for evaluation was generally only considered after the training course had taken place.

On the supply side, according to M. André Laignel, Secretary of State for Vocational Education and Training, the "moral standard" of the professional training market in France needs raising in order to rid it of its "almost unlimited scope for abuse" (Henderson, 1989). Of the 40,000 known training specialists who are present on the French market place, only 12 000 are believed to be genuine. M. Laignel wishes to see drawn up a sort of "Michelin Guide to Professional Training" and he is encouraging French universities to play an increasing role as providers of training to business.

In a later interview with M. Laignel (Tertiel, 1989), the minister confirmed that the current system of vocational education and training in France suffered from both inefficiency and fraud. Whilst the latter, he claimed, could be discouraged through a system of rigid central control, the inefficiency of the system was the result of the government's desire to leave training to operate in a free-market environment.

Nevertheless, the government is keen to see the setting up of a charter of quality which would allow those providers of training having acquired the administration's stamp of quality to benefit from

the various financial initiatives provided through the legal framework.

2.1.6. The Future

When François Mitterand was re-elected for a second term of seven years in 1988, he cited the improvement of corporate training as one of his principal objectives. As a consequence, professional training has become one of the five main targets of the 10th National Plan, under the responsibility of M. Lionel Stoleni, the Secretary of State for the Plan.

The draft of the Plan (1989-1993), published in the Journal Official of July 11th, 1989, recognised that the best guarantee for anyone, young or old, to find their place in society remains the acquisition of a qualification through training. Added to this, it is generally asserted that most people feel the need to develop their intellectual and human capacities to the maximum (pp 8697-8). Thus, the state in France stresses the right of every individual, regardless of age or status, to follow training courses leading to a recognised qualification and the Plan sets out to create a system of transferable training credits which will be recognised by certificates.

Furthermore, the Plan envisages a series of incentives to modernise the methods of corporate training by responding to the need for an individualised approach. Both the state and, by delegation, the regional authorities will be encouraging companies to develop selflearning training packages using multimedia techniques.

2.2. Training in Britain

The approach to training in Britain is quite different from the French model described above. Whereas the French have chosen to respond to the training needs of their workforce by obliging companies to invest in training, the British approach is more one of encouragement.

The decision to create a framework to encourage rather than to oblige employers to invest in training came out of the experience of the Industrial Training Boards which, since their establishment by Act of Parliament in 1964, had operated a statutory-levy system in order to fund training in their related sectors of activity. It was the weight and expense of bureaucracy, precisely what the French system has suffered from, which provoked the winding up of the statutory bodies and the development of voluntary bodies in the 1980s (O'Connell, 1990).

The consequences of the two approaches can be seen in the relative emphasis given to the distinction between education and training in the two countries. In France, the imposition of training levies on companies and the obligation to train has meant that training has remained the affair of companies. France has thus established a training infrastructure with few links with its academic environment and the division between education and training seems destined to remain in the foreseeable future.

On the other hand, over recent years, Britain has been placing increasing emphasis on linking training to education in order to prepare young people for their working lives. The aim of this section is to present the historical background of the British training scene as well as its current developments. Much of it revolves around the distinction between education and training and the initiatives undertaken to bring the two closer together.

One problem posed in the analysis of the two contexts relates to the boundaries of vocational education. In France, the distinction between vocational and management education relates less to the function of individuals and more to their corporate status. La formation des cadres (the training of executives) is a term used widely in France to denote the training of staff from the higher levels of the company. However, since the title cadre is often given to salespeople, sales training is not considered outside the realms of management education. Thus, in this study of sales training, a problem is posed when comparing the two systems and it is for this reason that a part of this section is given over to a brief analysis of management training, despite the fact that in Britain sales training is considered as vocational training. The chapter returns to the contrast between the two systems in its conclusion.

Other than with the Industrial Training Boards, there have been no laws to oblige companies to invest in training and, until the 1980s, training outside the apprenticeship system seems to have been left to the discretion of employers. An O.E.C.D. report in 1988, claimed that the basic education system of Britain was doing little to encourage a more practical approach to acquiring the skills that would be needed in later life:

"the British education system has, for a long time, placed emphasis on literary subjects to the detriment of subjects more closely linked to working life, such as Mathematics, the Sciences and professional disciplines" (my translation) (OECD, 1988).

However, since this time, efforts have been made to bridge the gap between education and training and a great deal more emphasis has been laid on competence-based training.

In 1984, the first of a series of commissioned reports on the state of training was published under the title "Competence and Competition" (Institute of Manpower Studies, 1984). The report compared the British system of vocational education and training with those of West Germany, Japan and the USA. The findings of the study showed a clear link between investment in education and training and competitive success in the three other countries, although in Britain this link was not in evidence. Moreover, whilst British companies tended to concentrate on the development of rather narrow skills, the three other countries were more concerned with improving the overall effectiveness of their workforces.

2.2.1. Education and Training

In its publication "Better Schools", the Department of Education and Science (March 1985) claimed that education and training could not always be distinguished, but were complementary. The distinction had been taken up by Peters (1966:36) who suggested that:

"We do not call a person 'educated' who has simply mastered a skill [..]. For a man (sic) to be 'educated', it is insufficient that he should possess mere know-how or knack. He must have also some body of knowledge and some kind of conceptual scheme to raise this above the level of a collection of disjointed facts.[..] 'Education' implies that a man's outlook is transformed by what he knows [whereas] 'training' suggests the acquisition of appropriate appraisals and habits of response in limited conventional situations [and] lacks the wider cognitive implications of 'education'".

There has been a tendancy to make a qualitative judgement on the distinction and it is all too easy to interpret all education as good and all training as bad. For example, Green (1983) claims that Britain has become accustomed to a system divided along the lines of class. He suggests that all government employment and training initiatives of recent years have been based on the idea that you educate the middle class and train the working class.

The Council of Europe (1986:20) claims that, be it "vocational" or "educational", the aim of education and training should be to encourage a creative and versatile attitude to active life as well as a willingness and ability to learn and to adjust to change throughout life.

The gap between academic and vocational qualifications is one which is beginning to be addressed in Britain today. According to Michael Howard, then the Employment Secretary, vocational qualifications are not for the less able, some university degrees being vocational qualifications in themselves. The present culture in Britain is changing to one in which education and training are valued and respected (Employment Gazette, 1991a).

2.2.2. Vocational Education and Training

Since the question of company training has never directly been taken in hand by the State, it has fallen to professional and industrial organisations to look after the supply side of the market and to satisfy the needs of their particular sector. This has led to a gross undersupply of trained and skilled workers in Britain that will remain for the foreseeable future - "certainly well beyond the end of the century" according to some experts (Handy, 1987).

It is, in fact, company management which has been held to account for the lack of clear initiatives in training, as was shown in a series of reports and studies carried out in the mid-1980s (Coopers & Lybrand, 1985; Mangham & Silver, 1986; Constable & McCormick, 1987; Handy, 1987). Even today, some senior managers see training as "a sheep-dip - a ritual out of which they expect to come cleansed but unchanged." (Employment Gazette, 1991a).

The need to begin integrating training into the corporate strategy of British firms appears to have been provoked by two developments over the past twenty years:

- Britain's entry into the European Economic Community which has led to a number of international comparisons on the workplace.
- Recent demographic trends which indicate that, whilst the numbers of young people reaching school-leaving age is set to fall by 25% between 1989 and 1995, the number of

people aged between 25 and 60 will increase by around two million. Furthermore, of the people who will make up the working population of the year 2000, 70% are already in place (Training Agency, 1989). This situation suggests a major training and retraining need for the future. Studies go on to indicate that, after the mid-1990s, it will no longer be possible to draw on a large pool of young people to replace adults whose skills will have become out of date.

As early as 1981, the government introduced a new training initiative to open widespread opportunities for adults, whether employed or returning to work, to acquire, increase or update their skills and knowledge during the course of their working lives. The white paper also defined the last two years of compulsory education as being particularly important in forming an approach to the world of work, a time when:

"every pupil needs to be helped to reach his/her full potential, not only for personal development, but to prepare for the whole range of demands which employment will make" (Dept of Education, 1981).

The white paper was a key document leading to the launching of the Technical and Vocational Education Initiative in November 1982 and the Youth Training Scheme in September 1983.

Since then, a series of initiatives have sprung up in the training sector. Many of them have been implemented through the framework of the government-funded Manpower Services

Commission, later known as the Training Agency and today under the control of the Training Enterprise and Education Directorate.

2.2.3. Training Agency Linked Initiatives

- The Technical and Vocational Education Initiative

According to its promoters, TVEI is designed to give 14 to 18 year-olds an opportunity to gain skills and qualifications of direct value at work. In the words of David (now Lord) Young, then Chairman of the M.S.C., the objective of the initiative was

"to widen and enrich the curriculum in a way that will help young people to prepare for the world of work, and to develop skills and interests, including creative abilities, that will help them to lead a fuller life and to be able to contribute more to the life of the community".

In agreement with the O.E.C.D. report cited above, the Training Agency claimed that the British compulsory education system did not offer job-specific training, which seemed to be left entirely to the employer. TVEI was begun in 1983 with a small number of pilot schemes jointly run by businesses and local education authorities. The popularity of the scheme has meant that, today, all education authorities in Britain are now involved in TVEI.

- Enterprise in Higher Education

The success of TVEI led to a similar project being launched, initially under the name "Project Enterprise", by the Manpower Services Commission at the end of 1987, this time aimed at giving the chance of learning business skills to every undergraduate in the country. It was hoped in this way to encourage a more effective understanding between employers and higher educational establishments and to provide the market with graduates better able to contribute effectively to their future employers.

One of the aims of these initiatives was to encourage the educational environment and the business environment to begin working together by inciting young people in education to gain practical experience in work situations.

2.2.4. Other Government Initiatives

At the same time, the government also sought to encourage the business environment to invest in training. The initial attempts were backed up by law and, although their success was only partial, the statutory ITBs were the foundations of the present industrial training situation.

- The Industrial Training Boards (ITBs)

Although the work of most of the Industrial Training Boards has now been taken over by the Industrial Training Organisations (see below), it is important to mention briefly the development of the ITBs in order to understand the transition from a system of statutory bodies to one of independent organisations.

ITBs were really the first form of government intervention in training. They were set up following the 1964 Industrial Training Act. Their mission was to supply and oversee training for people employed or intending to be employed in their particular industry. Each ITB was empowered to raise a training levy on employers, a part of which was reserved for the funding of the Board but the majority of which was returned to the industry by way of training grants. This levy, raised by all of the 23 statutory boards, was transferred to the government who delegated the work of the long-term planning of training to the Manpower Services Commission.

However, the system was judged to be too compulsory and bureaucratic and, in 1981, all but 7 of the ITBs were wound up and their work transferred to 102 non-statutory training organisations (NTSOs), the majority of which are now referred to as Industrial Training Organisations.

- Industrial Training Organisations (ITOs)

As described in the preceding paragraph, the dismantling of the Industrial Training Boards led to their work being taken over by the independent Industrial Training Organisations. These consist of voluntary employer bodies whose primary aim is to set training standards throughout industry and commerce. Contrary to the Industrial Training Board, the ITO relies on funding through employer subscription and sale of products and services rather than through imposed levies. The aim of the ITO is to ensure that the training needs of a particular industry are met. ITOs also establish training standards and qualifications and assess future skill requirements. For specialist skills, ITOs provide training directly for their industry. They are normally run by management committees comprising company executives and, in some cases, representatives of trade unions and of the education sector.

the government who may provide funding for certain ITO-led training projects. The National Council for Industrial Training Organisations, created by ITOs themselves at the end of 1988, oversees the work of the ITOs through a Code of Practice to which members and government subscribe. Although compulsory levies under the old ITBs have now mainly ceased to exist, the government has provided for levies to be raised in the sectors of construction,

engineering and road transport. These levies vary from 0.25% to 1% of the companies' wagebill.

Since they work to establish training standards and qualifications, the ITOs have also played a key role in the setting up of the National Vocational Qualifications network (see below).

- The Training, Enterprise and Education Directorate (TEED)

TEED is the part of the Employment Department which carries out the functions of the former Training Agency (disbanded in 1990). Its main function is to provide a policy framework for the Training and Enterprise Councils (see below). TEED is responsible for:

- developmental work on training, enterprise and education policy
- contract management for Training and Enterprise
 Councils, Local Education Authorities and other
 relevant bodies
- developmental work on training standards and systems
- direct delivery of selected national programmes

- The National Training Task Force

This body was formed in 1989 with a mission to advise the Secretary of State for Employment on training matters. It consists of leading figures from the world of business, local authorities and education. One of its principal tasks is to oversee the Training and Enterprise Councils (see below).

- The Youth Training Scheme

Now under the national training programme known as Youth Training, the Youth Opportunity Programme, subsequently known as the Youth Training Scheme, was launched in the late 1970s and aims to provide opportunities for young people to learn relevant skills and train for recognised qualifications. Youth Training is now the responsibility of Training and Enterprise Councils who are required to design a scheme sufficiently flexible to meet local economic needs as well as those of the individual. The government's guarantee provides that all young people under 18 who have left full-time education and who are not employed are entitled to training under the scheme.

All trainees have the opportunity of obtaining a recognised qualification to at least NVQ level 2 (see below). During training, they receive a minimum guaranteed incom. A young person who fails to apply for Youth Training may be disqualified from receiving unemployment benefit.

- PICKUP

The Professional Industrial and Commercial Updating Programme was launched by the Department of Education and Science in 1982. Its ultimate aim is to improve the competitive position of British industry and commerce through the updating of the skills of the workforce. The programme is designed to increase the role of further educational establishments in adult training through a series of local agencies which provide advice and support to all parties involved.

- RESTART

Whilst PICKUP was specifically designed for the promotion of training for those in active employment, RESTART promotes the development of learning opportunities for the unemployed. Its aim is more specifically to help those who have been unemployed for more than six months to find work again by offering training and counselling as well as financial support for those wishing to take up self-employment. Both RESTART and PICKUP work closely with the Training Agency (now TEED)

- Employment Training

Following the success of the YTS and Youth Training, the Employment Training programme was designed in collaboration with industry in order to give work experience to the long-term unemployed. Under the scheme, unemployed adults are entitled to benefit from a combination of practical and directed training for a period of up to 12 months. As with Youth Training, the scheme is

the responsibility of the local Training and Enterprise Council which has considerable discretion in the form of training provision. Priority is given to training designed to meet the needs of the local community, for example following large-scale redundancies. One of the problems ET has encountered has been with the trade unions who have refused to recognise the scheme.

- Training and Enterprise Councils

Created in 1990, TECs are independent companies, the majority being limited by guarantee. The original objective to set up 82 TECs has now been achieved (Employment Gazette, 1991a). The objectives of the initiative are:

- to promote more effective training by employers and individuals in their field of business using both public and private funding.
- to provide practical help to employers wishing to improve their training effort.
- to develop and deliver youth training under contract to the government and according to local needs. This includes overseeing the Youth Training Scheme.
- to develop Employment Training under contract to the government so that the unemployed are trained for local jobs.

- to provide training and counselling programmes for local small businesses.

TECs are independent companies operating under contract to the TEED which oversees budgets and assesses the quality of requests and bids for funding, paying particular attention to local environmental conditions. TECs are designed to answer the specific needs of their local communities and they are directed by local business leaders. The board of each TEC is made up of private sector employers from local companies (minimum tworepresentatives of education, economic thirds) and development, trade unions, voluntary organisations and the public sector. Contributions made by companies to support their local TEC are tax deductible. In 1990, TECs had a total budget of £20 million, mainly transferred from the Training Agency.

- The National Council for Vocational Qualifications

The NCVQ was set up by the government in 1986 with the aim of developing, from the plethora of different qualifications offered by various examining bodies, a framework of qualifications which would be clearly understandable by industry and individuals and which would provide the competences required in the workplace. Croner's Reference Book for the Self Employed (n° 182, June 1991) sets down the four principal aims of the initiative. They are:

- to establish a simplified national qualification system
- to ensure that qualifications measure competence in a job
- to remove barriers to training
- to facilitate progression from one qualification to another

The NCVQ does not award qualifications itself. Its role is as an accreditation agency and it has set up a framework into which National Vocational Qualifications (NVQs) can slot according to their occupational area and level of competence. The ITO "lead bodies" set standards in knowledge and skills which are shaped into qualifications by awarding institutions such as the Business and Technical Education Council, the City and Guilds of London Institute and the Royal Society of Arts. Once these awarding bodies have satisfied the NCVQ that the qualification comes up to its predetermined criteria, accreditation is granted for a period of five years. At the end of this period, the process of accreditation must be repeated.

An NVQ is a statement of competence and can be broken down into units comprising the skills typically occurring in the workplace. A system of credits allows each unit to build towards a qualification of full competence. Five levels of competence have been defined by the NCVQ, ranging from competence in routine tasks (level 1) to competence in the application of complex techniques in unpredictable contexts (level 5).

Figure 2-5 shows the relationships between the bodies responsible for training and vocational qualifications. (A similar framework exists for Scotland.)

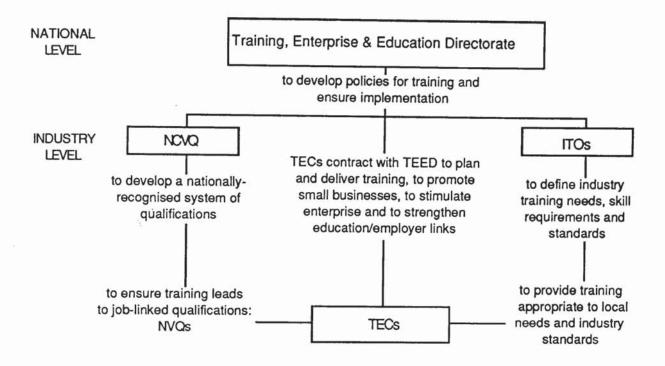


Figure 2-5: The Training and Vocational Qualification Framework (adapted from Croner's Reference Book for the Self-Employed, 1991:D181)

Today, NVQs are available to more than 40% of the nation's workforce in over 40 major industries and the target for the year 2000 is that 50% of the workforce will have attained a minimum of NVQ level 3. Support and encouragement has come from the CBI who have developed a system for monitoring the targets set for the NVQ initiative (the National Education and Training Targets) which, together with the National Training Task Force and the TECs, will ensure progress towards the full acceptance of National Vocational Qualifications (Helm & Redding, 1992).

2.2.5. Management Education

Given the absence of legal obligations for job-related training, it fell to company managers to bear a large part of the responsibility for encouraging training in the workplace during the second half of the 1980s. If managers themselves could recognise the necessity for training in the workplace, then they would ensure that sufficient investment was channelled into improving the overall situation.

The importance of management awareness of the training need was evoked in the findings of Coopers & Lybrands' 1984 study of training in Britain. The main aim of the study, commissioned by the National Economic Development Council and the Manpower Services Commission, was to determine company attitudes to training. The study concluded that, although Britain's future competitiveness and economic performance depended on the scale and effectiveness of company training, few employers held training as a priority in determining corporate strategy (Coopers and Lybrands Associates, 1984). Training was frequently seen by the respondents as an overhead which could be cut when under pressure, and there was virtually no analysis of training needs or evaluation of training. Furthermore, given the low amount of external pressure, either social or legislative, on companies to invest in training, the only way to improve Britain's performance was by radically changing the attitudes of employers.

The report suggested a solution built around three themes:

- encouraging companies to invest in training

- harnessing the interests of individuals in order to bring pressure to bear on employers
- improving the operation of the training market so that companies will be able to define their training needs more easily and obtain satisfaction from external training providers.

Another report, commissioned by the Economic and Social Research Council together with the Department of Trade and Industry, was published in 1986 (Mangham & Silver, 1986). The report detailed the findings of a survey designed to reveal the amount of management training carried out in companies and the general attitudes towards training. The study related to 1985 and some of the principal findings were:

- over half of all British companies have no formal training provision for their managers, although the larger the company the more awareness there appears to be for the need to train. However, 20% of the largest companies made no provision for training their managers.
- the excuses given for not training were:
 - lack of availability of managers for training
 - a belief that prior qualifications and experience are sufficient for competent performance
- in-house training is a crucial element of training activities in all companies

 the key areas for development given by many of the nontrainers were 'Marketing and Sales' and 'General Managerial Skills'

Perhaps the most worrying outcome of the Mangham/Silver report was the apparent indifference of employers towards the problem of training (Dickson, 1986)

A third report, once again commissioned by the MSC/NEDO group, this time joined by the British Institute of Management, looked into management education, training and development in Japan, the USA, West Germany and France and compared the scene to that in the United Kingdom. Britain's system of training was found to be in a muddle, managers from the other countries having been educated to a higher level and having undergone more formal training than their British counterparts. The study was carried out by Handy et al who suggested implementing a 10-point plan to rectify the British training deficiency. They recommended that the whole problem of management training should be overseen by a group of leading organisations who could act as models of good practice (Handy, 1987).

The publication of the Handy report coincided with yet another report on the state of management education and training in Britain commissioned by the Confederation of British Industries and the B.I.M. The Constable & McCormick report (1987) highlighted how little was being spent on the training of British managers - at that time equivalent to the cost of a packet of cigarettes a day - and, although there appeared to be a general willingness to consider new

approaches, British managers lacked the development, education and training opportunities of their competitors (Constable & McCormick, 1987).

Both the Handy and the Constable & McCormick reports called for the establishment of a "policy forum for management education and training" to ensure the development of "a charter of good practice".

At the end of 1987, the CBI and the BIM announced the creation of the Council for Management Education and Development which was to set up the Management Charter Initiative. The CMED was an industry-led and funded movement bringing together employers, the government and educators. It was founded to look into reforms in management education. It has since been renamed the National Forum for Management Education and Development.

2.2.6. The Management Charter Initiative.

Those responsible for the MCI published a 10-point code of practice in July 1988 which included a commitment to give a coherent framework for self development within companies and to contribute to closer links with local educational establishments in order to promote "a clearer understanding of the role of management" with young people. Initially, the promoters of the MCI sought to create a professional qualification similar to those of other professions. However, there had already been some criticism of the idea of creating the qualification of 'Chartered Manager' and many felt that this could lead to too rigid a system of formal qualifications in

management. Consequently, the National Forum has established a qualification system based on three levels: certificate, diploma and masters (Lee, 1990). However, when contemplating a formal approach to qualifications, there remains the difficulty of defining exactly what the competences of a manager should be.

On the practical level, criticisms have more recently revolved around the apparent lack of action since the MCI's code of practice was drawn up. Some are looking for tangible results from the effort in order for the initiative to retain its credibility with its commercial and industrial backers (Richards, 1989). It was also felt that the MCI proposals did not face the fact that Britain was in desperate need of more and better management education and development.

A report published in December 1988 by the MCI gave support to the development of a more coherent structure for management education claiming that, whilst many individual managers supported the idea of a professional qualification in management, the majority of employers had reservations.

One major criticism of the MCI relates to the lack of funding and the structural difficulties of staffing which have led to an outside image of organisational inefficiency (Thomson, 1991). However, the MCI has played a leading role in the development of the competence-based NVQs in close collaboration with the British Institute of Management and the newly-formed Association of Business Schools - formerly the Council of University Management Schools and the Association of Management and Business Education.

2.2.7. The Current Situation

The current debate surrounding management education was drawn up in a report by Deloitte, Haskins and Sells for the Training Agency in July 1989. In the report, the question of establishing a classification of the components of managerial competence was central. The idea of creating a common language for the skills and qualities of a manager was advanced by the Council for Management Education and Development in order to replace the conventional definition in terms of knowledge input. However, there appears to be some disagreement about what amounts to management competence.

The Training Agency defines competence as "the ability to perform the activities within an occupational area to the level of performance expected in employment" (Training Agency Competences Project, 1989). The Institute of Personnel Management is on record as saying that "...competence is dependent on the context in which it is demonstrated" (Deloitte, Haskins & Sells, 1989). Professor John Burgoyne of the Centre for the Study of Management Learning at the University of Lancaster defines competence as simply the ability and willingness to perform a task and he argues that management cannot be broken down into a "sequential exercise of discrete competences" (Burgoyne, 1988).

The trend towards the establishment of a professional qualification in management such as that originally proposed by the CBI/BIM under the Management Charter Initiative has led to further discussion on how to assess management competences. On behalf of the Training Agency, a survey of current practices for the assessment

of management competences was carried out in 1988 (Ashridge, 1989). The survey took into account the experience of a wide range of organisations providing management education and training, from educational establishments to companies. It was found that assessment techniques vary from written examinations at undergraduate level to the sharing of subjective perceptions about performance among colleagues in executive peer groups (see section 5.2.)

One of the more recent and comprehensive reports on the current state of training in Britain comes from a survey conducted by the Training Agency and published in 1990 (Training Agency, 1990). The report gives the broad outline of the British training scene, declaring that in 1986/7 a total of 350 million training days were undertaken by trainees and students at a cost of £33 billion.

There appears to have been an increase in investment in training on the part of employers, although one in five companies still provides no training at all for its employees. Small companies are still less likely to train their staff than larger ones, although those which are involved in training have records which match all but the very largest firms. One half of employed adults who left school without qualifications still receive no training whatsoever, although young people are benefitting much more from training and the updating of their skills.

Analyses of costs and benefits coming from training still only concern one employer in forty. From this, Banham (1989) concludes that 4% to 5% of Britain's gross domestic product is devoted to an activity where value for money is insufficiently monitored. Nevertheless, the Training Agency's 1990 report does suggest that above-average levels of training lead to above-average performance and gains in productivity.

The majority of employers train in order to improve their competitive advantage, although only 32% have a training budget and only 24% possess a training plan. However, it would appear that today's employers are more concerned with obtaining value for money in training than with the cost of training courses (Training Agency, 1990).

Recent encouragement has, nevertheless, come from the CBI. Hatfield (1989) talks about 1992 adding "a sharper edge to management training" and he goes on to suggest that Britain is now ahead of Europe in recognising the importance of training. This contrasts sharply with the interpretation of Foster (1988) who compared the current management education scene in Britain to a circus act!

The external training market is said to be very segmented in Britain with institutes of higher education seen as key providers of management and supervisory training, skill centres and colleges of further education providing specific skills training and Industrial Training Organisations providing sales training. Unfortunately, a lot of individuals remain indifferent towards training, although this is much less true with younger, skilled and qualified employees. Few people are ready to jeopardise stable employment for a full-time training course and, according to Bryan Nicholson, Chairman of the National Council for Vocational Qualifications, the biggest problem is

in getting people to believe in qualifications (Employment Gazette, 1992).

The conclusion of this chapter will return to a comparison between the two training contexts concerned in this research.

2.3. Conclusion

It seems that today's debate on the need for vocational education and training in both Britain and France focuses on two principal themes:

- the advances in industrial technology which call for an increasing awareness of the need to update the skills of the present workforce.
- the demographic changes which will bring major structural changes to the employment market over the coming decade and after.

Furthermore, there is the advent of a single European market at the end of 1992. From this point of view, both countries have the same preoccupation - to ensure the highest level of competition when Europe opens for business on December 31st, 1992. Both countries now accept that improved corporate performance can be achieved through the training effort and both point to the employer as the promoter of training.

However, it is at this point where the similarites seem to cease and major differences in approach to the training problem of the two countries appear. Whereas the French have chosen their legal framework to force employers to invest in training, the British have abandoned early attempts at raising a training levy, preferring to incite businesses to train through choice rather than through obligation. The principal advantage of the French system is that

funds have been made available through the levy system to pay for training, although this has meant that training has remained the affair of the company and the plethora of private consultancies. In this context, the state plays the role of system administrator, mainly leaving the marketplace to set the quality controls.

Britain, on the other hand, appears to have been a late starter on the international training scene, but has nevertheless taken steps to analyse future skill needs. It has chosen to concentrate on establishing a competence-based framework of qualifications, bringing together the academic and business worlds in the hope of preparing people for the needs of tomorrow in terms of skills and adaptability.

Although efforts have also been made in France to establish a competence-based framework of qualifications, such initiatives require the support of the academic environment which, from an institutional point of view, has had little to do with this sort of post-experience education and training.

In many ways, such divergences between the approach of the two countries boil down to cultural differences. The British tend to adapt the rules to the situation more than the French, who often seek first to establish the framework before beginning to work within it. Moreover, this is not only apparent in the legal system of the two countries. Handy pointed out that management has traditionally been considered as an art in Britain and a science in France (Handy, 1987) and a survey of the Institute of Directors in 1961 described the British executive as:

"..a man who was trained on the job, entering business straight from school."

This description appears to be largely still true.

If the French approach to management, as described by Handy (1987), is scientific, it can be argued that it is also more intellectual (Locke & Meuleau, 1988). For more than a century, the business leaders of France have been come out of the *Grandes Ecoles* with their highly selective entry requirements and their tendency to place prime importance on Mathematics. The training in such schools has always been described as "encyclopædic", the aim being to provide the business world with an elite of high-potential generalists who can rapidly become specialists on the job.

This approach is compatible with the system of hierarchy evident in French business and which Hofstede (1980) traces back to Mulder's theory of power distance (Mulder, 1977). It is hardly surprising, therefore, that France has chosen to impose the concept of training on companies through its legal system. On the other hand, Hofstede's study pointed to Britain favouring a decision-making process based on consensus which may explain why the British government has chosen to encourage employers to train employees through a series of directly- or indirectly-sponsored joint initiatives and not through its legal system.

Furthermore, the training markets in the two countries have evolved in different ways. While the French Minister for Vocational Education and Training worries about how to control the 40 000 training specialists in his country, the British are concerned about the lack of training providers in theirs, despite the proliferation of training services during the 1980s. In France, where business education is mainly looked after by the private or semi-private educational sector and where the university does not hold the same status in business education as its British counterpart, the competition for providing continuing education and training is fierce. University-based business schools in Britain, in the meantime, showed some concern over a potential threat to their autonomy when the MCI proposed a standardisation of management qualifications (Lee, 1990), although more recent events indicate that, in the field of management education, the thrust of the MCI initiatives has been towards post-experience education, and business schools have retained their autonomy over the MBA.

One big advantage of following the French example and imposing training through legislation is that the employer has no choice but to integrate training into company strategy, particularly since the training plan in France is now a statutory document that must be set out in the company's report and accounts. In comparison, according to the Training Agency, only 24% of British companies have any kind of training plan.

Indications coming from a study of one section of the retail trade in the two countries suggested that imposing a levy system for training purposes would encourage companies to take a keener interest in the training of their personnel in order to see a return on the money paid (Jackson, 1990). The study also suggested that, in the case of French retailers, there would probably be an immediate decrease in

the amount of training offered and undertaken if the "1% law" was scrapped. Certainly the success of imposing levies through statutory bodies such as the Industrial Training Boards is quite different from that of France.

Another advantage of the French approach is the guarantee of reemployment for any individual who wishes to take up full-time training. According to the Training Agency's 1989 report, more than one-third of those in employment in Britain are not prepared to run the risk of unemployment when considering a full-time training course.

One area of comparative convergence is the desire of both countries to work towards a system of nationally-recognised qualifications. The work currently being done by the CEREQ and the NCVQ is similar in this respect (Owens, 1988; Thompson, 1989), although recent progress in Britain has left the French initiative a long way behind.

In the current study, the relevance of the training contexts of the two countries is important. The fact that, institutionally-speaking, inhouse training is almost exclusively the pre-occupation of the company means that it is relatively unusual for a researcher from the academic environment to take such a practical interest in the field. In a different context, a joint venture between a business school and a company might have received a better reception and it might have been easier to obtain more support for the field tests in France Although it may be argued that this support was not necessarily forthcoming from Britain either, it must be remembered that the research was conducted from a foreign base, as far as the

British were concerned, and it could be for this reason that its interest was diminished.

Having completed a rapid presentation of the training context in which the research was carried out, the reader's attention will now be turned towards the learner.

Chapter 3
The Learner

Having set out the contextual background of the research in the previous chapter, let us now consider the concepts related to learning. In four sections, this chapter reviews approaches to learning, suggests how they may influence learning outcome, discusses their application in France and Britain and emphasises differences that must be taken into account when measuring learning in a cross-cultural context.

The first section deals with learning concepts. The second focuses on distance learning, the learning mode used in this research. The third section discusses the influence that the learner's preferred learning style may have on learning outcome. The chapter concludes with a discussion of how differences in cultural background may shape the learner's perception of cross-cultural distance learning.

The aim of the first section is to establish the existence of a link between the way trainees from the two countries approach learning.

3.1. Learning Concepts

In a face-to-face situation, learning will take place through an approach which will be situated somewhere along a learner-centred/teacher-centered continuum. This will depend upon the mix of teaching and learning activities chosen by the tutor. For example, in a traditional classroom situation, knowledge may be first transmitted by the teacher in a presentation and then learners will be expected to carry out related tasks either individually or in groups in order to confirm and reinforce learning. The success of a distance-learning course will, however, depend upon the learner's capacity to adapt to a learner-centred environment, in other words to a situation of independence from the transmitter of knowledge. This ability will be dependent on what learners have been accustomed to in their past educational/training experience.

An initial cross-cultural comparison is pertinent in this context. At first sight, a great deal of learning in France appears to take place in a teacher-centred environment and, contrary to Britain, the concepts of self-study and open learning are either in their infancy or have not had the benefit of the same media coverage or academic recognition as British institutions such as the Open University. Furthermore, post-experience education does not have the same level of social acceptance in the two countries, the separation between the learning period and the working period of an individual's life being quite distinct in France. There is, at this time, no possibility of obtaining a degree without attending university in France and, despite the fact that distance learning has been around for a considerable time (see Section 4.1.1.), it has remained in the

form of correspondence study for professional qualifications, with little or no open access. As such, the French model does not recognise the importance of the learner's experience in the learning process. It is with this difference in mind that the discussion of learning begins with a contrast between teaching and learning.

3.1.1. Teaching and Learning

Learning as a concept draws on a great deal of research in the field of educational psychology and, although most of the work in this field has been carried out in the conventional, face-to-face learning situation, much of it also applies to distance learning.

The French language provides no clear means of translating the word "learning", the closest meaning being contained in the French expression la formation par l'apprentissage (training by apprenticeship). The situation is sufficiently unsatisfactory for educationalists in France to invent a new word to describe the receiver of information i.e. the learner. Today the term l'apprenant is used to better describe what was known as l'apprenti (the apprentice).

To confuse the issue, the French equivalent for "to learn" is also used in everyday language to express the idea of "to teach". The following two phrases showing the double use of apprendre (to learn) serve as an example:

Il m'a appris que ...

He taught me that ...

J'ai appris que ...

I learnt that ...

Discussing language, thought and reality, Whorf (1956:42) claimed that all higher levels of thought are dependent on language and that the structure of our native language influences the manner we understand our environment. This is echoed in Fishman (1974:65) who claimed that

"observers are not led by the same picture of the universe unless their liguistic backgrounds are similar and can in some way be calibrated."

Meaning is thus intimately connected with the linguistic, its principle being symbolism. Consequently, if the picture of the universe does change from language to language, it may not seem so surprising to find major differences in the approach to learning in the two countries under review.

Whether this means that the recognition and development of learner-centred education and training in France is impeded by the lack of a readily-available term to describe it is debatable. There are many examples of the borrowing of words from one language by another in order to satisfactorily describe new concepts. Laissez-faire and savoir-vivre are examples of concepts which retain a flavour of the French cultural context they were drawn from and there are many examples of English words transcending both the French language and culture, such as manager, brainstorming, meeting, etc. There can, however, be a barrier to the transfer of concepts when a foreign term, together with its meaning, is taken up in another language where meaning cannot be easily understood culturally speaking. In this case, it would seem that the foreign term undergoes a rough translation in which meaning remains ambiguous.

It may therefore be of significance to notice that the French equivalents of expressions such as learning by doing (l'enseignement pratique) and even distance learning (l'enseignment à distance) still translate back into teaching concepts. A more detailed discussion of this can be found in Osborn/Lee (1988). Unfortunately, and perhaps significantly, not a great deal of recent research has been carried out in the area of learning in France.

In Britain, there exists a substantial research base on the teaching-learning concept. Bradford (1972) claims that the teaching-learning process is a human transaction involving teacher, learner and learning group. According to him, the relationships among learners and between teacher and learners have a great deal to do with ultimate learning. He argues that the learner brings to the learning situation:

- a perceptual screen which can block out information too threatening to accept. In particular, adults have self images which are more resistant to the subordinating role of simply accepting knowledge from others.
- resistances to internalised learning. The desire for the new, while at the same time looking for the secure leads to a preference for the kind of knowledge which can be copied and recalled but never internalised through a programme of change. He thus suggests that the learner's insecurity will lead to barriers to self-controlled, developmental learning which will have to be taken into

account in the distance-learning environment. (This point is further discussed in Section.3.2.)

- an approach to learning in which the learner's motivational, perceptual, emotional and attitudinal systems are important factors and will determine the readiness to learn. Learner motivation and attitude are factors which may be modified by the teacher in a conventional learning situation but they present barriers in distance learning. (This is also taken up in Section 3.2.)

On the other hand, Bradford argues that the teacher brings to the learning experience:

- knowledge of the subject, skill in organising and presenting material and the ability to test for recall
- an awareness of his/her own needs in order to enter fully into human transaction without the need for either rejection or over-acceptance.
- acceptance of the learner as a person to be listened to as well as the ability to separate the person from the unliked parts of his/her behaviour.

There certainly appears to be a strong tendency in France to consider the learning experience rather as a teaching experience in which information is disseminated from the expert to the non-expert. Here, there is a tendency for the learner's own experience not to be taken into account. We can take the example of child-education by recalling the educational policy of the 1960s in France when the Minister for Education claimed to be able to tell at any particular time in the school-week the precise point that every pupil in the country was covering in a subject that was being studied simultaneously across the nation. Such a policy is perhaps the ultimate in teacher-centred education where, across the nation, teachers are constrained to keeping up with the programme and the learner's speed and method of assimilation are ignored.

The researcher has been involved in the French educational system for long enough to be able to state that the will to standardise education is still very strong in national policy. The desire for creating standard frameworks is also prevalent in other fields in France such as Law and Accounting. One could therefore conclude that such an approach stems basically from culture (and this is taken up in the final section of this chapter). If this is so, Britain's recent move towards the establishment of a standard National Curriculum in schools will be an interesting initiative to monitor in the years to come from a cross-cultural point of view.

Some educationalists in France consider the pedagogical issue as being one in which subjects are taught more and more, the teacher being considered as the disseminator of knowledge and the learner as a sort of passive receiver in any learning situation.

Mucchielli (1984) includes the following criticism in his explanations for what he considers to be the failure of French teaching methods.

He claims that there is an the accent on the quality of "mental gymnastics" more than on the solving of real problems, since the real problems are still future problems and therefore non-specific.

This, together with what Bradford has described as the learner's quest for security in learning, tends to reinforce the French choice for a teacher-centred approach to learning.

The criticism of teaching methods in France seems to bring out the lack of will to take the learner's experience into account in the learning environment. Locke and Meuleau (1988:186) talk about the French preference for an "intellectual" approach to teaching in their international comparison of management education. Mucchielli (1984:12) claims that the teacher - or what he prefers to call the "Magister" - is the authority, the judge, the star, the model and the paternal symbol of the educational experience. Such descriptions of education in France tend to suggest that learning is knowledge-based, the role of the learner's own experience being downgraded to a secondary level.

In Britain, too, Entwistle (1990:663) accepts that, in the past, learning was generally considered from the point of view of the teacher or researcher. However, he suggests that in Britain there is now a growing emphasis on looking at learning from the point of view of the learner.

Learning, he claims, still remains, for many teachers and examiners, a question of presenting information which subsequently has to be reproduced accurately in the form it was presented. A sound knowledge in a subject area becomes equated with the quantity of information that can be reproduced to order.

However, Biggs (1987) points out that recent research in cognitive psychology suggests that knowledge stored in this way is not easy to use for any purpose other than answering specific, factual questions. According to him, knowledge has to be put to use in the solving of problems or to deal with new situations. For him, it is building the potentiality for transfer which is important and this naturally leads to an emphasis on meaning. Problem-solving, like dealing with new situations, depends to a certain extent on past experience, which will vary from learner to learner, and what is taught should allow for the testing of new knowledge as an addition to the learner's experience. In a teacher-led country, experiential learning may be inhibited for this very reason.

It is, nevertheless, the researcher's opinion that an understanding of the differences which exist in the overall concepts of teaching and learning in Britain and France does not, by itself, offer a sufficiently solid base for the development of good cross-cultural training courses.

Whilst, on the one hand, the opinions given above indicate differences in approach to the teaching versus learning discussion in the two countries under review, they suggest no solution to the problem of developing an approach suitable for both. From what has been said, it may well be possible to draw up a list for the crosscultural course designer of what to avoid; in other words, how to

eliminate differences in approach. It is nevertheless preferable to establish a list of what to do when designing courses for use in France and Britain; in other words how to solve the differences in approach so that a common, positive approach can be developed.

For the purpose of the current research, it is accepted that account must be taken of divergences in the way French and British sales trainees might expect to acquire specialised knowledge. However, a closer look at the learning process of the individual is required in order to attempt to construct guidelines for the development of such courses.

It is first necessary to review the principle theories concerning the way in which people learn before determining the way in which learners from both countries in the sample are most likely to approach the learning task in question. This will facilitate the identification of the key issues in learning to be considered by the cross-cultural course designer. At this point, it is intended only to identify key elements in the approach to learning likely to be used by trainees in the sample. The chapter relating to course design (Section 5.1.) attempts to draw up a series of recommendations for those involved in course conception.

3.1.2. Concepts relating to learning

Since course designers frequently have no direct control over learning in the real-time context, it is essential for them to have a clear idea of the way the learning will take place. Various schools of thought have claimed that learning could be assimilated to a factory production line, that complex ideas are nothing more than a series of simple ideas, that knowledge is innate and waiting to be activated or that the mind could "learn" through a series of stimulus-response situations (Davis & Nisbet, 1981). However, this research supports the theory that knowledge is acquired through experience, particularly in the field of adult learning.

As Boud (1981) points out, experience-based learning represents the earliest approach to learning for the human race. It has, nevertheless, traditionally held a position of inferiority when compared to the more organised forms of knowledge which have been constructed as subjects or disciplines and its significance and potential have only recently been fully recognised. Experiential learning is learning which comes by and from experience and which uses experience as a foundation for further learning. Weil & McGill (1989) talk about four "clusters" of people supporting the theory of experiential learning:

- those interested in the assessment and accreditation of prior experiential learning to gain access to educational institutions, employment or professional bodies (the basis, for example, of the National Vocational Qualifications initiative described in Section 2.2.4.)
- those involved in continuing education who see learning as active, meaningful and relevant to real-life agendas.
- those who see learning as a basis for group consciousness and social change through reflection.
- those who see experiential learning as a basis for personal growth and development.

Boud (1981) identifies the characteristics of experiential learning as including the involvement of individuals in their own learning, the link between the learning activity and the world outside and the presence of learner control over the learning experience. This type of learning also places importance on the past, thus giving learners the opportunity of looking back on their experience and seeing it "with fresh eyes".

Perhaps the most popular theory of experiential learning is offered by Kolb (1971) who describes the learning cycle as passing from concrete experience, through observation, conceptualisation and experimentation to new experience. A fuller discussion of this can be found in section 3.3.

Support for experience-based learning is abundant. It has been suggested that experiential learning relates to the change in an individual's behaviour potential brought about by repeated experiences in that situation - provided the change cannot be explained by other states. Piaget has also accepted that learning can involve a certain degree of experience coming not only from the learners themselves, but also from other people's experience. He claimed that what is thus learnt will be assimilated into existing cognitive structures which will be accommodated in order to meet new situations.

We are, it would appear, trained more in knowledge assimilation as children since our experience is limited but, with age and consequently with a broader experience, the task of accommodating our existing cognitive structures will play an increasing role.

According to the theory, therefore, there will be a difference between the young adult's approach to learning and that of the older learner who will have a greater degree of experience to call on. When measuring learning outcome in a group of adults, age may thus have an important influence.

The distinction between knowledge acquisition and assimilation and the development of the learner through accommodation seems to be at the base of modern learning theory. Säljö (1979), for example, proposes that learning through knowledge acquisition is:

- a quantitative increase in knowledge
- memorising
- the acquisition of facts, methods, etc, to be retained and used when necessary
- the abstraction of meaning
- an interpretative process aimed at understanding reality

On the other hand, among those who support experiential learning, Bower (1981) defines learning as the gaining of knowledge through experience and, according to Borger & Seaborne (1977:14), learning involves "any more or less permanent change of behaviour which is the result of experience".

Modern cognitive theories of learning set out to show that learning takes place through the mental processing of information and the determination of subsequent behaviour (Black & Mendenhall, 1990). Behaviour is therefore a result of learning, whereas, according to behavioural theories, it is the source of learning

A third theory is the social learning theory which has been advocated as a synthesis between cognitive and behavioural learning theories (Bandura, 1977; Hilgard & Bower, 1975). According to this theory, learning is influenced by both observation and experience. In this way, people anticipate their future behaviour by basing their future actions on what they have observed. Social learning theorists argue that individuals learn from experience and that experienced consequences of their behaviour shape what they learn as well as their future behaviour. Bandura (1977) describes the four central elements of social learning theory:

- attention: before behaviour can be modelled, the individual must notice it. The learner's attention will be influenced by the attractiveness, the status, the familiarity, the repeated availability and the past reinforcement (actual or vicarious) for paying attention
- retention: this will depend on both the imaginal and the verbal representations of the behaviour made by the learner
- reproduction: this is the learner's ability to imitate the modelled behaviour
- the incentives and motivational processes of learning.

The social learning theory is particularly relevant in the training context where the main motivation to learn may well stem from external factors such as the desire to improve performance.

In the case of the work undertaken with adult sales trainees in the present research, the social learning approach to learning would appear to hold more relevance. It insists on a change in behaviour as a consequence of learning which itself is directly affected by observation and experience. It is therefore a preoccupation of the course designer to encourage the key elements of the learning process as proposed by Bandura (1977). Three elements - attention, retention and reproduction - are dependent, to a large extent, on the design of the course, particularly in the case where the course designer will not be delivering the course.

The fourth element proposed by Bandura, concerning the incentives and motivational processes of learning, needs special consideration since these processes are both intrinsic and extrinsic in nature. Given the nature of the courses used in the present research, this point is covered below under distance learning (section 3.2.4.) where it is argued that the principle source of motivation for carrying out the training proposed is intrinsic.

3.1.3. The Importance of the Medium

When making comparisons between learners, we should also take into account the dominant system of sensory representation.

When learning is controlled from a distance, it is equally important to ensure that the each learner is receiving the same message. According to the work of Bandler & Grinder (1975) on Neurolinguistic Programming (NLP), this is not so. NLP, based on our sensory perception and the way we communicate what we

understand, claims that our level of understanding depends on what is already familiar to us and that we interpret information according to our own vision of reality. Our interpretation of reality, according to the theory, depends on our objectives or current actions and the theory suggests that we are forced to choose among information offered to us according to these objectives. In this way, NLP explains how the same message can be understood differently.

Even more relevant in the distance-learning context is the influence of our sensory perceptions on our understanding. This influence will vary from one individual to another. NLP describes the three main systems of sensory representation as proposed by Williams; i.e. audio, visual and kinesthetic (cited in Cudicio 1986:23). Although none of the three systems is exclusive to our individual perception of reality, we all have one dominant system which influences what we understand. Whereas a trainer in a face-to-face learning situation will have the possibility of adjusting to the individual learner, distance-learning should cater for all three systems in order to gain maximum impact.

Thus the choice of medium used in a training course appears to be of prime importance, if we are to accept the distinctions made above between learners. This point is taken up in Chapter 4 of the current thesis under factors which may influence the level of knowledge acquisition.

Because so much of the research into the learning process is centred around child education, it is important for the course designer to avoid applying pedagogical issues in learning to the andragogical

context. Consideration will now be given to the essential differences between the child and the adult learner.

3.1.4. Pedagogy/Andragogy

Given the interest that there has always been in the field of adult learning, it is surprising to find, until recently, so little in the way of theory on the subject. Only following the creation of the American Association for Adult Learning in 1926 was there any attempt to define adult learning as a social science.

Adult learning has been described as a process in which learners become aware of how important experience is. The idea of learning being a process brought nothing new to the pedagogical argument, but the emphasis on experience has led to reflections that Knowles (1990) summarises in the context of training as follows:

- adults are motivated to learn when they discover the needs that can be satisfied through learning
- adult learning is centred on reality. For this reason, training courses should be developed around real situations, and not merely around subject matter.
- experience is the most important factor in learning. Knowles recommends that an adult training course should be built around an analysis of experience

- adults need self-awareness, which is why the role of the teacher should not be one of a transmitter of knowledge and an evaluator of progress.
- differences in personality become more apparent with age.

 The tutor therefore needs to take account of the individual and to vary the elements of the learning environment to suit each personality.

The first three of the above points are of particular relevance to the present research in that they emphasise the learners' need to understand the advantages that completion of the training course can bring (i.e. improved job performance) as well as the role of their own experience in the learning process.

The final point, relating to the problem of adapting the course delivery to suit the learner, is easier to deal with where the tutor and learner interact in real time. In the case of distance learning, course designers must assume that they will not be the tutor of their course and must include in their overall design variations in the learning environment.

However, accounting for the personality, age, etc, of the learner in a distance-learning context is much more complex. In order to do so, the course designers must have a clear idea of the different characteristics that the indivdual learner might have.

The extent of personality differences in learners could be reduced by defining three types of learner:

- those turned towards an objective and who see learning as a way of achieving this objective
- those turned towards an activity who find relevance in the learning context which is not necessarily linked to the course content or to a particular objective
- those turned towards learning for its own sake and who have a thirst for acquiring knowledge

In the kind of learning considered in this research, it is assumed that the public consists principally of learners turned towards an objective. Figure 3-2 below points out the importance of ensuring that the adult learner understands the relevance of learning something and will therefore need to define an objective related to real life, whereas the child will not necessarily need to know how the learning is to be used in life.

Goguelin (1970) suggests that the term "andragogy" should be used to distinguish between child and adult education which, despite having a certain number of common points, demand two quite different approaches. In fact, the term "andragogy" seems to have become accepted as a more precise and less contradictory way of expressing the once popular phrase "pedagogy for adult learning".

Burge (1988) talks of the moment the term "andragogy" was first introduced into the field of educational psychology:

"It was in 1968 that the term andragogy began to be used in North America. As Malcolm Knowles tells the story, he was introduced to the term by a Yugoslav adult educator [...] in the summer of 1967, and began using it consistently in 1968"

The term "andragogy" tends to refer to both the practical aspects of helping adults to learn and to the academic study of adult education and learning.

An interesting contrast can be made between the way in which the two cultures under study consider the moment when a child becomes an adult.

From an Anglo-Saxon point of view, Knowles (1990) defines adulthood as being characterised by preoccupation with problem-centered issues, the immediate application of learning, a readiness to learn based in the "developmental tasks of maturation, an expanding repertoire of experience and "a self-concept determined by self-direction".

In French culture, the classification is much more precise. For convenience, Mucchielli (1984:10) defines an adult as

"a man or woman of over 23 years old who has entered working life, who has assumed his/her active social and family roles and who has already had direct experience of his/her existence" (p10 my translation).

To the basic knowledge acquired at primary and junior school is added the reconstruction of the world according to the dreams and fantasies of adolesence. When, after university, the adolescent enters the professional world, he/she quickly discovers that one cannot do anything anyhow at any time. The road is now traced with realism which takes account of one's self, the present and the relativity of one's project in life. One's capacity to learn will also undergo important changes:

- the universal curiosity of the child will be attenuated
- the adolesent's impression of infinite possibilities will cease
- one's intelligence, which will have peaked between 13 and
 17 years old, will be compensated by a greater capacity to
 organise knowledge
- social roles will modify one's personality, sometimes to the point of considerably deforming it
- one's motivations will undergo change (needs, sentiments, hopes and expectations)
- the self, once almost boundlessly flexible, will find its limits and in its place a certain defensive balance will develop, bringing with it resistance to change.

Knowles (1990:13), however, argues that educators now have the choice of a model - pedagogy or andragogy - and that the age-related distinction between the model was not useful. According to him,

"there is growing evidence that the andragogic assumptions are realistic in many more situations than traditional schooling has recognised".

Pratt (1988), for his part, argues that the andragogy-pedagogy distinction is best based on variations in learner dependency in specific situations, although Burge (1988) points out that some individuals will be very dependent, some independent and others interdependent in their relationship with a teacher or tutor. In consequence, she claims that it should not be assumed that self-direction is an evident need or style of adulthood. Kolb (1984) even suggests that there will be times when the same learners will require some pre-digested information in expository forms and, at other times, experiential and other inductive measures will be needed so that learners can reflect on events or analyse their own experience in order to generate personal implicit knowledge. Such variations in learners and learning must have important implications in distance learning (see section 3.2.)

The emphasis on learner-centredness in adult learning nevertheless runs the risk of resulting in a café-style approach to education. To a certain extent, adults have been encouraged to believe that they know what is best for them from an educational point of view and the teacher becomes nothing more than an assistant in the learner's goal of achieving whatever he or she wants.

Although this warning may be relevant in the case of in-house, nonformal training, the notion of allowing learners to decide form and content for themselves is the essence of open learning (see section 3.2.2.). Differences in attitude to child- and adult-learning are highlighted in the following table which is the researcher's own summary of the relevant literature:

Learner Attitudes	Pedagogy	Andragogy
the need to know	learners need only know what they must learn (i.e. what the teacher teaches) in order to succeed. They do not need to know how to use this knowledge in life.	learners need to know why they must learn something before beginning the learning process. Tough (1969) points out the time energy spent on analysing the costs and benefits of doing a training programme.
self- awareness	the learner is wholly dependent on the teacherand must accept this role.	since adults have become aware of their responsibilities in life and are capable of dealing with them, they will not accept situations where others impose their ideas on them.
the role of experience	the learner's previous experience is of little use in the learning environment. On the other hand, the experience of the teacher is essential. It is for this reason that the classic methods of teaching in the pedagogical context are through conferences, lectures and teache centred classes.	adults have not only had more experience of life, but their experience is different. Adult education must take these differences into account, particularly as individual differences will be accentuated (see above) Groups will tend to be more heterogeneous and there will be differences in motivation, in needs, in culture, in learning styles, in centres of interest and in objectives.
the will to learn	learners need only learn what is taught in order to succeed and progress.	adults are willing to learn only if the knowledge and competence gained will allow them to confront real situations with more ease. This suggests that the best way to educate adults is to associate to progression of the stages of learning with the learner's need to develop. Adult learning must therefore coincide in time with the learner's need to develop knowledge.
	learners in the pedagogical context orientate their learning around a subject. Knowledge is organised around the logic of the subject content	learning is orientated around life (or a task or problem). Learners will tend to assimilate more efficiently when the knowledge or competence has a direct relevance to real situations
motivation	learners are motivated extrinsically through grades, marks, teache approval/disapproval and parents pressure.	like children, adults are motivated extrinsically (by promises of a better job or a higher salary, etc.) but it is internal pressure which makes up the most important part of their motivation. Tough (1969) proposed that all normal adults are motivated to develop and progress in life but this motivation is often blocked by obstacles such as negative concepts of their quality as learners, the absence of opportunities and resources, time constraints and training courses which do not respect the fundamental principles of adult education.

Figure 3-2: A Comparison of Child/Adult Attitudes to Learning

In the years ahead, it seems that learning will continue to become more and more directed towards greater self-sufficiency on the part of the learner. Child (1983:17) sees six areas of development over the next century affecting:

- the cognitive predisposition of the learner i.e. the knowledge skills and abilities that the learner brings to a task to influence learning performance (this is discussed below under Learning Styles - Section 3.3)
- the affective predisposition of the learner i.e. the interests, attitudes and self-concept that the learner brings to a task
- the way in which a body of knowledge needs to be structured in order for efficient and effective learning to take place (discussed under Course Design in Section 5.1.)
- the sequencing and methodology of presentation of the body of knowledge (also discussed under Course Design)
- the reinforcement mechanisms necessary to ensure the continued interest of the learner, such as rewards, incentives and feedback (discussed under Motivation in Section 3.2.4.)
- the evaluation of learning performance as well as of the system used (discussed under Evaluation in Section 5.2.)

For the present, a study carried out in 1988 (Percy, 1988) suggested that adults are volunteers and not conscripts for learning. This

implies that learning must remain attractive to the learner as well as seeming worthwhile. It must also reach out to the learner, both physically (time, place, cost, convenience) and mentally. The need to retain the attention of the learner is discussed under course design (Section 5.1.). A discussion of the physical constraints in learning can be found in the next section on distance learning.

3.1.5. Summary

From the above discussion and in the present context, success in learning will depend upon the following considerations:

- the learner's ability to accept a learner-centred approach to learning
- the course designer's ability to facilitate the transfer of knowledge acquired in the course into the learner's professional context
- the course's ability to build on the learner's own experience and to relate knowledge acquired to real situations
- the choice of training media in order to facilitate learning among learners of different types

This section set out to discuss the approach to learning of trainees from the two countries. Having identified differences in the concept of learning, it has concluded that a cross-cultural training course of the type proposed should be based on the experience of the learner and should insist upon the practical application of what is learnt. It has accepted that learners seem to differ according to their cultural origins and that factors such as age and personality must also be taken into account as well as the attractiveness of the course.

It has suggested that one major area of difference between trainees from the two countries under review relates to their expectations in terms of the teacher/learner-centredness of the learning experience. This is of prime importance in the field of distance learning, which is the subject of the following section.

3.2. Concepts relating to Distance Learning

The previous section considered how people learn and suggested that a common approach to adult learning of the type proposed in this thesis could be based on the past experience of the learner. The discussion also evoked a potential area of difference between trainees from the two countries under review based on their expectations of teacher- and learner-centred training.

This section looks at the specific problems involved in learning at a distance, where there is a physical separation between teacher and learner for the majority, if not all of the time and where the learning experience will place emphasis on learner-centredness.

The aim is to determine to what degree the success of training courses such as those proposed in this research will depend upon the ability and willingness of learners to place themselves at the centre of the experience.

3.2.1. Definitions of the Various Terms Used

Keegan (1983) points out that there are at least six terms used in the literature to describe distance learning. They are:

- independent study: a term reputedly introduced by Wedemeyer (1971:550) and used extensively in the United States. The term stresses the learners' choice to study where, when, at whatever pace and with whichever method they wish (Moore, 1977). Keegan (1983) argues

that the term "independent study" is inaccurate since it does not express the interactive nature of distance education.

- be the term that springs to mind most frequently when discussing distance learning. Yet the term suggests an approach to learning which is much more limited in scope, since it only deals with one type of medium. Interestingly, despite the fact that technological progress now offers an increasing number of alternative media, the printed word remains the principle medium in distance learning. Sims (1977:4) suggests that the unique feature in the correspondence education process is that the learner is at a distance from the teacher for much, if not for all of the duration of the teaching-learning process. This is also true of other forms of distance learning.
- home study: although this term tends to emphasise the learning environment rather than the learning process (Keegan, 1983), it has become an accepted equivalent to certain forms of distance learning, particularly in the United States. It is, however, entirely unsatisfactory for use in a company environment where study may well take place in an office or computer or video room.
- external studies: this term also tends to lay stress on the learning environment rather than on the process. It is, however, commonly employed in Australia as a term

meaning distance learning. It suggests that learning takes place outside the traditional classroom environment.

- distance education: this is often used as an allembracing term encompassing the concepts of both teaching and learning at a distance. For Rumble & Harry (1982), distance education is a generic term which includes the range of teaching/learning strategies variously referred to as correspondence study, home or independent study, télé-enseignement, etc.
- distance teaching: tends not to lay emphasis on the learner's activity of learning at a distance and rather favours the tutor's activity of teaching at a distance (Holmberg, 1986). According to Rumble & Harry (1982), it refers to the institutional role of providing education at a distance. In contrast, distance learning refers to the learner's role in the process.

"Distance learning", "distance teaching" and "distance education" can be considered as interchangeable expressions meaning the same thing, according to Asch & Smith (1988:117). Since, when discussing distance learning, many authors include the area of course design which itself implies a degree of teaching, this thesis takes the terms "distance learning", "distance study" and "distance education" as encapsulating the the major elements in the type of learning situation studied.

One of the most widely accepted definitions of distance education is offered by Holmberg (1977:9):

"The term 'distance education' covers the various forms of study at all levels which are not under the continuous immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which nevertheless benefit from the planning, guidance and tuition of a tutorial organisation."

This definition has the misfortune of being more an explanation of what distance education is <u>not</u> than of what it <u>is</u>. Moore (1977:15) offers perhaps a more appropriate definition in describing the term "distance study" as:

"...those teaching methods in which, because of the physical separation of learners and teachers, the interactive, as well as the preactive phase of teaching, is conducted through print, mechanical or electronic devices."

A more detailed definition of distance education, concentrating on the learning process, is offered by Flinck (1978):

"Distance education is a learning system where the teaching behaviours are separate from the learning behaviours. The learner works - alone or in a group - guided by study material arranged by the instructor together with the tutor in a location apart from the students, who however have the opportunity to communicate with a tutor/tutors with the aid of one or more media such as correspondence, television, radio. Distance education may be combined with various forms of face-to-face meetings."

The common factor present in the majority of definitions of the term "distance education/learning" revolves around the separation of the

tutor and the learner in both space and time. As a result of this separation, there is a need in distance learning for some kind of mediatory materials as well as a link between these learning materials and effective learning which, in face-to-face interaction, takes the form of verbal feedback.

Because of its potential for "mass" education, Peters (1973:206) tends to regard distance education as an industrialised form of teaching and learning and this analogy is further supported in Stewart, Keegan & Holmberg (1983) who see distance education as requiring management skills such as lead times, deadlines, print runs, etc. For them, it is, therefore much closer to the industrialised model than conventional education.

Keegan (1986) attempted to encapsulate the characteristics of distance education by drawing on four existing definitions; those of Holmberg (1977), Peters (1973), Moore (1977) and the French law of July 12th, 1971. The result is Keegan's seven characteristics of distance education:

- the separation of teacher and student
- the influence of an educational organisation
- the use of technical media
- the provision of two-way communication
- the absence of group learning, with the possibility of occasional seminars
- participation in the most industrialised form of education
- the privatisation of learning

Others have attempted to define the dimensions of distance education within predefined limits. Delling (1975), for example, succintly proposes eight such dimensions:

- society, the student, the distance, the information-carrier, the study aim, the study matter, the learning result and the supporting organisation.

Methods relating to teaching and learning have been developed principally through studies in child education in schools, concentrating on traditional beliefs about how children learn and what objectives are most important at different age levels. However, these models have been influenced by more general theories about learning. In the 1950s, many such theories came out of the work of the behaviourists and, in particular, the research of Skinner who proposed the behavioural-control method. Skinner stressed the importance of learning reinforcement in order to change behaviour. When a subject's response is followed by reinforcement, the likelihood of the behaviour being produced again is increased. The response which is reinforced will also have the effect of weakening other potential responses that have remained unreinforced. In this way, the reinforcement of some reponses rather than others establishes particular patterns of behaviour (Wingfield, 1979). Furthermore, according to the model, reinforcement can be both positive and negative. If learners receive negative reinforcement, the likelihood of their using the same response a second time is reduced. Although Skinner's principles of learning made only a modest impact at the time, ideas in the behaviourist tradition are still being tested for example in computer-assisted learning.

In the 1960s, the developmental theories that had earlier been put forward by Piaget began to resurface. Although not denying the potential importance of the stimulus-response-reinforcement paradigm of Skinner, it was felt that not enough attention was being paid to the learner's own behaviour. Bruner's discovery-learning model insisted that behaviour was not something elicited by a stimulus, but rather a highly complex activity involving the acquisition of information, its transformation or manipulation into a form suitable for dealing with the task in hand and, finally, the verification of the adequacy of the transformation (Bruner, 1973). The model argued that people were not just passive receivers of stimuli and producers of responses. Learning was considered an active process involving the use of strategies and the transformation of sensory experience into new categories and into organised conceptions. The concept of active readiness to learn became a key notion in the psychology of learning.

In the 1970s, learning theory in the area of conventional education took two main directions. The first was through the work of cognitive and constructivist psychologists, such as Ausubel who promoted the organiser model. This model concentrated on the way people constructed meanings from information received through their senses. The importance of structuring information presented to the learner was emphasised and models in memory processes and concept development were employed to justify the approach. The second direction was through the work of Rogers and other psychologists in the humanistic mould. Rogers emphasised the importance of objectives in the learning process. He claimed that learning required personal involvement, it was self-initiated, it was

pervasive, it was evaluated by the learner and that its essence was meaning. The aim of education, according to Rogers, was the facilitation of learning and his model was based on the development of the whole individual and the use of education to ensure freedom so that the learner's expression and personality may be fully developed (Entwistle, 1985:7)

Other learning theories which do not fit neatly into the behaviourist and cognitive approaches given above include Gagné's hierarchical theory on the organisation of subject content and presentation. Gagné's model was based on what he termed as "subordinate knowledge", which implied that a person's ability to perform a particular task depended on the ability to perform a series of other, pre-requisite sub-skills. Gagné suggested that a person was ready to learn something new when these pre-reqisite skills had been mastered, in other words when the capabilities needed to learn something new had been acquired through previous learning (Wingfield, 1979:4).

In the 1980s, theories relating to learning tended to concentrate less on the simple experimental studies, which were popular with behaviourist and cognitive psychologists, and more on the importance of the social context of learning. A recognition of the dependence of the complex interaction between the learner, the teacher and the contents and requirements of the learning task led to the interactionist approach which provided teachers with ideas closer to real experience and less based on elaborate analyses which leave the learner in the background.

Baath (1979) looked at the above models in order to determine their suitability in the distance-learning mode. He found that they were all applicable to distance study and those which emphasised the structured form of presenting information - such as the models of Skinner, Ausubel and Gagné - were particularly relevant.

The problem of evaluating and monitoring teaching and learning models in the distance-learning context is complicated by the fact that the learner is, according to many of the definitions proposed, isolated from both the tutor and from other learners. Nevertheless, although they may work alone for considerable periods of time in a distance-learning environment, learners working away from their tutor in groups is also a possibility foreseen by Keegan (1986) and Flinck (1978). Thus, distance learning should not be considered only as an isolated activity carried out by an individual away from real-time tutorial support but also as a group activity in which the experience of other learners will influence the individual's learning.

This is an approach Hodgson (1986) has considered when identifying two different types of distance learning programme; those which are based on materials and those which are based on learner-groups.

According to her, materials-based programmes have the following characteristics:

- they involve the use of at least one form of media
- they are often designed for solo learners
- they require some sort of delivery system

- they can be used anywhere (as long as delivery hardware is available)

The characteristics of learner-group based programmes are:

- they are based on learner groups in which learners take responsibility not only for their own learning but also for others in the group
- despite this, learners work on their own for the majority of the time
- learning has a strong base in work activities

The learner-group approach to distance education may be of particular relevance to in-house training. Interviews conducted by the researcher with training managers has suggested that companies in both countries under review more frequently look upon distance learning as an individual activity in which the learner is isolated from everything but the materials making up the learning package. In the opinion of the researcher, they are overlooking the potential of feedback and trainee development brought about through exchanges with peers. The larger the number of people trained within a company, the higher the potential of the learner-group and the more important it may be to encourage group activities such as comparing notes and replies to exercises with peers. The practical application of this can be seen in the development of the Needs Analysis course discussed in Section 6.2.

Such arguments suggest that in the smaller company, where the potential of learner-groups made up of trainees from the same

company is more limited, the course designer will favour a more materials-based approach. However, in the larger corporate environment, where peer-groups form more naturally, a learner-group approach could maximise learning potential.

3.2.2. Open Learning

One other term should be considered in a discussion of distance learning; that of "open learning". Wild (1985:1) claims that "open learning" is, to a large extent, the key concept and "distance learning" is simply one of the means by which open learning is achieved. Open learning is about removing the constraints to learning, including the time, space and pace restrictions often cited by advocates of distance learning.

Most educational systems have been described as "closed" in terms of educational and administrative constraints (Coffey, 1977). The administrative constraints are listed by Coffey as follows:

- the learning activity must occur in a specific place
- the learning activity must occur at definite times
- it must take place over a predetermined period
- the learning group must be of a minimum size
- the learner must pay an amount of money towards the cost of the course

The educational constraints leading to a "closed" system, according to Coffey, are where:

- the learner has to accept the sequence of teaching that is offered
- the learner must accept the teaching strategy according to the teacher
- there is limited scope for learners to select their learning objectives
- there are likely to be minimum entry requirements which will have little to do with personal learning objectives
- assessment methods are likely to have little relevance on the application of the knowledge acquired

Wild (1985:2) suggests that a definition of an open learning system is where there has been an attempt to remove at least some of the above constraints as well as any others which reduce learning opportunities. According to this definition, it could be argued that the courses developed in the present research may be suitable for open learning in the sense that they are free of Wild's administrative constraints as well as of some of the educational constraints.

Support for this can be found in Boot & Hodgson (1987) who note that the various attempts at a definition seem to revolve around the notion of freedom from constraints on the learning process.

The term "open learning" may even be applied to conventional faceto-face learning as well as distance learning. Hussey (1988:143) argues that the key factor in open learning is its responsiveness to individual learning needs and, although distance learning overcomes the lack of "openness" of the traditional classroom situation, in other respects some distance learning courses may be decidedly "closed", while some traditional approaches may be "open".

If we were to attempt to reach a conclusion in the discussion surrounding the precise definition of open learning, we must accept that the key element is choice in learning. Binsted (1986) sums this up by suggesting that open learning involves learners having:

- choice concerning the learning goals they wish to pursue
- choice concerning the sequence or depth of learning they wish to pursue
- choice concerning the learning process and pace
- unrestricted access, not dependent on previous learning attainment

He accepts that, in reality, most programmes are neither entirely "open" nor "distance" and that many so-called "open" programmes are only open in terms of access.

As pointed out by Mackenzie, Postgate & Scupham (1975:15), "open learning" is an imprecise phrase that eludes definition. In the researcher's opinion, the very idea of open learning seems to elude precise definition by its desire to refuse boundaries and, therefore, only the vaguest definitions could be suitable.

3.2.3. The Individualisation of Learning

Although Burge (1988) claims that the general learning processes and life conditions of distance learners are similar to those of

classroom learners, much of the discussion around distance learning accepts that the learning experience differs in its learner-centredness.

It is reasonable to suppose that any course carried out without the presence of a teacher must place the individual at the centre of the learning experience. The concept of the individualisation of learning has been taken up by Bonvalot & Courtois (1982:63) who speak of the individualising of learning in the context of professional training in France. For them, individualising is not training adults but rather helping them to train themselves. The different phases of the learning experience are in constant rapport and orientation, training and evaluation cannot be dissociated in time. Individualising learning means that trainees must carry out their orientation, training and evaluation by themselves. Trainees thus become the masters of their own learning, not only because their position vis-à-vis the trainer changes, but also because they must re-appropriate knowledge in function of their person. They alone can succeed in striking a harmony between the knowledge they already possess and the knowledge they can acquire.

Burgoyne, Boydell & Pedler (1978) talk about self-developmen. and distinguish between development which is "of-self" and that which is "by-self".

Development "of-self" is interpreted as learning about or changing one's self to some extent and it thus implies a deep rather than a surface approach to learning - in other words, something of significance to the learner. Binsted (1987) warns against the

development "of-self" as an end in itself since it may well evolve into selfism, a term which Vitz (1981) describes as secular humanism with a devotion to "self" to the point of becoming a religion.

Development "by-self" is defined by Burgoyne, Boydell & Pedler (1978) as:

"implying that self [i.e. the learner], as opposed to some other person or persons or some force in the learner's environment, is 'responsible for' or 'initiating' or 'controlling' the learning process."

Distance learning courses may have, according to Hodgson (1986), both a dissemination and a developmental orientation. Dissemination relates to the transfer of knowledge as in a traditional face-to-face course. The developmental orientation is understood in the sense of the development "of self, by self". Thus, establishing distance learning in a training context must involve a degree of reflection on the part of those responsible for training in order to consider the impact of the individualisation of learning on the trainee. Making the learner responsible for initiating and controlling the learning process means helping them to train themselves, but the success of such an approach relies heavily on the learner's intrinsic motivation.

3.2.4. Distance Learning and Learner Motivation

The fact that the learner is placed at the centre of the learning experience in the distance-learning environment emphasises the need for the course designer to understand the motivations of the learner. In fact, all parties involved in the learning experience - the learner, the course designer and the organisation (the company or

educational establishment) - need to understand the learner's desire to pick up or put down a course. They also need to be aware of the reasons for abandoning half-way through. For the researcher, it is not only necessary to understand what motivates learners, but also to be aware of how to relate their motivations to the subject to be learnt.

An individual will be motivated either through external forces or intrinsically through a desire to succeed. Support for social learning theory has already been given in section 3.1. In the area of motivation, the theory claims that "man is neither driven by inner forces nor buffeted helplessly by environmental influences" (Bandura, 1963:2). In the learning context, external rewards do not create the capacity to think creatively or enhance the ability to interpret success and failure as information. Research has shown that extrinsic motivation may have a detrimental effect on the level of a learner's intrinsic motivation (Deci & Ryan, 1980). This section discusses the relevance of intrinsic motivation in the distance-learning context.

Intrinsic motivation relative to the learning situation can be divided between the incongruity theories (Berlyne, 1978; Walker, 1973; Hunt, 1965) and the competence and self-determination theories (Deci, 1975; Bandura, 1977). The former uphold that people are intrinsically motivated by the need to encounter events that are moderately discrepant from some internal standard. The intrinsic motivation comes from the individual's desire to accomplish something which is a challenge (due to the difference between the

individual's internal standard and that which is required to achieve a higher level). This is relevant to the difficulty of the course proposed.

When embarking on a training course, both trainer and trainee are looking to achieve improved performance through increased competence in the workplace. The concept of competence as part of intrinsic motivation was first proposed by White (1959) who claimed that people are motivated to attain competence in their dealing with the environment. Furthermore, people prefer to see themselves as the instigators of their own behaviour rather than as pawns to external forces (de Charms, 1976). However, Deci & Ryan (1980) argue that, although the attainment of competence is a part of the need for self-determination, competence acquisition that is forced by others rather than chosen by the individual is not intrinsically motivating.

This indicates that, for a training course to be effective, the learner must feel a desire to learn coming from an intrinsic source, even if this is supported by some form of extrinsic motivation. Furthermore, the learner must feel a degree of personal control over learning in order to establish a relationship between competence and intrinsic motivation.

To integrate the concept of moderate incongruity, learners must be encouraged to learn through activities which require them to stretch their abilities a certain amount in order to create a discrepancy between what they know they can achieve (the internal standard) and what is required of them (the stimulus event). In this way, they will create congruity from moderate incongruity, thus modifying the

internal standard ready for a new moderately incongruous learning task.

Furthermore, as is taken up in section 5.1., the learning task must be neither dull nor uninteresting since if such is the case, learners will not be intrinsically motivated at the outset and, therefore, learning outcome will be jeopardised (Deci & Ryan, 1980).

A task which is not intrinsically motivating may nevertheless be accomplished through external motivating factors such as rewards or compulsion. Despite its lack of intrinsic interest, the task may gain satisfaction by virtue of the activity's instrumentality. A distance-learning course will depend heavily on the intrinsic motivation of the learner and, unless imposed by the educational institution or the training establishment, rewards, punishments and other extrinsic motivators are likely to be few, if any.

Competition may also play a role in intrinsic motivation. According to Csikszentmihalyi (1975), competition is a component of intrinsically motivated activities. One of the factors present in the conventional learning environment, but absent in the distance-learning context, is competition between learners. However, competition is claimed to have both a positive and negative effect on intrinsic motivation. Competition, in one interpretation, is seen in the context of one party winning and one party losing. However, in the learning environment, it should be translated as one individual seeking to do better at the learning task.

Csikszentmihalyi (1975) defines the two concepts of competition by differentiating between "measuring self against others" and "measuring self against own ideal." Measuring self against others is not facilitated in a distance-learning environment. Thus, if competition is to be an integral part of course design, the distance learning course should, it seems, encourage measurement of self against one's own ideal. Competition in the sense of measuring self against others may decrease an individual's level of intrinsic motivation (Deci & Ryan, 1980). According to the latter, this is particularly the case for females, who have learnt to be less independent and achievement-focused than males.

A certain importance should be attached to the individual's perception of competence. Deci (1975) suggests that perceiving oneself as being competent at an activity will increase one's intrinsic motivation for the activity. This means that a course should be challenging and should show a progression in competence attainment which must be clear to the learner. This point raises the importance of feedback and is of particular relevance in the learner-centred environment. The difficulties of providing feedback in a distancelearning environment have already been mentioned in this section. Deci & Ryan (1980) talk about providing feedback through verbal rewards which, like other rewards, can either enhance or diminish intrinsic motivation. They claim that verbal rewards which increase intrinsic motivation are those emphasising competence. They further claim that positive competence feedback should always increase intrinsic motivation. This suggests that, in a distance-learning course where verbal rewards can be communicated through the learning medium, learners should be made aware of their improved competence at regular intervals in order to stimulate intrinsic motivation.

Negative feedback, it is argued, will decrease the individual's intrinsic motivation (Deci & Cascio, 1972; Deci, Cascio & Krusell, 1973). However, Deci & Ryan (1980) claim that not all negative feedback will have a detrimental effect on intrinsic motivation and they use the example of trial-and-error learning to reinforce their argument. They do claim, however, that negative feedback signifying an individual's incompetence will decrease intrinsic motivation. Negative feedback is taken up in the section relating to course design (Chapter 5).

3.2.5 The Advantages of Distance Learning over Conventional In-House Training

The research work carried out in the various companies participating in the current research has allowed the researcher to gain an overall impression of their attitude towards distance learning for in-house training. For many, distance learning is seen as an attractive alternative to face-to-face training since it allows learning to take place without the necessity of removing trainees from the job. As such, it is compatible with experiential learning, since what is being learned in the distance-learning environment can be instantaneously applied to the practical environment, thus enhancing the reinforcement of learning in the field. This does, however, assume that learners are able to recognise and exploit their experiences with a view to self-development. This point is taken up below under preferred learning styles (section 3.3.).

Apart from the opportunity cost gained by not having trainees away from their posts during training, some companies also see both economic and educational advantages in distance learning. Although the initial cost of either developing or buying-in a distance-learning programme can be relatively high when compared to conventional face-to-face training, the possibility of spreading this cost over a broad base of trainees is seen as a major advantage in the larger company.

Furthermore, a major educational advantage is to be gained by offering the same quality of training over a period of time to all trainees (who are also able to choose the "best time" to learn and will not be subject to the pacing constraints imposed by the trainer or other learners in a conventional course).

The advantages in distance learning are many but the need is frequently stressed for the course to be relevant to the learner's own work situation. In this way, a learner in full-time employment and taking a course over a period of time has an advantage over the full-time student or a student temporarily extracted from the professional world for a course.

A survey into the use of distance teaching by Airey & Goodman (1986) concluded that most companies using distance education as a part of their training effort cited trainer and trainee flexibility as the main advantage

In the survey, the companies were all using distance education in order to enhance rather than replace existing training. Hodgson (1986) also sees one of the main advantages of distance learning as a way to reach people who can no longer be released for long periods of time as well as to allow managers of small- and medium-sized companies to have access to training. However, the smaller company will not be able to spread the cost of developing distance-learning over a broad base unless it does so as a joint initiative with other companies.

Hodgson (1986) stresses the importance for course designers to attend to both the individual learners and their particular situation. Where the course design includes a development orientation, she points out the need to pay particular attention to the way assessment is handled, to the way tutors relate to the programme and to the extent learners have control over the content.

The advantages of using distance learning rather than traditional learning for in-house training purposes can be summarised as:

- the meeting of individual learning needs in a way that is more applicable to the learner's own situation
- the improvement of the individual's access to training
- the enhancement of the learning experience for both the trainee and the company
- the provision of a training programme in which the quality remains the same
- the improvement of cost-effectiveness resulting from keeping the trainee in the workplace during the training period

Although distance learning implies a step away from group learning and the individual learner thus plays a more central role, group learning is not excluded. However, the learner will be working alone for the majority of the time, even when group learning and occasional seminars are part of the course. Thus, the course designer/writer must assume that the learner will be working in an isolated environment and an attempt will be made to meet the individual's learning needs. It is for this reason that a knowledge of the type of learner carrying out the course is essential in course design. If we accept that people will approach the learning task with differing degrees of motivation, we must also accept that their approach will vary according to their psychological make-up. The following section will discuss the individual's style of learning.

3.3. Concepts relating to learning styles

Having discussed learning in its broad context before considering it in the more specific field of distance learning, the current discussion will now focus on individual approaches to learning. As individuals working in their own individual environments and with their own specific motivations, no two learners can be the same. Furthermore, each learner will have an individual style of learning which may influence learning outcome. The importance of considering preferred learning styles within the context of the current research sprang from the need to make valid comparisons between cases making up the field sample. Their research is basically concerned with a comparison of the learning outcomes of trainees coming from two countries. However, early research indicated that it was perhaps too much of a generalisation to create populations solely according to nationality and social background, since this would amount to ignoring the influence of a trainee's learning style on learning outcome. By including this dimension in the research, comparisons in learning outcome between members of the sample could be made between learners of the same learning style. As set out in the research model (section 7.1.), this approach gave a second dimension on the learning level, thus allowing more meaningful comparisons to be made.

Leino, Leino & Lindstedt (1989) claim that knowledge of learning styles is a crucial component in the process of learning to learn. The ability to set and achieve goals seems to come easily to certain individuals and less easily to others. The way individuals approach learning appears to be closely connected to their psychological type.

It is claimed that, in distance learning, knowledge of one's psychological type can bring a level of awareness to the "fit" between self-management skills and the natural organisational inclination of the individual.

Distance learning, in particular, requires self-direction and self-management. Individuals who are not natural planners may need to acquire planning skills quickly in order to be successful in learning at a distance.

In a traditional training environment, where trainer and trainee are in a face-to-face situation, the individual's approach to learning, i.e. the preferred learning style, has gained a certain importance over recent years.

An individual's learning style is defined in Entwistle, (1981:91) as:

"the general tendency to adopt a particular strategy of learning".

However, a distinction should be made between learning style and learning strategy. Whereas learning strategy implies a planned approach to the task of learning, learning style would seem to suggest the characteristic manner of learning. It can be assumed, therefore, that learning strategy is a more purposeful action that the learner carries out consciously, while learning style is a part of the learner's subconscious profile. In this sense, Entwistle's definition of indivdual learning style is ambiguous, since he talks of a learner's "adopting" a style.

The distinction between strategy and style is perhaps not of importance if we limit our study to the determination of learner types. In this case, we are not assuming that one "style" is better than another and we are only concerned with determining the profile of the learner. Such is true in the present research. However, certain authors talk about encouraging the individual to become an all-round learner (in particular Honey, 1986). Learning strategy then becomes the procedures adopted in order to adapt an individual's learning style to suit the learning task.

Relevant to the current research is the influence that learning style will have on learning outcome. Pask and Scott (1972:217) see course design as obscuring the extent to which individual learning styles influence the learning outcome. They state that:

"it is less commonly recognised that differences of [learning] style have great educational importance because students fare very differently according to whether the teaching materials are or are not adapted to suit their idiosyncracies."

Jung's definition of psychological types (1923) was the starting point of reference for many modern theories about learning styles. He defined an individual's actions as the result of either acquiring or using information. In the former case, he proposed that information is acquired through a perceptual function continuum represented at one extreme by intuition and at the other by sensation. The intuitive person uses a degree of insight whereas the sensing approach involves measuring, weighing up and identifying the information acquired in a specific way.

The way in which information is used is described along a judgement function with thinking and feeling representing the opposite ends of the continuum. The thinking approach favours a logical, analytical and detached decision-making process based on the facts available. Individuals who prefer the feeling approach will base their decisions on personal beliefs.

Early research into learning styles concentrated on learner activities such as reading academic articles before replying to questionnaires designed to distinguish between deep and surface approaches and high or low levels of understanding (Marton & Säljö, 1976; Pask & Scott, 1972). Interest was focused on requiring the learner to reach a deep level of understanding in order to determine the different strategies used to reach this point.

The research distinguished between serialist and holist strategies. The serialist learner, who followed a series of logical steps in learning, tended to reproduce knowledge received in a straightforward, reasoned manner. Holist learners, who tended to consider individual elements of the learning task within their overall context, combined several elements of knowledge simultaneously. Pask and his colleagues identified a sub-category within the holist strategy in which learners relied on personal "props" to aid their understanding. Such learners were known as redundant holists, since simultaneous recall of elements of knowledge were dependent on mind-mapping (Buzan, 1984).

Leino, Leino & Lindstedt (1989) propose three approaches within the field of cognitive psychology as examples of the development that has taken place in research into preferred learning styles:

- Witkin's Field Dependence/Independence theory appears to be the most researched development. This involves the ability to perceive items as discrete from their background. The theory has been enlarged to include embedded contexts in problemsolving situations and the ability to structure. Field dependence/independence has more recently found a new dimension in the social domain where there is growing who function evidence to show that people autonomously of the external visual field also function more autonomously of others in social situations (Leino, Leino & Lindstedt, 1989:4).
- Kagan's Reflection-Impulsivity theory (Kogan, 1976) of the early 1960s. This involved grouping objects on the basis of their perceived similarity. In addition to the three conceptualising styles descriptive, relational and inferential it became evident that individuals varied in the time it took them to respond (Leino, Leino & Lindstedt, 1989:5). The term "conceptual tempo" has been used to refer to the general cognitive-conceptual speed involved in Kagan's Matching Familiar Figures Test.
- Conceptual Level theory comes from Harvey, Hunt & Schroeder (1961). The theory is concerned with individual differences in information processing and the way in which a

person perceives environmental events, such as social stimuli. An individual's style is measured by means of a Paragraph Completion Method. This indicates that low-conceptual learners gain more benefit from a highly-structured environment and high-conceptual level learners are more efficient in a low-structured environment - or, at least, they are less affected by variations in structure.

An awareness of these theories is essential since the designer of courses of the type tested in the current research should be seeking to cater for the widest variety of learning styles. It would be wrong to assume that elements of a distance-learning course are perceived in the same way by all learners and it would appear important to consider ways of ensuring that both text and visual aids remain clear to learners of different types.

The question of preferred learning styles frequently tends to be expressed in terms of polar opposites. The work of Kagan et al (1964) and Witkin et al (1977) on field dependence relates closely to Jung's perceptual function. The logical, analytical approach to the acquisition of information (sensation) apparently suggests a higher degree of field dependency, although Witkin (1976) accepts that training in the work environment may encourage the temporary application of the opposing approach for specific tasks.

Kagan et al (1964) studied response rates among children in the learning environment and contrasted impulsiveness with reflection, suggesting that a very active orientation towards learning inhibits reflection and thus precludes the development of analytical concepts.

The impulsive-reflective continuum could be translated by a risk-taking/caution model. Risk-takers tend to take chances even when the likelihood of success is poor, whereas the cautious individual tends to take chances only when the likelihood of success is relatively high.

Individual differences in perception were studied by Harvey, Hunt and Schroeder (1961) who opposed complexity to simplicity in the way that individuals construe the world. They found that complexity was characterised by the use of hierarchic integration whereas simplicity was revealed in the use of dimensions of difference.

The holist perception of certain individuals from the serialist perception of others was studied by Pask and Scott (1972) who suggested that the global approach of holists was used to construct a broad view of the learning context which included their real-life experience. The serialist, on the other hand, followed a linear progression of reasoning with the intention of reaching an overall understanding of the whole from the component parts.

Pask's distinction (1969) between those who "see things as parts of a whole" and those who "have a special aptitude for stringing subproblems into sequences" also correlates strongly with the activity of the two hemispheres of the human brain, discussed under learning concepts in Section 3.1.

Pask's Conversational Theory (1976) links the holist/serialist perception theory to distinct learning styles. The preference for

displaying a holist strategy is described as comprehension learning whereas the serialist's strategy is referred to as operational learning.

"A pure operationalist climbs vertically on a domain map and cannot transfer to other areas, whereas a pure comprehensionist sees analogies everywhere but cannot employ any concept in a practical way." (Gilroy, 1989:146)

3.3.1. The Learning Styles Inventory

The practical application to learning of the various theories which have evolved, directly or indirectly, from Jung's definition of psychological types has been brought to the forefront through the work of Kolb.

In Kolb, Rubin & McIntyre (1974:27), Kolb emphasised the lack of understanding that exists in the field of the learning process and argued that, with the help of a learning model, managers are able to help others as well as themselves to learn more effectively.

In the same paper, he goes on to describe his Experiential Model. Based on Jung's concept of styles or types, this is an extension of the theories of the 1940s expounded by Kurt Lewin. The Experiential Model puts experience at the base of the learning process and, consequently, identifies strongly with the cognitive field of psychology (Kolb, 1976:3).

Kolb argues that, for the learning process to be effective, the learner must possess four abilities, each of which may at first appear to be in conflict with the others. He puts these abilities on two axes, one varying from concrete experience to abstract conceptualisation and the other from active experimentation to reflective observation.

Most cognitive psychologists see the first axis, from concrete experience to abstract conceptualisation, as being the primary learning dimension (Flavell, 1963; Bruner, 1960 & 1966; Harvey, Hunt & Schroeder, 1961).

Kolb's Learning Styles Inventory is based on four individual learning styles. The four styles are based on the learner's preference for the active or reflective, the concrete or the abstract, as described in the Experiential Learning Cycle.

The relationship, described in Kolb (1976), between concrete experience and abstract conceptualisation forms part of the Tripartite Theory of Freud. Kris (1952) explains the need for the concrete perspective as a regression in the service of the ego. According to Kolb (1976:4), to be creative requires an individual to be able to experience anew in order to be freed of the constraints of abstraction. Bruner (1966) points out the dialectic tension created between such abstract and concrete involvement. Kolb's axis opposing the active with the reflective, suggests a similar tension to that of the concrete and the abstract.

However, rather than presenting the model as a conflict between opposing elements, Kolb has preferred to see the learning process as a closed loop in which there is a generating force present which leads the learner to higher levels of understanding.

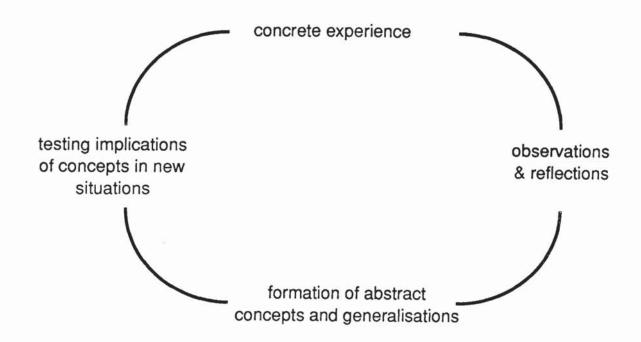


Figure 3-3: The Experiential Learning Model (Kolb and Fry, 1976)

Kolb goes on to concentrate on individual learning styles by describing them as degrees of preference for one or another of the four dimensions of the Experiential Learning Model. According to him, learners' preferences express their way of resolving the conflicts between the concrete and the abstract, the active and the reflective. He then argues that, from a simple test developed through his own research into the learning process, it is possible to measure one's own strengths and weaknesses as a learner. In the sense that the model is based on the belief that learning is influenced by experience and observation, the Experiential Learning Model respects Social Learning Theory (described in Section 3.1.2.).

Kolb accepts that people have a tendency to develop learning styles that emphasise certain learning abilities to the detriment of others. Some develop skills of synthesising a number of disparate facts from which they can draw general theories, but they may be incapable of testing these theories by applying hypotheses to test situations in

order to arrive at a practical conclusion. Others show opposite characteristics which limit the possibility of their drawing general conclusions from their experience. He illustrates this by contrasting the mathematician's capacity for abstraction with the poet's need for concrete experience. A manager may be encouraged to develop active skills whereas a naturalist will be expected to develop observational talents primarily.

Following a series of tests on practising managers, graduate business students and a variety of students from other disciplines including Medicine, Engineering, History and Foreign Languages, Kolb has defined the four dominant types of learning styles as the converger, the diverger, the assimilator and the accommodator (Kolb, 1976:5).

The following diagram illustrates the relationship between the four types of learner:

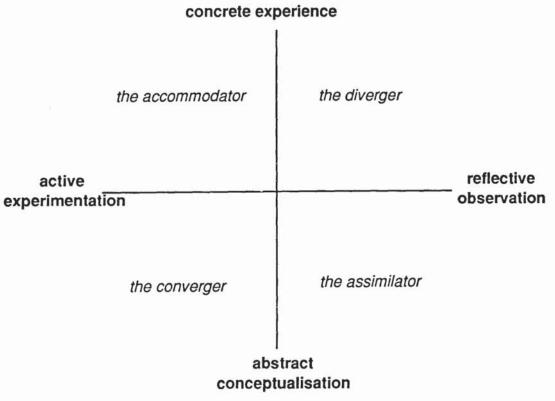


Figure 3-4: The Learning Style Inventory (Kolb, 1976)

- The converger's learning style tends towards the ability to conceptualise (i.e. the formulation of abstract concepts and, generalisations) and to actively experiment in order to test the implications of the concepts in new situations. The strength of this type of learner lies in his/her ability to apply ideas in a practical situation, to deduce a certain number of hypotheses from an abstract concept and to focus them on specific problems.
- The diverger, according to the results of Kolb's LSI tests, is at the opposite pole to the converger. His/her strengths lie in the ability to look at concrete situations from several angles.

The terms "converger" and "diverger" were deliberately chosen in order to describe the ability or lack of ability to focus on specific problems and the ability or lack of ability to generate ideas from one source.

- The assimilator's dominant abilities lie in the facility of creating theoretical models through inductive reasoning. From disparate observations, this type of learner assimilates what he/she has seen into an integrated explanation. As is the case with the converger, the assimilator is more preoccupied with the soundness of the theory than its practical application.
- The fourth style is that of the accommodator who is better at concrete experience and active experimentation. The accommodator's strength lies in the desire to become involved

in new experiences by carrying out plans and experiments. This style generally corresponds to the risk-taker.

In the field of Management Education and Training, Kolb's learning styles are highly significant. In his work, he found that many managers are of the action-oriented type of learner. However, their training may well require them to use a reflective-analytical approach. This suggests that trainers may well be asking them to use the very abilities in which they are weak (Kolb, 1976).

According to Leino, Leino & Lindstedt (1989:26), the LSI is quick and easy to use. However, they point out that, although the model:

"..decribes an individual's learning process more comprehensively than information-processing models because it includes experimenting with one's ideas and acting on incoming information, [..] generalising any part of the [learning cycle] as an individual's learning style and typifying individuals accordingly is an over-simplification" (pp26 & 27).

A number of tests designed to determine preferred learning styles have evolved from Kolb's LSI. In particular, Gregorc (1982) has developed a learning styles instrument using lists of words with a concrete/abstract dimension. Kolb's Active/Reflective axis is replaced by a Random/Systematic dimension. Gregorc holds that the concrete-sequential person is analytical, logical and orientated towards research, while the abstract-random individual is spontaneous, sensitive and aesthetic. The concrete-random person is creative, risk-taking and intuitive.

Other authors have concentrated on cerebral functions in order to distinguish between learning styles. Goldstein and Scheener (1941) list a number of skills evolving from greater abstractness from experience and these corrolate closely with the skills associated with the activity of the right hemisphere of the brain in Williams (1986). In particular, the skills listed in both works concentrate on the simultaneous treatment of various data as well as an awareness both of the separate experiential elements and of the whole.

Reinart (1976:160-168) furthers the link between brain hemisphericity and learning styles, reinforcing the findings of Whorf (1956). Reinart developed the Edmonds Learning Style Identification Exercise based on how the learner's pattern of internalisation of his/her native language reveals a learning style. In the ELSIE test, respondents are asked to give a spontaneous indication of whether they feel or see:

- a mental image of what was heard (visual)
- a mental image of the word spelt out (visual)
- no mental image but meaning comes from the sound of the word (audio)
- an emotional or physical feeling about the word (kinesthetic)

This relationship with different sense modalities can also be linked to the functions of the right and left hemispheres of the human brain (figure 6, p77).

Sperry's work on commissurotonomy (section 3.1.) may also be of interest when considering the individual's learning-style preference.

Sperry's brain surgery has allowed a certain number of experiments to be carried out which suggest that the brain's activity has a deciding influence on the way we tackle a particular problem and the findings (given in Williams, 1986) suggest a strong correlation with the four dimensions of the learning process as expressed by Kolb.

Other researchers attempt to take a more practical approach to the question of the learning styles of managers (for example, Honey & Mumford, 1982). Whilst acknowledging the work of Kolb in this field, Mumford argues that Kolb's Learning Style Inventory is based on a series of words which do not describe professional activities. In particular, Honey (1986:114) places emphasis on the need to develop an all-round learning style. Having integrated the LSI into his own training courses, Honey found that the predictability of the test was not sufficiently accurate and that the face validity was poor. Working with Mumford, he developed a questionnaire which they called The Learning Styles Questionnaire (LSQ), which determined whether a learner ws predominantly:

"Activist - What's new? I'm game for anything.
Reflector -I'd like time to think about this.
Theorist - How does this relate to that?
Pragmatist - How can I apply this in practice?"

(p114)

Although Honey's definition of learning styles ties in closely with Kolb's Experiential Learning Model, Cross (1984) argues that the LSI and the LSQ in fact measure different aspects of learning, going on to state that:

"the LSQ descriptions are written more in the form of personality types than in the form of learning skills or abilities" (p119)

The main characteristics of each learning type, according to Honey, and the sort of activities that they gain the most from are summarised in the following table:

"Activists learn better from activities where:

- . There are new experiences/problems/ opportunities from which to learn.
- They can engross themselves in short 'here and now' activities such as business games, competitive tasks, role playing exercises.
- They have a lot of the limelight/high visibility.
- They are thrown in at the deep end with a task they think is difficult.

Reflectors learn best from activities where:

- . They are encouraged to watch/think/chew over activities.
- . They are allowed to think before acting, to assimilate before commenting.
- They have the opportunity to review what has happened; i.e. what they have learned.
- . They can reach a decision in their own time without pressure and tight deadlines.

Theorists learn best from activities where:

- They have time to explore methodically the associations and inter-relationships between ideas, events and situations.
- They are in structured situations with clear purposes.
- They have the chance to question and probe the basic methodology, assumptions or logic behind something.
- . They are intellectually stretched.

Pragmatists learn best from activities where:

- There is an obvious link between the subject matter and a problem or opportunity on the job.
- They are shown techniques for doing things with obvious practical advantages currently applicable to their own job.
- They have the chance to try out and practise techniques with coaching and feedback from a credible expert.
- . They can concentrate on practical issues.

(Honey 1986:114/5)

Honey's approach to defining learners, developed to deal with the specific area of management learning, is more pragmatic and he offers advice on how to become an all-round learner.

Kolb, nevertheless, remains the principal authority on learning styles. The latter's work was designed to give a clearer understanding of the consequences of individual styles on the learning process. The test he developed to allow this understanding is the direct result of his work on the Experiential Learning Model.

It is important to remember, both from the point of view of the tutor and of the learner, that there can be no one right way to learn. It is the duty of the course designer to integrate encouragement to reflect and observe, in the same way that it needs to be made clear to the learner that an active orientation is not sufficient in itself and that it is only through observation and reflection that new experiments can be generated. Support can be found here for Honey's call for developing the all-round learner.

3.3.2. Conclusion

The choice of describing the learners taking part in the current study according to their preferred learning styles as well as their socio-educational-cultural backgrounds was influenced by the use of such an analysis in one of the participating companies. The LSI was chosen principally because it was easy to apply and, since the aim of this part of the study was primarily to identify learning styles and not to develop the all-round learner, the LSI best fulfilled the requirements.

Moreover, it seems that the identification of individual differences in learning styles is of the utmost importance when considering the design of any training course. This is particularly true in the field of distance learning where the separation between trainer and learner discourages any feedback which might allow the course to be targeted differently (Kuhn, 1962; Keegan, 1986). If we accept the desirability of developing the all-round learner, or if the course has to be designed for individuals of unknown learning styles, there is a responsibility placed on the course-designer to cater for all preferred styles.

When designing training courses, the obvious tendency is to plan the content around one's own preferred style (Entwistle and Hanley, 1977). The consequences of this approach are evident. Honey (1986) gives useful advice to the course designer by suggesting that it is by acquiring a broader range of learning skills that the trainee becomes a more effective learner from life's events. At the same time, trainers are more likely to help a wider range of trainees, since an understanding of how to improve learning efficiency among trainees will help the trainer to become more effective. Using his own experience, Honey (1986) describes the content of a self-development programme, used by himself to develop his reflector-theorist styles, and concludes with a section designed to strengthen the trainer's activist and pragmatist styles.

Naturally, a simpler solution to the problem of adapting courses to the different learning styles of trainees would be to select only those who show certain abilities for a particular programme. However, Kolb argues that, in a course where only one type of learner is present, all the creative tension between opposing styles is lost, the experience becomes less fruitful and the generating force suggested in the Experiential Learning Model is weakened.

The ongoing debate concerning businessmen and academics brings out the benefits of creative tension. Most academics, according to Kolb, show strong reflective-observation skills and relatively weak abilities for active experimentation. However, the opposite is true for business practitioners.

Nevertheless, it would appear to be highly desirable to bridge the gap between the two orientations as much as possible in order to avoid a value conflict between the trainer and the trainee. Once again, support can be found here for the development of an all-round learning style.

If individual learning styles are not taken into account when designing courses, it is for trainers to adapt their delivery to the learner. In a conventional setting, this can be achieved intuitively through the feedback received by the trainer in interaction with the learner. However, when learning is taking place away from the tutor, as is the case in distance education, course delivery will tend not to be suitable for each individual learner. Designers of distance-learning courses should therefore be aware of the variety of the learning styles of their audience and attempt to cater for each type. At the very least, learning styles must be considered in any measurement of learning outcomes in order to avoid making inaccurate comparisons between differing styles.

The previous sections of this chapter have set out to identify how learning outcome may be influenced by the learning context, by learner motivation and by the individual's approach to learning. The final section of this chapter dealing with learning variables discusses how the cultural background of the learner will affect the way a course is perceived.

3.4. Concepts relating to culture

The aim of the research undertaken in the present thesis is to identify and overcome the cross-cultural barriers which may influence the learning outcome of courses developed for use in several countries. Such barriers may be of a variety of sorts and may relate not only to the way in which learning is considered by members of the cultural group but also to the way in which learners understand what is being communicated in the course. When using, for example, a video simulation as a training support, the relatively strict respect of office hierarchy, which seems natural to the French, may be understood to be somewhat stilted to the British trainee used to less formal office interaction. The way of greeting or leaving colleagues in the business environment may unnecessarily divert the learner's attention away from important messages in the learning content and thus interfere with learning outcome. Therefore, the aim of this chapter, which concludes the discussion concerning learning input, is to consider the cultural dimension of learners and its influence on the way they will understand the course.

One of the components of our "cultural baggage", language, has already been mentioned in Section 3.1. This chapter considers other elements of culture within the context of France and Britain. It also attempts to offer some explanation for the differences in approach to training which are highlighted under the chapter devoted to the learning context (Sections 2.1 & 2.2.).

Nobody has yet come up with a universal definition of "culture", probably because it has a great deal to do with human behaviour

and, therefore, encourages subjective rather than objective analysis. Back in 1871, E.Tyler saw it as:

"a complex whole which includes knowledge, beliefs, arts, morals and all other capacities and habits acquired by man as a member of a society" (my translation)

Kluckhohn (1951:86) gives a consensus of anthropological definitions:

"Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiment in artifacts; the essential core of culture consists of traditional ... ideas and especially their attached values."

Gauthier, Ratiu, Rodgers and Xardel (1988) define it as:

"everything that brings together the behavioural characteristics shared between the members of a society." (my translation)

Culture is to a human collectivity what personality is to an individual. But such "all-inclusive" definitions do not attempt to uncover the components of a culture and their sources.

Hofstede (1980:21) offers a more structured approach by defining culture as:

"the collective programming of the mind which distinguishes the members of one human group from the other."

All interpretations accept that culture is closely linked to a collective identity which the individual will go to great lengths to protect. The individual's need to belong to a community and to protect national identity is clearly demonstrated in the case of war, although the desire to belong is demonstrated by us all in our everyday lives.

In the business context, the post-war period has seen the rapid expansion of business beyond national frontiers which has led to the study of management approaches across various countries. Before the 1970s, principles of management were generally expected to follow the theory of convergence in that, if there were any differences between the practices of different nations, they should be modified to suit the theory. In this period, it was mainly the North American example which led the way in management thinking and the business environment of other countries tended to borrow the ideas coming from American authors writing in the American context. The results were often unsatisfactory. More recently, however, there has been a certain recognition in the business world of the significance of culture.

The Europe of the future offers a unique testing ground for the study of intercultural business thanks to the opening up of the internal market to a wide variety of differing cultures.

One of the most thorough studies carried out into cultural differences in the international business environment was by Hofstede. Published in 1980 in book form under the title "Culture's Consequences", Hofstede proposed that the mental programme of each individual is partly unique and partly shared with others of the

same culture. He goes on to argue that our mental programming originates from two sources, the inherited element and the instilled element.

The hereditary element comprises two levels:

- the universal which is the common genetic level which makes us understand smiles, tears, etc, and
- the individual level which helps to explain how differences occur in individuals of the same family and educational environment.

The instilled element is our mental programming on a collective level and this, according to Hofstede, takes place throughout our lives, although, as pointed out by Piaget, he accepts that the most important part is learnt during early childhood.

One of the important distinguishing features of a culture can be found in its system of values and these too are learnt early on in childhood. These values may even be in conflict within the same culture - as is the case in France where Liberty is taught as a value alongside Equality, or where deep-seated religious beliefs survive alongside the desire for wealth

In our desire to reach an understanding of other cultures, it is important not to ignore the more obvious indicators such as language and the different ways in which we conceive the dimensions of time and space. According to Hockett (1964), languages differ in their ability to express certain concepts. He points out, for example, that the Japanese have no translation for "decision-making" and such omissions, which exist in all languages, have led to the exchanging of foreign words between languages (savoir-faire, business, manager and stage being just a sample between the two cultures in question in this research). Some countries, France being a good example, have refuted the influx of foreign terms and have sought to look for suitable translations in their own language. The problem is that sometimes the "imported" word then takes on a new meaning and the result is often an inaccurate translation. For example, the French have imported the word "management" and, for a time, it existed alongside the French equivalent gestion. However, management now tends to refer exclusively to Human Resource Management.

Lexis as a key to cultural understanding has already been discussed in the area of "teaching" and "learning" (see section 3.1.). Sentence structure can also give important indications of the way a culture will conduct its affairs. For example, the position and role of the adjective compared to the noun it describes is said to indicate the qualitative aspect of a culture. (Whorf, 1956).

Language is perhaps the most clearly recognisable part of a culture. It is also the most important vehicle for the transmission of information in a distance-learning environment. Although the current research does not deal directly with linguistic aspect of cross-cultural training, the reader will be well aware of the dangers of poor translation on learning outcome.

Other important considerations are to be found in the field of paralinguistic behaviour, described by Pitt Corder (1973:36) as any deliberate manipulation of bodily behaviour for communication purposes. This is of particular relevance when dealing with crosscultural programmes using visual supports such as video since, when comparing learning outcomes of individuals of different cultures, information can be badly "translated" paralinguistically in the same way as it can be lexically. In this area, body language is perhaps the most obvious contrast to be made between cultures, and differences such as the French habit of embracing are to be treated with care when creating common visual supports for courses.

Other conflicting interpretations can arise from less obvious paralinguistic behaviour such as the use of space. The anthropologist Edward T. Hall (1971) has published some interesting findings relating to the significance of space in cross-cultural communication. He found that communication is influenced by the distance that people respect between them when communicating. Following on from the observations of Hediger (1954:145) on captive animals and the determination of personal space and social space in communication, Hall claimed that our perception of space is dynamic since it is linked to the action - i.e. to what can be accomplished within a given space - rather than to what can be seen in passive contemplation. He defined the four zones as:

intimate space, personal space, social space and public space.

Each of the four zones has a close and distant mode and Hall defines the acts that take place within each, basing his research on American behaviour, and more particularly on the north-east coast of the United States where his experiments took place. He does, however, accept that the distances proposed for each zone vary greatly between cultures. His observations suggest, for example, that what is considered intimate space to an American is social space for a Russian. The extent to which the "incorrect" use of space in a training support will interfere with learning outcome is a factor which cannot be ignored and the cross-cultural course designer should be aware of its relative importance.

Upon the definition of the four zones depend certain other communication supports such as eye contact and voice volume. Here again, the course designer should be aware of differences when using visual and audio supports for training. According to Hall, the British consider eye contact with the person addressing them as a mark of respect for what is being communicated and they take the American habit of looking elsewhere while being spoken to as impolite. Similarly, the British consider loudness of the voice as an indiscretion and are therefore frequently misunderstood to be conspiring when in deep conversation among themselves. The researcher's own experience of living and working in France has indicated that eye contact and loudness of voice are indeed perceived differently according to the culture.

The set of a visual support such as a training film should also be considered. In the working environment, Hall points out cultural differences, relating the lay-out of offices to the need for privacy and

comparing the importance of the closed door in the German, American and British context.

Hostede's study was particularly interesting in the field of culture and differences in management styles. Under four headings, he compared the findings of his study of a high-technology multinational company present in the majority of the countries of the world, given the name "Hermes" for discretional purposes but later identified as IBM.

Each of the themes of the study considered the implications of cultural differences in the workplace. The four themes were :

- a) uncertainty avoidance how a culture deals with the uncertainty of the future and how it uses technology, law and religion to cope with what it is not sure of.
- b) power distance how a culture deals with the problem of human inequality.
- c) individualism the relationship between the individual and the collectivity.
- d) masculinity how a culture copes with the duality of the sexes and the influence the solutions have on life in the community.

Each theme was treated in a separate section of a questionnaire completed by 116 000 members of the "Hermes" staff in a total of 72 countries across the world. The results were translated on a scale showing the countries with the highest need in each of the four themes at the top and those with the lowest needs at the bottom.

Interesting conclusions can be drawn from a study of the two countries concerned in this research - Great Britain and France - which, when cross-referenced with some of the observations of Hall (1971 & 1984), go a part of the way to explaining how cultural differences translate in everyday life.

The Hofstede study showed an important difference between the two countries in the need for a power distance. Whereas the British appear to favour decision-making by consensus, the French tend to admit the need for a relatively strict hierarchy in the company with one man being wholly responsible for taking certain decisions.

The "Hermes" study becomes even more interesting when comparing power distance needs with the individualistic character of the members of the two countries. The following table gives the scores of Britain and France in these two domains:

Country	France	Britain
Rank / 53	11th	3rd
Coeff /100	71	89

Country	France	Britain
Rank / 53	16th	44th
Coeff /100	68	35

Individualism

Power Distance

Figure 3-5: A Comparison of Two Cultural Elements between
France and Britain
(according to Hofstede's 1980 study)

Both countries rank high on the "Individualism" scale, although the British need for power distance ranks fairly low on the world scale. The French score on the power-distance scale combined with their apparent need for individualism suggests that their individualistic character shows, on the one hand, a need to be personally involved in the decision-making process while, on the other, an acceptance of decisions being made at the appropriate hierarchical level.

Crozier (1970) explains how the French reach a situation of compromise between the need both for individualism and for power distance through the highly bureaucratic system which exists where form often takes priority over content and the decision-making machinery tends to be a rather impersonal process. This conveniently allows for decisions to be made on both the personal and impersonal level with the latter having full force and the former satisfying the need for individual involvement.

Crozier thus explains the highly centralised form of the French Administration which is used as a model for much of the business environment. Confirmation for such a theory is also given through Hall's findings relating to architectonics. The individual, closed-door office layout common in French business buildings shows a marked contrast to the open-plan, community office design more frequently seen in Britain.

Given the complexity of cultural differences throughout the world, it would appear impossible to arrive at a point where training courses can be developed across all cultures. Nevertheless, a thorough understanding of a nation's culture is an essential starting point

when determining the possibility of developing an integrated approach to training across cultural boundaries.

It is in the area of cross-cultural course design that a knowledge of cultural differences is relevant. This is particularly so where examples of interpersonal communication are used in the training course. Such is the case in the present research for which a course in the area of commercial negotiation was developed (Section 6.2.). This final section of the chapter concerning the learner has pointed out the importance of recognising cultural differences when designing courses of the type proposed in the research. Since its aim is not to determine the extent to which learning is influenced by the incorrect use of linguistic, paralinguistic and environmental factors, an effort has been made to make the two courses, together with their supports, as culturally neutral as possible. The researcher was able to do this by attempting to avoid as many culturally-sensitive aspects as possible in the development of the courses. Some of the points covered in this section have been taken up in the guidelines for the development of suitable cross-cultural training courses in section 5.1.

Part 1 of this thesis has looked at the input variables relating to the learning experience. They have been broken down into a study of the learner and the learning context. Part 2 covers the development of the courses used in the research and begins with a discussion surrounding the choice of training media.

PART 2

KNOWLEDGE ACQUISITION

Part 1 of this thesis considered the learner and his/her contextual environment with the aim of identifying potential influences on learning outcome.

Part 2 looks at the training course itself and considers the different options available for the design and implementation of cross-cultural training courses of the kind used in this research. It does so by first contrasting the various ways in which such courses may be delivered and looks at the distance-learning supports available in the two countries under review, their advantages and drawbacks.

There then follows a chapter reviewing the options available for course design and evaluation.

The third chapter of this part is devoted to a description of the way in which the two courses in the current research were developed.

Part 2 concludes with a chapter describing the structure of the empirical reseach and the problems encountered in the field.

Chapter 4 Training Media

The success of a distance-learning programme may partly lie in the background and character of the learner, but it will also depend upon the training medium chosen. The aim of this section is to present the different types of medium available to the course designer as well as to give an insight into the way in which distance learning supports have been applied to training in the two countries. Farson (1987) states that, whilst education is resistant to change, "when change does take place, it is likely to be outside forces, such as the advent of a new technology." This is particularly relevant in the area of distance learning where the enormous technological progress which has taken place over recent years has offered a variety of solutions to bridging the gap between tutor and learner. Technology here means the practical application of the various print-based, audiobased, video-based or computer-based supports available facilitate and to augment the effectiveness and efficiency of learning at a distance. It is these modes of communication at the service of the distance learner, rather than the other way round.

However, during the course of this research, it has been obvious to the researcher that the choice of distance-learning media has all too frequently been technology-led rather than learner-led. From the researcher's own experience, this seems particularly true in France and it may well be this which has led to the development of a number of training programmes which, although highly impressive from a technological point of view, are excessively expensive outside the largest companies and/or have little pedagogical interest. It may

also be that, if we accept that French learners look more for teacher orientation than their British counterparts (see section 3.1.), the media used in French distance learning are perhaps more readily perceived as replacements for the tutor and will consequently play a more central role in the learning process.

A classic example of technology-led media development in distance learning can be seen in the use of the first-generation Minitel system as a distance-learning support. A visit by the researcher to the training centre of a major French automobile manufacturer in the Paris region offered the opportunity of participating in a training course in which a CBT sales-training programme was projected onto the wide screen of a lecture theatre and participants were asked to answer a number of multiple-choice questions using a hand-held remote control machine which recorded their replies. The animated graphics were of poor quality due to the low screen-definition of the Minitel and the whole operation would have been more effectively carried out by the trainer (who, in any case, was present to run the equipment!).

There are many other examples of training programmes developed from the availability of technological support. Some are good and some are not so good, but the researcher frequently has the impression that the question "How can I apply this technology in the learning situation?" has been the starting point rather than the question "The learner's need is this. Can technology help me satisfy this need more completely?"

Even when consideration is given to the ultimate users and their needs, often the novelty value of a technological learning support is not taken into account. From the researcher's own experience, a multinational company in Paris invested large amounts of money in a self-service interactive video laboratory on their premises for training in everything from customer relations to foreign languages. Despite a roaring start, the laboratory rapidly lost its popularity and was a technological desert within six-months.

As stated in section 3.2., one of the key characteristics of distance learning is the separation of the tutor and the learner for the majority, if not all, of the period of learning. Their manner of working together is therefore asynchronous and this is why distance learning demands the establishment of some form of two-way communication. Bates (1984) claims that the organised provision of such communication is essential to distance education.

One problem which arises from the need for two-way communication in distince learning concerns the delay in feedback. Previous research carried out in this area has been summarised through the work of Baath (1980) who listed three main consequences:

- the interrruption of the process of learning once an exercise has been completed and before it has been corrected.
- the reticence of the learner to go back over what has been learnt once information on performance is fed back.

- the abandoning of the course by the learner because of a decline in learning motivation due to the delay.

It is perhaps in the field of reducing delays in feedback that technology is of most use. Farson (1987) also adds the importance of integrating new ways of thinking, particularly in the case of the manager, who is faced with the growing complexity of the business environment. This calls for interpretive skills rather than simply knowledge acquisition, which suggests that the learner will benefit more from a prolonged and intensive educational experience which combines learning with practical application over a period long enough to allow concrete experience to play a role in the learning process. Such experiential learning cannot be accomplished in a conventional training environment where learning through teaching and simulation often precedes learning through experience.

Holmberg (1985) echoes the need to consider technology as a means to an end when he stresses the need to bear in mind the attributes of the medium rather than the medium itself. He asserts that sophisticated media should not be considered for their own sake, but rather as learning tools. Gilroy (1989) insists that no one medium is more effective than the others in distance learning and that the choice of media must also depend upon the characteristics of the learner. This point has already been discussed in the first part of this thesis under Section 3.3.

Nevertheless, used in the correct way, technology will undoubtedly play a role of increasing importance in distance learning. Keegan (1986) includes the use of technical media as one of the seven

characteristics proposed in his definition of distance education. He suggests analysing the different forms of distance-education media according to the medium upon which the learning materials are based. He proposes that distance education should be based on one or a combination of technical media which he classifies under four headings:

Print-based Audio-based Video-based Computer-based

Given the technological advances over recent years, the classification of training media should perhaps now be developed to take account of the convergeance of video-based technology with computer systems, where one is wholly dependent on the other as in the case of the interactive video-disc. Account must also be taken of the popularity of teaching by telephone which, for the purposes of the present analysis, has been included under audio-based distance learning. It is unclear whether Keegan's structure would define courses by telephone with courses using telematics, since technologically speaking they use the same medium, one being audio-based and the other video-based.

We should therefore perhaps be looking for other ways of classifying media in distance learning. There may be, for example, a case for redefining forms of distance education according to their interactivity, as is suggested through the standardisation of levels of interaction such as those outlined by Daynes (1982) for laser-generated technology, such as Interactive Video and CD-I.

Bates (1984) divides distance learning media into nine categories covering broadcast television, radio, home experiment kits, audio/video cassettes, video-discs, cable/satellite TV, telephone, micro-computers and viewdata/teletext systems. Print can also be included in this list. Bates claims that access to these new media is becoming easier and more diverse, thanks to rapidly-reducing costs. This means that more trainees are obtaining greater control over their learning with increased interaction between "tutor" and learner.

The choice of the appropriate medium is taken up by Svensson (1973) who approaches the problem from three angles; the pedagogical, the technical and the economic. Other approaches to the choice of appropriate media in the distance-learning context are suggested by Gagné (1967) who considers media in relation to their didactic functions and Handal (1973) who attempts to consider the functions and applications of different media against each individual part of a course (Holmberg, 1985:67). However, it is generally agreed arrival of new techniques such that the as telematics. teleconferencing, interactive video and satellite broadcasting are rapidly changing the distance-learning landscape (Courtois, 1988).

For the purposes of this analysis, it has been necessary to choose between the various technological classifications and, for reasons of clarity, the basis proposed by Keegan (1983) has been retained.

4.1. Print-based Supports

Holmberg (1985:56) claims that the printed word is still the principal medium in distance learning. Indeed, Gilroy (1989:110) points out

that very few courses are designed without some form of print-based material. Print provides a permanent record of information which can be consulted whenever and for whatever reason the learner wishes. Wurster (1979) sees print as a medium in distance learning which allows for the individualisation of information in a variety of study environments. He also points out its mobility and accessibility for revision purposes. The relatively low cost of print-based materials is also a major advantage of this medium.

However, print-based learning does imply a certain level of literacy on the part of the learner which may not always be present (Gilroy, 1989). It also has limitations according to the type of learning involved. Chang et al (1983:14) distinguish between operations on knowledge, which can be communicated through print-based materials, and operations with knowledge, which rely on external factors which are more difficult to communicate through print.

Print-based distance learning can be used for a variety of purposes. It is, for example, used in Rank Xerox UK as a means of preparing trainees for conventional training courses in the form of a pre-workshop manual introducing concepts which will later be developed in a face-to-face situation. However, perhaps the most familiar type of print-based distance learning is correspondence study. Defining correspondence study as "the organised provision for instruction and education through the post ...", Glatter & Wedell (1971:11) study student performance using correspondence study and they compare this in a favourable light to performance through conventional education. It has been claimed that improved results can be obtained through correspondence courses and the findings of studies

comparing conventional and correspondence study carried out by Kennelly (1967) seem to indicate this. Glatter & Wedell (1971:48) conclude that, when it comes to taking tests and examinations, correspondence students tend to do as well as, if not better than those taught orally. However, learners at the end of a distance-learning course will probably have developed a higher level of intrinsic motivation which will be translated in improved examination results. It might be more precise to take account not only of learners who have completed a distance-learning course, but also those who have dropped out along the way.

4.1.1. Correspondence Study in France

With perhaps the exception of the Open University, correspondence study is mainly the concern of private educational establishments in Britain and most European countries, although France has a public body which holds a virtual monopoly. The Centre National du Télé-Enseignement was created at the outbreak of the Second World War in order to ensure that a maximum number of people could continue their basic education despite state disintegration. The CNET became the Centre National pour l'Enseignement par Correspondence in January 1981 and more recently, in February 1986, the Centre National pour l'Enseignement à Distance. The CNED is still very much a print-based educational establishment, despite attempts over the past few years to integrate other forms of media, such as computer-based material, in response to a desire to offer multi-media solutions to a potential market in continuing education (a decree of February 26th, 1986 defined the mission of the CNED as "the promotion of

distance education using, in particular, modern communications techniques").

There are seven centres of the CNED throughout the country. The original aim of the institution was to provide education for students of school age who, for a variety of reasons, were unable to attend school. Although secondary education remains the main raison d'être of the CNED, an increasing number of the adult population are turning to this organisation either to work towards the academic qualifications they were unable to acquire during their school-life, or to go on to professional qualifications with a view to advancing their career. For certain specialised programmes, the CNED works closely with the Centre National des Arts et Métiers (the CNAM) and the University of Paris.

The CNAM is also a state body concerned with adult education, offering a variety of evening courses in its 40 regional centres. In 1963, it offered a distance-learning option through the Télé-CNAM using a variety of media including broadcast television and print-based materials. Because of a certain opposition coming from the teaching profession, the initiative was abandoned, although it did find an extension in the creation of the Télé-enseignement universitaire which groups 18 universities and offers the support of radio, tapes, records and video as well as printed material.

4.2. Audio-based Supports

The audio-based form of distance-learning support is the only complementary education medium, outside print-based supports,

which has established itself as an autonomous support for learning, although it is rarely used without some form of print-based support.

Holmberg (1985) suggests that recorded instructions may sometimes help to guide learners on how to study, particularly when dealing with target groups of low reading potential. Giving support to this, Durbridge (1984) claims that the spoken word can favourably influence cognition compared to the written word. According to her, the spoken word adds clarity and meaning to the message, thus providing the learner with audible clues, such as stress and intonation. Also, since it conveys a sense of the speaker, it may well help to motivate the learner. There is also the possibility of modulating the human voice using pitch, sound, pace, inflexion, tonal amount and quality and pause.

The sound source leaves both the hands and the eyes free to be used for reinforcement of what is being learned such as the drawing of diagrams and graphs. Many of the audio-cassettes of the Open University are linked to visuals in the belief that listeners may concentrate on the spoken word while, at the same time, develop the potential for simultaneous study activities through the accompanying visuals (Durbridge, 1984:101).

Apart from the fact that most people are equipped with the necessary, and often highly-portable playback material, audio-cassettes can provide a certain intimacy for study without having the more formal characteristics of video.

Audio-based learning supports are particularly well-known in the area of language learning but they do have a number of other uses in training. Bates (1984:6) suggests their use for the presentation of raw data for analysis and interpretation, interviews, simulations, music, etc. He goes on to emphasise the user-friendly characteristic of the audio-cassette and the ease with which authors can record their material on cassette at extremely low cost. At the time of writing, Bates claimed that the Open University could record up to three hours of courses on one C60 audio-cassette, copy it and send it to open learners for a mere 50p!

In Britain, telephone teaching has received the interest of the Open University. This training medium overcomes the problem of providing learning reinforcement through immediate feedback and it has recently become popular in the area of language teaching. Robinson (1984) points out the added advantage of being able to give immediate help to the distance learner with particular problems, although she accepts that it is probably not suitable for mass instruction. She also suggests that research shows that this form of communication can provoke anxiety in the learner and that some students may be reluctant to contact their tutors for reasons other than cost. The problem of technophobia is taken up below under teleconferencing.

Following the classification given by Robinson, telephone technology falls into one of two broad types: the public service network, for which the cost is relatively low but where there can be some problems of quality; and dedicated systems where the quality is high but so are the capital costs. The telephone as a teaching medium,

according to Schram (1977), is part of what he terms "little media", since it is less costly and easier to install than its counterparts in the "big media" bracket (e.g. CBT, TV broadcasting, etc).

4.3. Video-based Supports

This includes courses on broadcast television, video-cassette, video-disc, and interactive video.

4.3.1. Broadcast Television

The major drawback with broadcast television is its lack of interactivity. However, the possibility of recording programmes overcomes the problems of having to work in real time and allows a minimum of interactivity, even if it is only at the level of playback facilities (for example, being able to hold or repeat sequences in order to reinforce learning).

Whilst this medium has been used by the Open University in Britain for many years, France has had less success with attempts in the early 1960s to broadcast through the third national channel, FR3. Bates (1984) claims that this form of distance learning has severe limitations due to the lack of possible two-way communication and this has a severe effect on its popularity. According to him, no Open University TV course has an audience of more than 7,000 and the majority have fewer than 500 viewers, although taking into account the times at which at lot of the programmes are broadcast, this seems hardly surprising. As a guide, he sets out his opinion of the

strengths and weaknesses of broadcast TV, although his arguments could hold for many other forms of distance-learning supports.

Broadcast TV as a Distance-Learning Medium

Good for:

Encouraging individual interpretations
Stimulating creative thinking
Providing an overview or synthesis
Narrative/story-telling
Demonstrating continuous processes
Modelling learning processes
Raising awareness
Developing skills of evaluation

Bad for:

Mastery learning
Feedback/self-evaluation
Analysis (of processes or situations)
Storage of information
Reflection/deep processing
Presentation of complex ideas
Development of abstract thinking

Figure 4-1: The Strengths and Weaknesses of Broadcast TV as a Distance-Learning Medium (adapted from Bates, 1984:33)

Whilst accepting the role of broadcast television in stimulating an awareness, it is debatable whether it can encourage the active participation of the viewer. Supported by exercises which encourage individual interpretation, creativity and criticism, or which oblige the learner to consider the most suitable way of learning, broadcast television does have a role to play in distance learning and it remains a useful, albeit expensive, complement to distance learning as a passive provider of information.

4.3.2. The Video-cassette

This has become a useful and more flexible alternative to broadcast television over recent years and, apart from constraints on the portability of playback equipment, it offers the distance learner all of the advantages of the audio-cassette as well as being able to:

- present real-life experience in complex situations
- illustrate dynamic situations and simultaneous interaction combining several variables
- offer learners basic material for analysis and interpretation (Constanty, 1988)

At the Open University, according to Bates, (1984:6), a 25-minute television programme could be delivered to a student on videocassette for 75p at 1986 prices. The video-cassette can be used for recording specially-adapted commercial video training courses. There are many examples of such video courses available on the training market. Names such as Rank Adler, Video Arts and TMI are among the best known in Britain (Golzen, 1988), whereas on the French market some of the top Parisian business schools are involved in the production of this type of training support.

The video-cassette is also used in the area of tutored video instruction, sometimes known as "candid video". In this form, TVI is claimed to be the least expensive form of video-based distance education (Constanty, 1988) as, in its simplest form, it is the recording of a lecturer giving a course to a group of students. This is the form being used in the European PACE programme (see section 4.7. below). One of the pioneers in Britain of TVI has been Aston University which has installed purpose-built lecture theatres for

video recording. Others include Herriot Watt's Distance Learning Video Instruction programme.

4.3.3. Interactive Video

Interactive video is still a relatively new arrival on the market which allows the combining of filmed images, text and graphics with immediate access to any frame. There is still a certain reticence among training managers to rush into mediated training using the latest technology since some consider that such technological development tends to make learning media-dependent. However, Leslie (1988) claims that, when using interactive video, people learn in about one third of the time they would normally take under conventional training and that the level of knowledge acquisition is higher, making IV more effective.

One of the problems encountered by the researcher with claims of major improvements in learning efficiency when using new technology is that the claims are frequently put forward by the converted who may find it difficult to look objectively at the training medium. Nevertheless, interactive video does offer all the advantages of video as well as providing immediate feedback for learning reinforcement.

Copeland in Leslie (1981) talks of the importance of respecting the expositional/inquisitional continuum in the learning situation. He claims that interactive video can be used for both expositional and inquisitional purposes whereas other forms of television video supports remain largely expositional.

The desire of supporters of IV and CBT to stress the immediacy of feedback to the learner has led to an attempt to establish some form of internationally-accepted standard of interactivity. Daynes (1982) suggests a five-level scale for laser players varying between still-frame or slow playback with no addressability to fully-integrated videodisc/computer systems. However, the National Interactive Video Centre claims that the most widely-accepted scale is that of the three-level Nebraska Scale (NIVC, 1985) ranging from recording, playback, pause and scanning facilities on the first level to full interactive feedback facilities in a programme where learners may choose their own sequencing on the third level.

Videodiscs are claimed by some to engage the learner in a dialogue that promotes faster and better learning. They claim that people learn best when their actions get attention and videodiscs have the advantage of responding to actions with instantaneous feedback. In their opinion, just as films, radio and music affect a person's emotions, the videodisc, by borrowing from these media, can also influence how people feel. They feel that this emotional influence can help trainees to think more clearly (Dalton, 1986). However, there appear to be no more recent research findings to substantiate this claim.

4.4. Real-Time Conferencing

Sometimes called teleconferencing, this form of distance education, which seems to be more popular in the United States than in Europe, makes use of audio and video supports. It could be that the French minitel network could be used for this purpose over the coming

years, but only with improved sound and picture quality (Constanty, 1988). However, it is generally accepted that this type of communication is a poor replacement for face-to-face education in that it cannot transmit non-verbal communication in the learning context (Smeltzer, 1986, Hall, 1971 & 1980, Short, 1976). It remains to be seen whether the development of fibre-optic transmission in Britain and France (Surridge, 1989) will open up a future for the use of real-time conferencing in the distance-learning environment.

4.5. Computer-based Supports

Keegan's final category of distance-learning supports realates to the use of the computer for learning purposes. Apart from offering selfpacing and reinforcement opportunities to learners, computers can give immediate feedback and, when linked into a host processor, will reduce feelings of isolation without jeopardising autonomy, since contact with the host computer is learner initiated. Anderson (1984) promotes the mobility of computer-based training as well as its potential for providing immediate feedback on exerices. These, she claims, give this form of learning a clear advantage over other distance-learning media. However, it remains an expensive support (Hassoun, 1990) which makes it less suitable to the small-business environment where the investment may be too high. Furthermore, computer-based training may not satisfy learners who seek a more hands-on approach (Comeau, 1986), unless it is used for computerrelated training activities such as software initiation. As with most audio and video supports, computer-based learning seems to offer a potential as a complement to other learning media but can rarely offer a stand-alone solution.

4.6. Computer-conferencing

This is really another branch of teleconferencing which uses the computer as a medium of communication. As such, it suffers from many of the same drawbacks. Communication passes through a reduced field of sensory perception and potential for learning reinforcement is limited.

However, in certain areas, computer-conferencing is finding success. The IMaC distance-learning programme is based on this medium (see introductory chapter). The participant is free from any spatial constraints, providing there is suitable hardware at hand. Computer conferences rarely take place in real time but make use of electronic mailboxes in which messages can be left. This means that participants can contribute comments to conferences at their convenience, since the medium is asychronous (Farson, 1987).

As mentioned in Chapter 1, early feedback from participants on the Rouen Business School's IMaC programme indicates overall satisfaction, although trainees coming from technologically lesser-developed countries have experienced problems of data saturation at their country's central node.

The system allows easy access between participants and tutors as well as the possibility of leaving and picking up messages between each other. This facilitates groupwork at a distance and therefore allows case studies and other learning supports to be exploited more fully.

Other cross-cultural programmes using this medium as a complement to learning have been developed in the Management field between the University of Lancaster and the Business School in Lyons. The M.A. in Management Learning is a joint degree offered to trainers using a combination of distance-learning and on-campus seminar supports and has been functioning since 1988.

4.7. The Future

Since the mid-1980s, the European Commission has launched a series of initiatives aimed at advancing the role of technology in learning.

DELTA, launched in 1986, was designed to develop learning for retraining purposes by building on the milestones of information and telecommunications technology (Lam, 1986). The programme saw this development in three stages:

- taking advantage of new technologies
- developing an integrated services digital network, promoting direct broadcasting by satellite and strengthening the role of personal computers in learning
- working towards fifth generation computers, intelligent data bases and broadband communications.

The overriding technological aim of the programme is to standardise European systems so as to encourage collaboration across national boundaries. By taking the best university courses in areas related to high technology and by transmitting them to training centres across Europe, the companies and the universities which make up PACE are

seeking to bring top level training to corporate Europe (Constanty, 1988).

COMETT was launched in 1987 to promote cooperation between European companies and universities in the field of training. The programme proposed four 'strands', one of which called for multimedia training projects. In the first round of applications announced in 1988, 70% of all projects granted subsidies came from French initiatives (Constanty, 1988).

Another innovation coming from France is the second-generation Minitel which will combine sound and image of high quality using the ISDN digital network The present problems of using such technology in distance education revolve around the cost of developing programmes suitable for interactive training as well as the lack of hardware needed to exploit the idea (Constanty, 1988).

From a technological point of view, much is also expected from the compact disc which has all the potential of the video disc in a more compact and manageable form. Philips and Sony are the two leaders in the field of the interactive compact disc (CD-I) which should satisfy the interactive requirement and give the possibility of dubbing and re- recording in the same way as with the audio- and video- cassette.

4.8. Conclusion

The aim of the discussion concerning training media is to reinforce the need to apply a training medium to the learning need and not the other way round. It also attempts to show the extent of the choice of media that the designer of distance learning courses is faced with. There are three factors which seem to dominate this choice; the cost, the suitability and the efficiency of the medium chosen.

The cost is obviously of prime importance. Developing any media-based course involves fixed as well as variable costs, but the higher of the two are fixed. In the opinion of the researcher, only the very basic forms of print-based, audio- or video-based supports can be considered, unless one happens to have a major sponsor who is ready to provide equipment such as an interactive video workstation or a mainframe computer with conferencing possibilities.

As mentioned above, a great deal depends upon how many learners the capital and development costs will be spread over and this is perhaps why so much in computer-mediated learning material is developed in the larger corporate environment. The small-business sector therefore has to rely on buying in distance-learning programmes or jointly developing courses with the help of institutional funding. It follows that participal training needs in small firms cannot be addressed specifically, thus taking away a certain number of the advantages of individualised learning.

For the present research project, it was possible to produce a low-cost video support for what are effectively print-based training courses. For cost reasons, it has been impossible to test the claims of IV experts who insist on the efficiency of their products over the use of straight video.

The question of learner suitability is also of major importance. An attempt has been made in Part 1 to account for the learner's preferred learning style in the choice of training medium and possible explanations of preferences have been given in the section relating to the general concept of learning.

In the researcher's opinion, it is most important to recognise that the choice of training medium should be made according to the learner's needs and not according to the attractiveness of the proposed solution. One of the biggest difficulties when entering the field of multi-media training technology is to remain objective in one's appraisal of the choices offered. How easy it is to latch on to technology's answer to a training problem and to follow it into the mists of uselessness, losing sight of the original objective somewhere along the way

The third area of concern is linked to the "blinding-by-science" approach of many who support one or another of the training media on the market. Although not a great deal of learning research has been conducted in the field of higher training technology, some of that which has been undertaken has dubious validity. Numerous are those who claim to achieve the same learning outcome in, for example, half the time compared to another medium. Few can substantiate their claims with a solid methodological approach. It would seem that the potential investor in training technology should be capable of remaining open to, but at the same time wary of all proposed solutions to a training problem.

Chapter 5
Course Design
and Evaluation

5.1. Concepts relating to Course Design

The first part of this thesis discussed the conceptual and contextual background to the research. It indicated the need for a thorough knowledge of the learning environment in which cross-cultural distance learners will find themselves. Part 2 opened with an overview of the choice of media supports available to the coursewriter. There now remains the question of relating the learning environment and its supports to the design of the courses in order to be able to draw up guidelines for the writing of cross-cultural distance-learning material. This chapter is concerned with the principles relating to the design of courses and the techniques of evaluation.

The first task, before even considering the design of the course, is to be able to recognise the training need which will be answered by the course. According to Guest and Kenny (1983),

TRAINING NEEDS = STANDARD OR DESIRED PERFORMANCE - PRESENT OR ACTUAL PERFORMANCE

The learning objectives for the course to be designed should, therefore, indicate the knowledge, skills and attitudes that the trainee is expected to demonstrate at the end of the learning period.

This is true not only of conventional course design, but also of the design of distance-learning courses.

Furthermore, according to Holmberg (1985:54), whereas the conventional course does not guide, teach or induce the student to learn, a distance-study course must do this by giving complete explanations with examples, by providing exercises of various kinds and by constantly referring to what the learner has already succeeded in mastering. This suggests that the knowledge, skills and attitudes that the distance-learning trainee is expected to acquire need to be monitored throughout the course, since the distance-learning course must compensate for that part of a good teacher's activity which consists in motivating and activating students, presenting the subject, providing exercises and feedback, promoting transfer and facilitating retention.

In Figure 5-1, an interesting comparison can be drawn between the current research design and a model of instruction proposed by Bloom (1976).

Bloom's three stages of "Learner Predisposition", "Instruction", and "Learning Outcome" correspond to the stages of "Learning Input", "Knowledge Acquisition" and "Learning Output" used in the present study. However, a certain number of cognitive predispositions listed by Bloom, such as verbal ability and written comprehension are not studied as part of this research. It was assumed that the trainees making up the sample from both countries would satisfy the minimum requirements for such areas as reading and writing ability and their interests and attitudes were similar. Their general

intelligence was assumed to be of a level which would not have a negative influence on learning outcome in the samples tested.

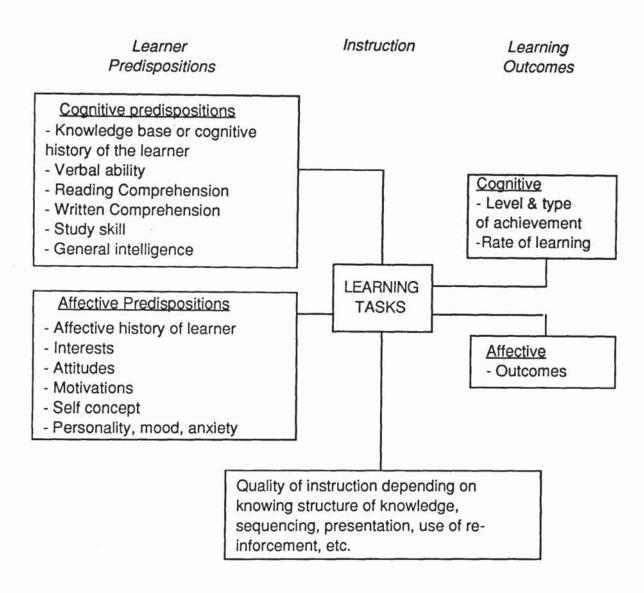


Figure 5-1: A Model of Instruction

from Bloom (1976:18)

The measurement of general intelligence would have presented a difficult problem in the research, since none of the participating companies included IQ tests for recruiting salespeople. It can, however, be safely assumed that the minimum level of intelligence

required for recruitment in all the participating companies is sufficient to avoid any major IQ disparities among members of the sample used. Added to this, in the case of the Needs Analysis course, the populations from Digital Equipment in France and the U.K. could be said to be sufficiently matched for useful comparisons to be made and the Rank Xerox U.K. population can also be included in this category, given that they recruit a similar profile to Digital.

Preferred learning styles have been included in the current research under "Learning Input". The importance of including this aspect has already been discussed in Chapter 3 of this thesis.

A certain number of predispositions and outcomes identified by Bloom have not been measured due to the difficulty of obtaining accurate measurements in the distance-learning context. This applies to the rate of learning and the affective predisposition of learner mood and anxiety.

5.1.1. The Writing of Course Materials

Riley (1984:201) sees the problem of drafting distance-learning materials as one involving three main tasks:

- finding and selecting the sources
- sequencing the material
- finding the words

This approach, she claims, has been recognised by cognitive psychologists, who distinguish idea-generating from organising the

ideas and translating them into appropriate language (Hayes & Flower, 1980).

Silber & Stelnicki (1985:282) offer principles for the writing of training materials. They are based on the assumptions that:

- trainees learn if:

- they see how the information will help them in their jobs
- they understand the "pay-off" for the extra effort needed to learn something new
- they believe that the materials training them know more than they do

- learning is made easier if:

- trainees know what they are about to learn
- they understand how the information is organised
- the information is explained in terms of something they already understand

The Carrard method given in Silber & Stelnicki (1985) is based on manual apprenticeships. It rests on the following recommendations:

- Introduce only one new concept during each lesson
- When a new concept has been assimilated, give the learnerone night to "sleep on it".
- Never allow bad habits and ensure that the new concept is repeated until it becomes a reflex action.

- Always maintain a high level of concentration and, for this purpose, vary both lessons and exercises sufficiently.
- Keep the learner constantly aware of the goals to achieve.

Furthermore, the method sets out eight additional rules which can be applied by course writers. They are:

- Avoid lists and long explanations.
- Teach the names of new tools as they are being used.
- Always correct false movements by getting the learner to repeat the action as many times as is necessary.
- Never go on to anything new before all previous lessons have been completely assimilated.
- Always have the exercise done before explaining it. It is quite possible to study several things simultaneously as long as only one new concept is being used.
- As soon as you feel the interest fade, stop the exercise and do something else. The learner should, from the beginning, be in a position of control.
- Create an atmosphere of confidence and pleasure in order to make the learner happy to be learning.

Although the approach is faithful to the "learning by doing" method, it has little to do with active learning in which learners are expected to relate the problem to their general experience, to set up a series of hypotheses which will be tested and to arrive at a conclusion which is the result of their own reflection.

It would seem to be important to build in a system of monitoring so that the course is developed around the primary objectives and that achievement is measured against these objectives. Perraton (1973) recalls what can happen if the methods and aims do not correspond. She cites the example of a BBC radio series of the 1950s called "Bon Voyage!", designed to give information and reduce the public's apprehension about going to France. The series dealt with French customs controls, how to order meals, how to deal with French currency, etc. As a result of the series, the public perceived the whole idea of going to France as too difficult and the programmes actually increased their apprehension (Belson,1967).

In her thesis, Gilroy (1989) puts forward a chronological way of approaching course writing for distance learning. The following is a summary of the three stages she proposes:

Stage 1 - The Pre-Writing Stage

Here it is essential to remember at all times who the course is for, what it is about and what constraints the learner will have to face when carrying out the course.

Gilroy divides this stage into four steps. Steps 1 and 2 concern the learner, steps 3 and 4 the course.

- Step 1 establishing the educational problem and the learners' needs.
- Step 2 defining the target population in terms of their existing knowledge and skills, their objectives,

expectations and attitudes, learning styles and the study context.

Step 3 - determining the course objectives in terms of:

- improved performance
- the learning conditions
- the criterion (i.e. how well the learner will be expected to master the information for its application on the job)

Step 4 - developing a framework in order to:

- divide the course into manageable chunks
- allocate the time needed to complete the course
- organise the course-development stage in order to obtain feedback and make necessary modifications before arriving at the final version.

(Gilroy, 1989)

Burge (1988:10) lists gender socialisations, age, race, job, interpersonal relationships and home life as also influencing the learning process. For the purposes of the current study, the cultural background of the learner is also an important variable.

Stage 2 - The Writing Stage

At all times during the writing stage, it should be remembered that what may appear simple to the course designer is likely to be judged complex by the unfamiliar learner. According to Gilroy, particular attention should be paid to:

Structuring the content. This means:

- sticking only to the essentials of the course
- tackling the information in a logical manner and ensuring that this logic is transparent to the learner
- connecting the essential elements of the course, one to another, and ensuring that the learner knows where he/she is at all times during the course.
- encouraging the learner to relate the information presented in the course to his/her own experience

Orienting the learner. Apart from clearly stating the objectives and relationships of each element of the course, questions designed to aid and reinforce the learning process must be inserted and full, clear answers must be provided in order to allow learners to assess their progress. This possibility of self-assessment should be present throughout the course and congratulations should be offered at appropriate intervals in order to motivate the learner.

Presenting the text. For print-based materials, word- and line-spacing should facilitate reading. The tone of the text should be direct and interesting and must encourage involvement on the part of the learner as well as provide understanding of his/her problems in order to give reassurance. Visual aids should be used

to give variety to the text. In order to avoid confusion, section numbering should be kept to the simplest form, as should tables, graphs and illustrations which must be used only for facilitating the transfer of information. Furthermore, they must be relevant to the surrounding text.

It is important to retain the learner's attention throughout the course in order to aid knowledge retention (see Section 3.2.), making full use of text and images to do so. The learner should have ample opportunity to reproduce what has been learnt in the work situation and text and images should be professionally relevant.

Stage 3 - The Post-Writing Stage

Course material must always be pilot-tested with the course-writer's peers as well as with a sample of the target population in order to determine:

- the time needed to complete the course
- the clarity of the information presented
- the interest of the information presented
- the recall potential of the information presented

The course will then be evaluated through questions and questionnaires in order to determine the learner's background, attitudes and motivations concerning the course and the knowledge acquired from the course (see Section 6.1.5.1. below).

5.1.2. The Writing of Self-Assessment Questions

Lewis (1984:42) offers advice on how to write self-assessment questions (SAQs) together with a checklist for the course-writer. He includes the following:

- Does each SAQ relate to an objective of the course?
- Has each objective been tested?
- Are the SAQs attractive? Will the learner want to answer them?
- Is it clear how each SAQ will help the learner?
- Are the SAQs realistic? Will the learner be able to answer them?
- Are the SAQs varied in type, length and nature?
- Are the SAQs frequent enough?
- Are they clearly constructed and is the language clear?
- Has the necessary advice been provided to help the learner to answer?
- Do the SAQs stand out clearly in the course? Has a particular symbol or other convention been used to identify them?

The checklist is extended to include the following questions relating to the writing of answers to SAQs:

- Has an answer been provided for each SAQ?
- Are the answers clear?

- Has the correct answer been reinforced?
- Has guidance been given on wrong answers?
- Is it clear how the correct answer is arrived at?
- Are the answers of an appropriate length and in the appropriate place?
- Have the learner's feelings been considered? Have learners been congratulated on correct answers and sympathised with for incorrect answers?

In the context of teaching programmes prepared in advance, Borger & Seaborne (1977:205) emphasise the importance of arranging things so that the learner will make nothing but correct responses throughout the course. As a consequence, they recommend that the learner receive only positive reinforcement.

On the other hand, Ali (1981:2) claims that, in recent years, the importance of providing learners with both positive and negative reinforcement has become recognised and he cites Fleming & Levie (1978), Merrill & Tennyson (1977, 1978), Merrill & Wood (1974) and Travers (1977) when claiming that the use of both types of examples prevents overgeneralisation, undergeneralisation and misconception from occurring.

In the researcher's opinion, there is certainly a case for showing the consequences of incorrect behaviour in certain situations. The problem is that it needs to be absolutely clear to the learner what is incorrect and this must be followed up immediately with positive reinforcement, i.e. the correct way of doing things. Failure to do so

will leave the learner unsure of what is right and what is wrong in a given situation.

Added to this, showing the incorrect way of doing things is an art which can require humour, stereotyping and irony and these may not be gifts possessed by the coursewriter. It is the researcher's opinion that the dangers of negative reinforcement being construed by the learner as positive reinforcement are not worth the risk. The problem is further accentuated when dealing with the cultural dimension, since humour, stereotyping and irony do not necessarily translate across national boundaries. An example of this which is relevant to the current study is the researcher's own experience of the way the French understand the use of humour in training films starring famous British comedians. At best, trainees take this approach as a distraction (with little pedagogical utility). At worst, it can take them some time to realise the joke and, during this time, they are unable to assimilate the information presented correctly.

5.1.3. The Choice of Medium

The choice of media available to the coursewriter has been covered in Chapter 4. If we are to accept the claims of Mucchielli (1972:56) of the relative efficiency of learning media, the choice of the medium to be used for a distance-learning course is of the utmost importance. According to him, we retain:

- 10% of what we read
- 20% of what we hear
- 30% of what we see
- 50% of what we hear and see at the same time

These figures would certainly seem to put correspondence courses at a severe disadvantage when compared to video courses.

Moreover, when some form of interaction is included in the course, the percentage of information retained is claimed to increase to:

- 80% of what we say, and
- 90% of what we say while doing something associated with our reflections and which involves us.

(Mucchielli, 1972:56)

It seems that such figures should be read with a degree of caution, bearing in mind what is meant by knowledge retention, over what period and when it is measured.

Hodgson (1989) believes there are fundamental aspects which need to be considered in any educational design incorporating the use of technology-based learning materials. She refers to conceptions of the purpose of education dissemination orientation and development orientation (Boot & Hodgson, 1987). She claims that new technology is inherently more likely to be used "to tell" rather than "to communicate".

Two other factors which she considers concern technology-based learning materials being used "to domesticate" rather than "to liberate":

- the design of the materials being used and the extent to which they prevent the learner from questioning and interrogating the information they contain
- the emerging phenomena of "rightness" frequently associated with the status of "absolute truth" on the screen.

Hodgson goes on to argue that technology-based information, with its quality of "rightness", could encourage the concept of quantitative increase in memorised knowledge (Säljö, 1979).

She concludes her discussion by considering the educational process as a domesticator or as a liberator and by suggesting that new technology should be used to facilitate and to contribute to what is, and should remain, a social and human process (Hodgson, 1989:125).

5.1.4. Conclusion

In considering the design of distance-learning materials, it is essential to bear in mind the learner-centred dimension of this type of education at all times. Strang (1987:27) insists that any personcentred model of learning focuses attention on the learner as a human being and

"rather than considering [learners] solely as learning machines, the model encourages recognition of qualities such as the propensity to adopt attitudes, to have intentions and to make decisions."

The real challenge for the coursewriter is to determine how to expand the world of the learner (Burge, 1988:10).

This conclusion will limit itself to a summary of the important points which emerge from the previous review of key issues in course writing.

Preparation Stage

- identify the training need
- identify the learners' needs
- once the training need has been recognised, define the knowledge, skills and attitudes expected of the trainee after having completed the course. This must be in relation to trainee performance before the course
- define the existing knowledge of the trainee in the course subject
- define the learners' background in terms of: existing knowledge

objectives

attitudes

......

expectations

age

profession

- determine whether the course is materials-based or learner-group based
- determine the course objectives in terms of: job performance intellectual development degree of knowledge acquisition sought
- determine the structure of the course
- choose the media in terms of facilitating the learners' task and/or reinforcing learning
- determine the time needed to complete the course

Norms to respect for:

Texts

- use a friendly tone to make the learner feel part of the experience
- make sure the layout of the text is neat and easy to read
- use visual aids intelligently and ensure that they are placed close to the related text
- ensure that questions and exercises are placed where the learner can find information relevant to the answer
- avoid numbering paragraphs and keep any section numbers to a minimum using single letters or numbers

Writing Stage

- structure the content in a logical manner
- interconnect each element of the structure
- link the elements of the structure to real-life situations
- keep the trainee aware of the overall objectives of the course
- constantly check method against aims in order to keep them in perfect harmony
- build on knowledge acquired in order to show trainees that the course is expanding this knowledge
- write each element of the course allowing for developmental tests to be carried out on parts or the whole of the course
- keep referring back to what has already been learnt
- avoid introducing irrelevant information
- announce clearly what is about to be learnt and how it will be organised
- explain the importance of the course in terms of job performance
- give the learner ample opportunity to reproduce what has been learnt
- show understanding of the learner's problems in order to reassure
- relate the course and its supporting activities
 (questions, execises, etc) to the learners' own experience
- encourage discussion with other learners where possible
- write a friendly introduction explaining how the course will help learners to train themselves
- explain the utility and exploitation of self-assessed questions
- match the choice of media to the aims of the course
- ensure that the media chosen "communicate" (and not "teach")

The aim of this section relating to course design has been to set down general recommendations for the development of the types of courses used in this research.

Learning outcome will depend upon the way a training course is designed and the way it is delivered. The first two chapters of Part 2 of this thesis have attempted to set out the full range of delivery systems available to the designer of a distance-learning course together with approaches to and recommendations for course design. Before discussing how these were applied in the development of the two training courses used in this research, one final aspect relating to course design must be considered. The following section therefore concentrates on the subject of evaluation.

5.2. Evaluation

The aim of considering the area of evaluation in the present study is to define a model of measuring whether and how well the courses to be developed would achieve their objectives. It is therefore important to bear in mind the measurement both of learning outcome as well as of course content. Once a training need has been identified and the design and delivery of the course which will satisfy this need have been decided upon, the means of measuring its efficiency and effectiveness must be considered. The degree of success in terms of learning outcome will depend upon a series of factors influencing the approach to evaluation chosen and such factors are discussed in this section which focuses on the measures used in this study.

5.2.1. The Aims of Evaluation

The aim of measuring the efficiency and effectiveness of training courses such as those developed for the current study will be to judge the efficiency and effectiveness of the courses themselves, the extent of learning outcome coming from the courses and the resulting improvement in the performance of trainees in their processional environment.

Evaluating an educational instrument is a way of describing it in terms of its efficiency and effectiveness. We must first have a clear idea of what the course is setting out to do, since its effectiveness will be measured against this objective. It is generally accepted that the prime objective of any training programme is the improvement

of job performance and, as a consequence, the enhancement of organisational effectiveness (Goldstein, 1974).

Nevertheless, other objectives can be taken into account, particularly where alternative delivery systems are envisaged. For example, when evaluating distance-learning courses for in-house training, a company may wish to measure the potential reduction in training costs over a period of time or the variety that such a course may offer to trainees.

In defining evaluation as "the assessment of the total value of a training system, training course or programme in social as well as financial terms", the MSC (1981) accepted both the quantitative as well as the qualitative objectives that educational evaluation may have.

Rae (1986:2) also places emphasis on the fact that evaluation is concerned with the overall benefit of the course in social as well as in financial terms. He puts the discussion into more practical terms by claiming that trainees will be doing a course aimed at developing their techniques or skills and that few trainees will attend the course with no skills whatsoever, either learnt or inherited. The success of the course will first depend upon its validity as far as the achievement of its laid-down objectives is concerned, in other words how efficient it is as a training course. However, its success will also depend upon how effective it is in achieving its objectives.

It would appear that relying solely on a quantitative approach to the measurement of educational performance is fraught with danger,

since the intangibility of the objectives in education and the different values that learners place on them cannot be communicated solely through quantitative measurement. There is, therefore, a need to approach measurement from a qualitative point of view. Furthermore, according to Stake (1967), evaluation must also be used to describe as well as to assess the strengths and weaknesses of a course.

Finally, evaluation may also have a developmental objective in that information obtained about the efficiency and effectiveness of a course may also be used to make it more efficient and effective. Thus, in the training context, course improvement should also be a key aim of evaluation.

Easterby-Smith (1990:6) summarises four underlying purposes of evaluation for training as:

<u>Proving:</u> This is commonly seen as the ideal aim of evaluation. It sets out to determine whether the course has, or has not, had a particular effect on trainees. Often course directors will be asking: "Is it worth the money?"

Controlling: This is particularly relevant where the course is run by people other than its designer. Its aim is to monitor that the course is being delivered according to its specification. In conventional training, it also asks the question: Are the trainers coming up to the required standard?

Improving: This is where the participants will be encouraged to comment on how the course might be changed or adapted in order to suit their needs better.

Learning: Evaluation should be designed to facilitate learning. To a certain extent, this is what formal assessments set out to do. Particularly in the field of distance learning, self-assessment is a necessary tool for clarifying and summarising what has been learnt.

For the purposes of the current study, evaluation has been taken as having more to do with feedback to measure educational performance other than the assignment of values, although it is accepted that a cost/benefit analysis of the implementation of cross-cultural distance-learning courses for in-house training will be of importance to a company. Unfortunately, given the difficulties experienced in encouraging companies to participate in the fieldwork and given the natural reticence for them not to wish to disclose training costs, such a cost/benefit analysis proved impossible to carry out.

However, before discussing the methods of evaluation used in the current empirical study, it will be relevant to summarise the case of evaluation in the distance-learning environment.

5.2.2. The Particular Case of Distance Learning

A certain number of aspects relating to evaluation in a distancelearning environment must be considered. In conventional education, evaluation normally takes place on a regular basis and this leads to modifications in objectives and behaviour. However, this cannot take place in a distance-learning environment. Rumble (1981) favours an approach based on critical success factors and performance indicators which can help course managers to monitor and assess effectiveness and efficiency (see Section 5.2.3. for further discussion of critical success factors). He nevertheless points out the problem of modifying distance-learning courses, which have frequently been developed to last for several years and in which changes can be costly. It is for this reason that he insists on a highly developed system of developmental evaluation. Not only is it much harder to modify a distance-learning course, but also the minimal contact with learners makes it difficult to evaluate how they study and make use of the course materials.

In the field of distance education, Holmberg (1985) and Cronbach (1963) criticise approaches to formative evaluation which are dominated by a desire to make the means agree with the end, since the feelings of the learner are not taken into account. From this, it would seem that they would tend to favour a goal-free approach to evaluation in the distance-learning environment where the evaluator is not influenced by expected outcomes. Holmberg recommends a learner-centred formative approach in order to take account of individual reactions to a content-oriented evaluation. Mace (1976:27) also favours a system of evaluation which shows how the structure and presentation of the programme have helped the learner to understand and enjoy the learning experience.

The evaluation of distance-learning materials presents the added complication of having to be carried out away from the evaluator. It would therefore appear to be essential to develop a more structured approach to evaluation in this environment. McIntosh (1974) suggests an evaluation based on four elements:

- the need or demand for the course
- the effectiveness of the course for all parties
- the individual units of the course
- the impact of each of the course's components

Tate (1985) takes a different view by offering a three point solution to distance-learning course evaluation based on :

- the procedures for design, development and production of the course
- the quality of the system (objectives, feedback, assessment)
- the effectiveness of the course

However, such models as the one proposed by Tate (1985) are more oriented towards institutional distance learning on a mass scale, such as that practised at the Open University. In this case, the "distance" between the evaluator and the learner in the case of in-house training using distance learning is not so great in that evaluation will probably be carried out by members of the same organisation as the learner. Thus, as far as evaluating the educational instrument is concerned, it may well be possible to make use of the learner-group

in the corporate environment, as described at the end of Section 3.2.1.

Having outlined the main concerns of evaluation, it is now possible to discuss the methods employed in the current study.

5.2.3.The Approach Chosen

In the original research design, it was intended to evaluate at three different stages. The first concerned the course-development stage where the prime objective was to identify the strengths and weaknesses of the drafts of the training courses (Stake, 1967). For this purpose, the model chosen needed to be formative; i.e. the evaluation of the individual parts of the course and the contribution of each to the whole course (Cronbach, 1963). This is what Scriven terms as "intrinsic evaluation" (Gilroy, 1989:121). In order to obtain maximum feedback during the evaluation process at this stage, the presence of the researcher was necessary and the approach used had to be learner-centred and goal-free (Scriven, 1967). Details of how the courses were evaluated at the developmental stage are given in Sections 6.1.4. and 6.2.6.

The second objective of evaluation in the current study was to determine learning outcome. Although this was primarily quantitative in nature, it was also considered important to gain information about learner reaction during the learning experience, as well as changes in attitude brought about by doing the course. For this purpose, it was decided to measure immediately prior to and straight after the course by making use of a pre-test and post-test

questionnaire. Furthermore, it was felt that learning outcome should be measured in the same way. By analysing the differences recorded, both on a qualitative as well as a quantitative scale, the researcher was able to determine the "pay-off evaluation" (Scriven, 1967:54) using the pre-test/post-test design. Easterby-Smith calls this approach the scientific model, involving straight-forward comparisons between similar variables (Easterby-Smith, 1990:7).

The choice of the number of knowledge questions to be used in the pre-and post-tests was strongly influenced by the amount of time the trainee could reasonably be expected to devote to the completion of the questionnaires. The testing environment is described more fully in Section 7.1.5., but the experience coming out of the developmental tests described in Chapter 6 suggested that it would be necessary to keep the time needed to complete the questionnaires down to a strict minimum.

The third objective of evaluation in the original research design was to measure changes in job performance. At the outset, it was hoped that comparisons could be made in improved sales performance, comparing trainees who had completed the course and those who had not. Ideally, a measurement of what the researcher termed "learning recall" would take place a few months after the end of the empirical study. The role of the recall test is explained in Section 7.1.3. Unfortunately, for the reasons stated in Section 7.1., it was not possible to accomplish this level of evaluation.

The final objective of evaluation in the current study related to the cost/benefit analysis. Here, the measurement was intended to take

the form of an analysis of what the use of courses such as the ones developed for the study would bring to the company, from the point of view of both the advantages and disadvantages. By comparing the costs and benefits with a conventional training course of the same type, it was hoped to show that the development of this type of cross-cultural learning was financially viable. Unfortunately, a reluctance on the part of participating companies to disclose sales figures meant that this level of evaluation was not available to the researcher.

5.2.4. The Anticipated Outcomes of the Evaluation

The aim of this section is to offer a series of hypotheses concerning the expected direction of the results coming from the empirical study. It is divided into three parts. The first considers the likely results of the study in the light of the cultural discussion given in Sections 3.1. and 3.4. The second part considers the likely influence of learning styles on learning outcome. The final part looks at the possible impact of age on learner attitude towards distance learning and on learning outcome.

5.2.4.1. The Expected Influence of the Participants' Cultural Background

The main arguments put forward in the discussion surrounding the educational background of the participants from the two countries (Section 3.1.) suggested that the French would be more familiar with a teacher-centred approach to learning. Support for this was given through the researcher's personal experience of working in the

higher-education sector in France as well as through suggested differences in language, thought and meaning. Furthermore, cultural differences indicated in other studies (Hofstede, 1980) suggested that the French felt more at home in the more formal hierarchy of the teacher-learner context and, therefore, they could experience difficulties in the self-learning environment.

How such learning differences might be exposed in the training context remained hypothetical at this stage in the research, but it seemed reasonable to assume that any impact would be translated in the results of the empirical study on two levels.

First, on the attitudinal level, it was hypothesised that the French would have a less clear idea of distance learning than the British and, when asked to state their opinion of this mode of learning, would probably tend towards a non-committal reponse (answer c) on the five-point scale given in Section C of the pre-test questionnaire in Appendix B). As pointed out in Section 4.1.1., the French are reasonably familiar with the correspondence course, although the older participants would only know of this type of learning as an alternative mode of secondary-school studies for people who are unable to attend regular school. It could also be supposed that fewer participants would have had experience of distance learning in France, although it has become an accepted way of learning foreign languages and, since the area of previous distance-learning experience was not asked for in the pre-test questionnaire, this hypothesis may not be easily confirmed in the results.

On the second level, given less familiarity with distance learning, the French participants could be expected to have more difficulty in working through the courses used in the study. This could be confirmed at the learner-reaction level, for example in the feedback requested in Section A of the post-test questionnaire. However, the novelty of working through a course in an unfamiliar mode could have a positive effect on learner motivation. Nevertheless, it was expected that the French would not have a neutral reaction to the courses carried out in the study and, given the evaluation model chosen, this could be confirmed in the post-test questionnaire. The impact that familiarity with the distance-learning mode of training might have on learning outcome was also to be confirmed. The hypothesis was that the British would attain a higher mean score than their French counterparts in learning outcome. However, the quantitative/qualitative distinction between the two developed for the empirical study might also influence the level of learning outcome in favour of the French for the Investment Decisions course and the British for the Needs Analysis course (see the opening section of Chapter 6).

The second level of expected influence related to learning styles.

5.2.4.2. The Expected Impact of Learning Styles on Learning Outcome

The second set of hypotheses which could be put forward related to the expected variation in learning outcome according to the participants' approach to learning. Section 3.3.1. outlines the reasons for choosing the Learning Styles Inventory (Kolb, 1971) in order to determine a learning style profile for each partipiant. The reader is

reminded that the final analysis placed participants on either the concrete experience/abstract conceptualisation axis or on the reflective observation/active experimentation axis, with convergers and accommodators tending towards a more practical orientation and divergers and assimilators towards a more theoretical approach to learning. It will also be remembered that the two courses developed for the empirical study were different in that Needs Analysis had a more practical approach to sales training through simulation, whereas Investment Decisions remained conceptual in its approach. It was therefore reasonable to assume that accommodators, having the most practical orientation, would attain a higher mean learning outcome score in Needs Analysis and a lower mean score for the Investment Decisions course. In the same way, it was hypothesised that assimilators would perform better in terms of learning outcome in the Investment Decisions course and worse in the case of Needs Analysis.

The final area of likely influence on the results of the field study was that of the age of the participants.

5.2.4.3. The Expected Influence of Age on Approach, Attitudes and Outcome

A review of current literature indicated that differences in the participants' age may have an influence on the way they approached the courses in the study, on their general attitudes towards this type of training and on the learning outcome. It was therefore decided to attempt to draw up hypotheses concerning how age may affect the

motivation to learn, the way the courses were carried out and the degree of potential learning gain and learning recall.

Bromley (1988:152) claims that there appears to be no clear relationship between age and motivation, although he acknowledges the generally-held view that motivation decreases in intensity as the learner becomes older. He does, however, talk about the "mental strain" of going back to the learning situation after a long pause and this seems bound to affect the older learner more than the younger. He also accepts that attitudinal problems affecting learning can appear through such factors as the content and organisation of courses, the levels of difficulty and the pace of assimilation demanded (Bromley, 1988:183).

Pace is an important factor when considering any type of learning, although learning in the distance mode allows learners to work at a pace which suits them, whereas group learning imposes restrictions in pace which may affect learning outcome. Faustler (1991:236) suggested that response-centred, perception-centred and motor-centred learning activities may slow with age. Supporting this, Bromley claims that it is in the areas of understanding, processing complex information and remembering that the effects of ageing on performance are most evident. It could thus be expected that older participants in a learning situation may require a longer time to complete a distance-learning course, that the length of each study period may be longer than for a younger learner or that the number of phases needed to complete a course may be greater. The feedback section of the post-test questionnaire used in the current empirical study allowed the researcher to control for these hypotheses.

Whether age could have any influence on overall learning outcome seemed less clear. For example, compared to young adults, Kausler (1991:237) claimed that older adults have been found to recall less about locations of buildings familiar to them as well as to learn less easily about new buildings presented to them. Such findings, when applied to the learning experience studied in the current research, could indicate that older participants might attain lower scores in learning gain and learning recall.

5.2.4.4. Summary of Expected Outcomes

Three areas of potential influence on learning outcome were identified prior to conducting the field tests. They concerned the learners' attitude and approach to the learning experience, the learning style profile of the participant and the age of those taking part in the study. It was accepted that the learner's attitude and, to a certain degree, the approach to the learning experience would be influenced by the cultural background of the participant.

In order to confirm the hypotheses put forward, Chapter 9 of this thesis reconsiders the discussion in the light of the results which are given in Chapter 8.

Having discussed course design and evaluation in the context of the courses developed in the current study, the following chapter looks at the way in which the courses used in the research, together with their supports, were developed.

Chapter 6 Course Development

Up to this point, the discussion has revolved around learning variables (the learner and the learning context) and the structural variables (course delivery systems and course design and evaluation). This chapter is concerned with the way in which the two courses used in the research were developed. It begins with a general comment relating to the decision to develop two different types of course.

My past experience in the field of education, mainly in French business schools but to a certain degree in continuing education, led me to distinguish two basic approaches to business-related topics. The first relates to those requiring quantitative analysis and the second to areas where such analysis is less possible or suitable.

An example will help clarify this distinction. In the field of decision-making, there are certain areas of analysis for which quantitative data are readily available. Corporate finance is a good example of an area where decisions will rely heavily on quantitative data such as capital investment, working capital, profit, etc. On the other hand, in the area of personnel recruitment, certain decisions will rely less on quantitative analysis (which, in any case, may not be available) and more on qualitative aspects such as the quality of previous experience, applicant profile, motivation, etc. Whilst it is accepted that it is rare for one type of analysis to be exclusive to one area of decision-making, the quantitative/qualitative orientation of a topic is often evident.

My experience in the Rouen Business School has undoubtedly influenced my view of the profile of the French businessperson. Nevertheless, many of the decision-makers in the business environment in France have come through the *Grandes Ecoles*, of which the Rouen Business School is one, so this view is likely to be fairly typical. At the *Grandes Ecoles* there are high demands on student capacities in Mathematics-related areas, and the scientific approach to management in France (see Section 3.1.) seems to lend support to the idea that the French business world is oriented particularly towards quantitative aspects of decision-making.

In British business schools, I have observed that there is somewhat less emphasis upon quantitative techniques. Furthermore, there appears to be a growing emphasis on the "people" dimension of management and the need for effective human resource management (Storey, 1991). As can be seen in Section 6.1. below, the choice was purely coincidental and has little bearing on the results since both courses were tested in each country.

Whilst such indications are not the specific focus of the current research, I decided to take any such differences into account in selecting the types of courses to be used by developing two courses, one requiring quantitative analysis and the other relying on behavioural analysis. I had in any case decided that, in order to retain a cross-cultural balance in the study, it would be advisable to develop two courses with one company, one course from a training need in France and one from a need in Britain. Ironically, the quantitative course developed in this study originated in Britain and, as a consequence, the qualitative course was developed initially in

France. As it happened, the two courses finally developed covered training needs in both countries, but this initial approach allowed me to define course objectives and structure independently in the two countries. In order to test the cross-cultural aspect of the research, I would be working from a balanced structural base. Although a country's preference for one type of course would not necessarily translate into differences in learning outcome, it would nevertheless be interesting to look for confirmation of this in learners' reactions to the two courses.

On the learning level, I felt it would be interesting to compare learning outcome not only in relation to the socio-cultural-educational background of the samples, but also according to their preferred learning styles. This would allow cross-comparisons to be made between learners of the same preferred style regardless of their nationality. Added to this, the U.K. training centre of the company I was then working with (Rank Xerox) was familiar with the use of the Kolb LSI.

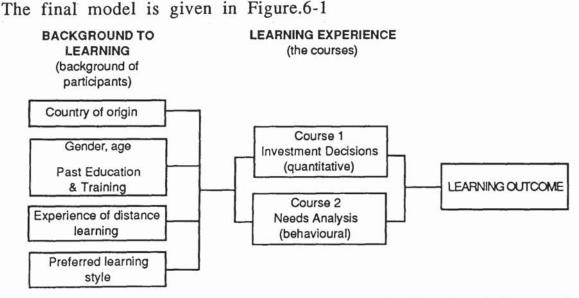


Figure 6-1: Level of Comparision for the Empirical Research

The model allows comparisons in learning outcome to be made in relation to any combination of variables. Furthermore, I felt that if one of the courses could be developed from the Rank Xerox U.K. training repertoire and the other from the Rank Xerox France repertoire, cross-cultural comparisons would be enriched.

There now remained the problem of developing the courses. This is covered in the following two sections.

6.1. The Development of the Quantitative Course (Investment Decisions)

6.1.1. The Approach

A certain amount of initial consideration was necessary as to which course could be developed and from which country. There were some obvious constraints. Given my early professional experience in banking, I decided that I might feel more at ease developing a first course in the finance field. For the second course, I favoured developing a qualitative training course using a video support. Once again, past professional experience helped me to identify sales representation as a suitable area. Moreover, a video support could be used in this subject area for simulation purposes, which would allow a cross-cultural evaluation of the impact of using a technological support.

For the filming and editing of a training film, it was going to be necessary for me to be very much on the spot, particularly during the production of the first film. France was thus the obvious choice for the development of the qualitative course. This proved to be the right decision since experience showed that it was going to be far less demanding to realise the English version of the video support, given the experience acquired from producing the French version.

From the outset, it became clear that the courses to be developed would be in the field of sales training where a need for innovation was apparent in Rank Xerox in both countries. Within the in-house sales-training courses offered by Rank Xerox (U.K.), it was necessary first to find an established quantitive course suitable for transfer to the distance-learning mode. Rank Xerox UK gave me an introduction to the person responsible for company training in Finance at that time who suggested that it would be of interest for the company to develop a distance-learning course within their Applied Finance Programme where a training need existed. It should be mentioned that Rank Xerox U.K. had already sponsored distance-learning course development in the field of credit control (Gilroy, 1989).

At that time, the Applied Finance training programme was organised on a workshop basis, the trainees having first to read through an interactive Workbook before going to the Company's training centre in Newport Pagnell, approximately two weeks later, to follow the five-day Workshop. The interactive element of the Workbook was provided by way of a series of questions, presented at regular intervals in the book, designed to test the trainee's understanding of the material presented. Once satisfied with the answers given, the trainee could then compare them with the model answers at the back of the Workbook. One final question was posed at the end of the

Workbook, designed to provide the basis for the trainee's first activity at the Workshop.

The company was interested in developing a distance-learning course which would replace both a part of the Workbook and the corresponding time spent in the workshop session. The principal role of the workshop session was to reinforce learning in a controlled environment (i.e. with a trainer) through exercises and the company felt that it was of interest to develop a distance-learning course which would include the same potential for learning reinforcement.

Chapter 6 of the Rank Xerox Applied Finance Workbook, entitled "Investment Decisions", which dealt with the client's procedure for approving investments in fixed assets, served as the basis for the development of the first distance-learning course designed to give the salesperson an awareness of the various ways which are used by companies to calculate the return on an investment. The overall aim of the distance-learning course was to help the salesperson understand the different interpretations given to the term "Return on Investment" and allow him/her to take account of this in the sales argument.

The final part of chapter 6 in the original Workbook dealt with analysing the tax effects of an investment. It was obvious from the outset that this could not be a part of a cross-cultural course, since tax laws in Britain have very little in common with those in France.

The course was therefore developed from the first eight pages of the chapter. Since the aim of the research was to adapt an existing course

to distance learning and not to write a new course for this purpose, the seven approaches to the calculation of return on investment given in Chapter 6 of the Workbook are found in the same order of presentation in the distance-learning course. Each approach was, however, developed so as to make it suitable for the self-learning process. This involved making the language more friendly, describing the approaches more fully, using examples where necessary and writing a series of questions for self-assessment (see Section 5-1 on course design).

The chapter in the original Workbook was preceded by five other chapters which served to ensure that the trainee had a solid prior-knowledge base. Since I had no guarantee that the trainees in the sample used for testing the distance-learning course would have this prior-knowledge base, its principle elements needed to be included in the stand-alone course. Before dealing with the content of the chapter, it was necessary to write an introduction to the course in order to provide the learner with the knowledge-base (see Section 6.1.4.4.). The introduction was originally intended to be in a separate booklet to be read before studying the return on an investment. However, apart from such modifications, the content of the course did not include any major additions to what was to be found in the Applied Finance Workbook.

One area which was greatly modified related to the interactivity of the course. Despite the claim to the contrary found in the introduction to the Workbook, there was very little work demanded of the trainee outside the eight questions relating to the material presented in the six chapters. I therefore set to work to analyse the content of the chapter on which I was to base my course in the Workbook and create a series of questions which would reinforce learning and render the course more interactive. A total of ten questions relating to return on investment were created, most concerning the various approaches to its calculation.

It was essential that the questions should follow the evolving complexity of the approaches and that they should show a very clear link to what was being presented in the course as well as to each other. In this way, it was hoped to give learners an opportunity to monitor progress by comparing their answers with those given at the end of the distance-learning manual.

Thus, the training need had been identified with the company, their expectations of learning outcome from the distance-learning course being comparable to those achieved through the existing workshop. What the company hoped to gain, above all, was the possibility of offering training in return on investment to a wider audience and, given the numbers of potential trainees, at a lower cost. The structure of the course was to follow the Workbook, each new point studied being an extension of the previous one in order build on knowledge acquired. The medium chosen was print-based since it was felt that the only other support which would benefit the learner was computer-based training which would mean my being trained in specialised software and tied to a compatible word-processor during course writing. For the same reason, the solution of using CBT would also limit the opportunities for trainees outside Rank Xerox to complete the training course.

The course was written respecting the formal standards set out in Section 5.1. and efforts were made to situate the different elements of the course in a professional context. The course is reproduced in Appendix A at the end of this thesis. The tone used was friendly without being informal and emphasis was laid on the importance of the course in terms of job performance.

6.1.2. The Transfer to French

Once the first attempt at writing the course had been completed, there remained the problem of how to put it into French. The principal hypotheses being tested was that the same learning outcomes could be achieved across cultures using the same course. After the first attempt at a strict word for word translation into French, it became evident that, whilst this approach ensured that the two courses had the same content, the manner in which it was to be perceived by the learner might have an influence on learning Colleagues in the Finance Department of the Rouen Business School felt that the original draft in French did not give the impression of being structured enough, the paragraphing was too long and the sections of the course were not defined clearly enough. It was also pointed out that there should be more practical advice given in the course, since it tended to be strongly based on theory. Such points showed up basic weaknesses in course design and they were immediately rectified in both versions. The introduction was drawn out so as to include more advice on how to work through the course. Material dealing with cost/benefit analysis was also extended with a view to making the course more practically useful. The questions were boxed in order to make them more conspicuous and

the whole text was broken by the insertion of "practical advice" pages.

As each modification was made to the French course, the English version had to be modified in the same way and re-read by Rank Xerox. A small number of post-graduate students on the Aston MBA programme as well as two students from the University of Rouen also took part in developmental tests. A short questionnaire was developed for the purpose of obtaining feedback on the course, the results of which were as follows:

Problem cited	Solution proposed
Not clear how much knowledge the learner should possess before beginning the course.	The introductory section to the course had not been given for reading. To avoid confusion, this was integrated into the course.
Sometimes evident that the course was written by someone not of French mother-tongue.	The course was re-read by a French national (for the second time) and linguistic amendments made.
Integrating exercises in the course itself does not help the overall balance of the course.	A separate booklet for answers was developed containing only the exercises. Learners could then refer back to the course with ease.
Text sometimes too familiar in its tone.	Expression was amended where appropriate.
Course perhaps too short.	No action.

Overall conclusions: It is true that the above amendments to the French version of the course were carried out following the advice of

only a limited number of people. However, they were working with only the first draft of the course and the feedback session was quick to arrange and efficient. Furthermore, the information obtained was of a general nature and there was going to be an opportunity for carrying out more detailed amendments during the pilot tests.

The two Rouen University students found the whole idea of a distance-learning course intriguing. Although they had had no personal experience of distance education themselves, they had heard comments from others relating to correspondence courses which, according to them, had the relatively bad image of being arduous and non-motivating. They did not have this impression during the test, although they felt that this was mainly due to the length of the course. Their principal problem was to be able to identify with those trainees towards whom the course was directed.

The test was interesting to me for two reasons. First, it allowed me to have the first real feedback on the course and to make one or two important adjustments to the text.

Second, it taught me that, no matter how carefully a course is written, the cultural background of the author will always filter through words written in a foreign language. From this point on, I paid particular attention to making sure that everything written in French was triple-checked.

6.1.3. The Second Draft

It would be inaccurate to state that the divisions between the first draft, the initial edit and the second draft were clearly definable. The truth is that the process of modifying the course took place progressively over a period of three months. The principal reasons for this lay in the fact that there were two distinct panels of "editors" working on the two versions of the course in the two countries.

Despite the choice of carrying out developmental tests in one country only, it was essential to keep both versions of the course completely up to date for fear of over-developing one version and thus losing the cross-cultural dimension of the research.

As was to be expected, modifications to the French version of the course were far more immediately manageable, since I was on the spot to discuss them with all parties concerned. However, it was important to remain closely linked to the source of Investment Decisions, i.e. the chapter in the Applied Finance manual obtained from Newport Pagnell. I proceeded in the same manner when developing the Needs Analysis course which had its origins in Rank Xerox France. I wanted to avoid finishing up with a tried-and-tested distance-learning course in one language which would then be simply translated into another. One of the aims of the research was, after all, to show how training courses could be developed crossculturally and not just used across cultures.

The final result of the development of a French version of Investment Decisions was a close translation of the English course with the same knowledge content, suitable for use in both countries. The student sample in both countries brought out one technical problem relating to differences in the calculation of reducing-balance depreciation which meant that the relevant question had to be modified to include depreciation calculated on a straight-line basis. With this detail corrected, the course was ready for the final developmental tests.

6.1.4. Developmental Testing

The term "developmental testing" is used in Lewis/Meed (1986:57). It is described here as "the try-out of a decently-presented draft on a few members of the target population". The final tests then take the form of a validation. Lewis and Meed set out the differences between the two forms of testing as follows:

Developmental testing	Validation
small-scale	large-scale
informal	formal
subjective	objective
artificial circumstances	real circumstances
manuscript in draft	manuscript near to, or in its final form

Figure 6-2: Differences between Developmental and Validation
Testing

(from Lewis & Meed, 1986:61)

The advantages of adopting such a procedure were:

- the development phase could be limited to the author's country of residence where there already existed a dialogue with Rank Xerox and where the organisation of face-to-face testing was greatly eased.
- the time-consuming problem of adapting courses from one culture to another could be borne in mind during the developmental stage, but need not actually take place until the final testing phase.
- validation could be carried out under real-life conditions
 and in the distance-learning environment.
- there would be no question of having half-finished, halftested courses on hand at the end of the research period.

6.1.4.1. The Participants

The tests were carried out in the Rouen and Caen branches of Rank Xerox. A feedback session was organised in Paris for those following the course in their own time.

Nineteen people took part in the tests in Rouen and Caen and a further twelve from Paris were given the course as an unsupported distance-learning exercise.

The following tables set out the origins of the samples used in the pilot tests. By the term "controlled", the reader should understand the tests which took place in the offices of the company in Rouen and Caen and at which the researcher was present to record learner reactions as well as the time needed to complete the course.

Test type	Rouen	Caen	Paris	Total
Controlled	12	7	0	19
Distance Learning	0	0	12	12

Total numbers present at feedback sessions

Test type	Rouen	Caen	Paris	Total
Controlled	9	4	0	13
Distance Learning	0	0	12	12

Total numbers completing

Origin of samples (by professional category)

Sales	Techn	Admin	Others
8	1	2	1
6	1	0	0
11	1	0	0
25	3	2	1
	8 6 11	8 1 6 1 11 1	6 1 0

6.1.4.2. The Controlled Tests

These tests took place in Rouen between June 12 and June 15, 1990 and in Caen between June 19 and June 22, 1990

When these tests took place in Rouen and in Caen, I was present to introduce the aims of the test. I then remained with the groups from beginning to end. The sessions were organised in four parts; three sessions of 45 minutes for the accomplishment of the course and a fourth lasting around one hour during which the participants were asked for their comments. In Rouen, the sessions were organised over four days. In Caen, there were three sessions only, with the feedback meeting tagged on to the end of the third day.

Whilst I gained an enormous amount of information from all the sessions, it was sometimes felt that my presence rendered the exercise a little "false" as a distance-learning test.

About two weeks before the tests, the introductory section of the course (the pre-course) was distributed to each participant and the pre-test questionnaire was completed in the days preceding the tests.

6.1.4.3 The Distance Learners

There were 12 participants in this group, all of them attached to the Company's offices at La Défense, near Paris. Here, too, each participant had received the pre-course two weeks before beginning the test and the pre-test questionnaire was sent out and returned

before the course itself was distributed in mid-June. The feedback session took place in Paris on July 6.

6.1.4.4. Observations and Proposed Action

The overall criticism of the course, confirmed by nearly all the participants, was the lack of emphasis on the practical application of each approach of analysing an investment. In other words, the course was still thought to be too theory-based.

Other general comments concerned the need to include "talking images" to liven up the course and the controlled tests indicated a need to have summary/recall pages inserted at regular intervals. This would act as a means of reinforcing the practical application of the course. The observations are summarised below.

page	observations/comments	action taken
1	Section "Suppositions" - knowledge of these points should not be supposed	Integration of the pre-course into the main course as an introduction
1	Need for more explanations about the practical application of the course	Insertion of passages in the course clearly setting down its practical use
4	Question 1 too complicated. It supposes selling experience, it is not put clearly enough, the answers required are lengthy and there are doubts about its usefulness	Reformulation of the question to reinforce its pratical utility
9	Definition of "Competitive Advantage is too academic	Reformulation of the definition
12	Question 2 is too simple	Reformulation of the question
14	Fictitious depreciation rate. 65.5% is not put into context. Confusion over when costs go out and returns come in	The two methods of depreciating were explained more clearly. The example given commenced in year 0
21	Lack of detailed summary	Insertion of periodic summaries throughout the course with final recapitulative

The above comments were taken into account in a complete overhaul of the Investment Decisions course and, after having once again had the resulting course re-read in the Rouen Business School and in Rank Xerox France and UK, the final version was ready for testing (see Appendix A).

The reader's attention will now be directed to the development of the second course used in the research.

6.2. The Development of the Behavioural Course (Needs Analysis)

6.2.1. The Approach

Investment Decisions had been developed from a training course offered in Rank Xerox UK and it therefore seemed important to keep the conceptual balance in the overall research by developing the second course from training offered in Rank Xerox France.

A course needed to be developed which fulfilled certain criteria designed to keep an overall coherence. These criteria were:

- a topic requiring qualitative rather than quantitative analysis (see the opening section of this chapter)
- a course developed from an existing training programme since a completely new training course would involve new variables such as the extent of the training need.

- a training need coming from a relatively non-technical area which could be developed by someone from outside the Company.
- a training need addressing a similar public to that of Investment Decisions (i.e. the sales force), thus making it possible to compare the structural as well as the contextual variables.

Discussions in Rank Xerox France led me to the area of the Complex Sale, an established course developed for Rank Xerox in the mid-1980s by the Huthwaite Research Group and still used in the French training centre in Paris.

The manual introduces the different steps involved in a sale, from the initial preparation stage through the phase of customer contact and the identification of the customer's needs, the evaluation of the different options open and how to resolve his/her preoccupations relating to the purchase before arriving at the decision to buy.

The problems encountered in the writing of the courses and the setting up of the field tests is described more fully in the following chapter. For the pilot testing of Investment Decisions and the writing of Needs Analysis, I was very fortunate in having the help of the Rank Xerox Personnel Manager in Rouen. With him, it was agreed that I would choose one of the steps of the Complex Sale. The analysis of customer needs seemed the most suitable since it required no specialised technical or product knowledge on my part and it would lend itself without too much complication to video

simulation. I also felt that concentrating on needs analysis would allow me to develop a generic course which could be tested in a number of types of company should I not be able to obtain the necessary sample wholly from Rank Xerox.

6.2.2. What Is a Complex Sale?

"Complex sale" is a term used by Rank Xerox France. The approach used by the Huthwaite Research Group in the area of customer needs can be found in Rackham (1987) under the name of the "major sale". The author describes two main types of sale; the simple low-value sale and the major (complex) sale. According to him, a simple sale can often be completed in one call whereas a major sale may require several calls spread over a long period. Multi-call sales have a different psychology from single-call sales in that the most important discussions and decisions are likely to take place while the seller is not present, i.e. during the interval between calls. This means that a successful multi-call sale depends upon the customer's capacity for remembering the key points of the seller's presentation. Research carried out by the Huthwaite Group (Rackham 1987:8) suggests that the customer is likely to have forgotten well over half the key points within the week following the seller's visit.

Furthermore, in a major sale where the purchase cost is likely to be high, the customer is more conscious of value and the seller must therefore build up the perceived value of the product or service he/she is selling. Since, as the multi-call sale progresses, the seller and the product will tend to become inseparable in the customer's mind, Rackham contends that it is essential to develop the right

approach to the identification and development of the customer's needs.

The first sign of a need is shown through the customer's dissatisfaction, no matter how slight, with the current situation. This is what Rackham describes as an implied need. The approach goes on to develop the implied need so that the customer perceives the problem or dissatisfaction as being larger than the cost of solving it. The balance between cost and perceived value is called the value equation. This situation will lead the customer towards a strong desire to change the current situation; in other words, to transform the implied need into an explicit need.

Rackham stresses the importance of developing or extending implied needs into explicit needs through customer questioning. Beginning with questions designed to allow the seller to establish background information about the customer's current situation (situation questions), the seller can determine the customer's degree of satisfaction with this situation (problem questions) in order to uncover implied needs. The seller can then build up the size of the implied needs (i.e. the seriousness of the problem) through questions designed to show the full extent of the consequences of the problem (implication questions). From this point on, the seller will develop the perceived value of usefulness of the solution through what Rackham defines as "need-payoff" questions which are designed to encourage the customer to express for him/herself the benefits of the solution proposed.

This completes what is known as the SPIN strategy (Situation, Problems, Implications, Need-payoff) which allows the seller to demonstrate the capability of the product or service offered in order to conclude the sale.

6.2.3. Practical Development

The first step was to develop Rackham's approach in order to make it suitable for distance learning. This presented me with a task which was not dissimilar to that set by Investment Decisions.

As far as form was concerned, it was essential to keep the language friendly in its approach and to give as many examples as possible of each type of question presented. As with Investment Decisions, I inserted a series of ten self-assessed questions after each new concept presented in order that progress could be monitored throughout the learning process. Compared to Investment Decisions, the Needs Analysis course lent itself more to graphic supports such as tables and diagrams, some of which were developed from Rackham's 1987 publication.

Given the abstract nature of some of the questions set in the course, suggested answers to only some of the exercises set were included in the early version of the Needs Analysis manual. However, discussions in Lancaster with Mr Don Binsted of the Centre for the Study of Management Learning at the University of Lancaster led to a complete set of answers being inserted at the end of the manual. This would ensure that the learning process would receive the necessary reinforcement (see Appendix B).

6.2.4. The Video Support

The decision to use a video support as a complement to the print-based support stemmed from the need to keep the nature of the course as professionally oriented as possible. In the field of selling skills, illustrating sales behaviour is of prime importance since it will reinforce learning. There are many examples of how simulation exercises or real-time sales presentations can be used to illustrate behavioural concepts. However, the only other people actively involved in developing cross-cultural sales training courses at the time was a group called I.I.S., based in London with a subsidiary called Interaxis in Paris. They were mainly concerned with the development of courses using interactive videodiscs and had developed training courses in the areas of customer contact and basic selling techniques.

To solve the problem of illustrating the selling concepts of Needs Analysis, I favoured producing a video sales simulation in French and dubbing the soundtrack for use in Britain. I.I.S. convinced me that it would be an error to proceed in this way since their experience indicated that dubbed sequences met with hostile reactions from some trainees and that, because of this, learning outcomes would almost certainly be affected.

The idea of using a filmed scenario which could be exploited to identify customer needs came mainly from two sources:

- I had previously seen a series of short, filmed sequences relating to communication skills developed by Don Binsted

at Lancaster. These sequences were used in interactive video courses designed to teach trainees how to communicate within their work environment. They showed different approaches in the same situation and the learner was required to identify the best one and then to justify its use in other situations.

- The Video Arts team had released a training film entitled "Negotiating Profitable Sales" in which a salesman was being prepared for an important appointment with a difficult customer by studying a "filmed" mock interview. The salesman was required to identify the possible stumbling blocks to be overcome in a sales discussion.

The latter video-based courses tended to show both the right and wrong way of approaching a business situation, an approach that I did not favour for two reasons:

- First, despite a certain amount of experience in customer contact, I did not feel sufficiently qualified to talk about the right way of approaching a sale, nor could I always recognise a wrong approach. The course I had developed from the "Complex Sale" was designed to show one way of conducting the sales discussion and nowhere does it pretend to be the only way.
- My personal experience in teaching has convinced me that it is not always desirable to teach the wrong way

of doing anything since the learner has as much chance of retaining the wrong way and the learning process is unnecessarily overloaded with "false" information. Negative reinforcement in learning is discussed in Section 5.1.2.

However, the films cited above did confirm my feeling that using a filmed sequence for training purposes in both France and Britain would lead to interesting findings on a cross-cultural level.

I therefore chose a framework for the Needs Analysis course which involved:

- One filmed scenario showing a typical sales situation which would be shown in its entirety at the beginning of the course.
- The course itself showing the different stages of a sales discussion using examples from other sources than the film.
- A second showing of the scenario backed up with some form of exercise which would enable the trainee to identify the different phases of the discussion.

I considered it important to avoid trying to produce the perfect scenario showing precisely the way one should conduct such an interview. However, as explained above, I did not intend to show any sales blunders. I hoped that the result would be a filmed scenario

which would lend itself to positive analysis and therefore encourage reflection on the part of the trainee.

Whereas the Rank Xerox Complex Sale manual provided the support for developing the course itself, I had little to guide me for the scenario. What was needed was a sequence that was long enough to bring out examples of each type of question posed by the salesperson, yet short enough to hold the trainee's concentration during the initial unbroken showing at the beginning of the distance-learning course.

It was essential to find a suitable product for the sales discussion. I did not know enough about the technical side of the equipment Rank Xerox sold and I was therefore not confident about using such products in the scenario. On the other hand, choosing an everyday consumer product would be inappropriate since I would be testing the course on trainees who needed to find some identity with the product they sold everyday.

The choice of a low-tech industrial product seemed suitable and the idea of choosing an air extractor came from a study that I was supervising for two students from the University of Rouen who were completing a post-graduate degree in Business Administration (the same students who participated in the development tests for the French version of Investment Decisions). They were looking into the development of a small business in the ironware industry and the subject of their progress reports at the time related to the working conditions in the company's factory.

The underlying structure of the scenario was worked out on a computer organiser. The explicit needs concerned the problem of extracting polluted air from the factory. From this, it was necessary to design the implied needs and then to write the dialogue between the salesperson and the customer.

The initial script was written in French and checked for its authenticity by two practising engineers.

6.2.5. The Filming

The scenario was filmed in the Rouen Business School one Saturday. Because of the lack of available funds, it was necessary to rely on friends to accomplish the task. One of them was a graduate of the School who worked in the advertising industry and was reasonably skilled in the use of Video 8. The other two volunteers were colleagues from the faculty of the Business School. The extremely tight schedule meant that the scenario had to be filmed sequentially (in any case, editing facilities were not available to us). The previous evening had been spent noting down the camera shots on the script so that the minimum amount of time was taken for filming. The whole scenario was filmed in a total of six hours.

The English version of the film was made several months later in Aston Business School. Once again a limited budget meant a reliance on friends, but at least a lot of the technical conceptual work had already been carried out for the French version (for example, the camera shots remained the same as on the French film). One major advantage was being able to work with professional technicians in

Aston University who allowed me to use their editing facilities. The filming of everything, including the course presentation, was completed in two days.

6.2.6. The Pilot Tests

Pilot tests for Needs Analysis were carried out in October 1990 in Rouen with a group of adult learners following a training programme in sales techniques given by a private training body called PRISMA. I was fortunate enough to be able to "borrow" PRISMA's trainees, all of whom were engineers mainly around 40-45 years old.

Each participant was given the coursebook together with a videocassette and was expected to complete the course over a period of two weeks. The pre-test questionnaire was completed by each participant during the first session. They were due to have a second course with PRISMA two weeks later when I would be present to collect the post-test questionnaires together with initial feedback on the course. However, at the mid-October session it was discovered that only one participant had had the time to complete the course. Most of the others had begun the work but it was decided that more time was necessary.

Unfortunately, I was only able to recuperate a total of three completed tests from the PRISMA sample, and this set the shape of things to come. The difficulty of getting trainees to return material is another of the problems dealt with in Section 7.2. below.

Nevertheless, the PRISMA sample indicated that a few general modifications needed to be made which were confirmed when a further pilot test was carried out on 9 students from the Rouen Business School a few months later. Perhaps thanks to the experience gained from developing the Investment Decisions course, most of the test sample found the course practical and interesting. The principal findings of the pilot tests are presented below in table form.

criticisms	action taken
- The script which was included at the beginning of the manual was unnecessary and it tended to divert attention away from the salesman's approach in the initial viewing of the video.	 The script was taken out of the manual. This point was relevant since, in any case, the script was necessarily in the final section of the manual, as it was needed for the final series of self-assessed questions.
- The text was too dense and this interfered with the learning process for many.	The initial version had single-line spacing and no idented paragraphs. The modified version was spread over twice as many pages.
The early self-assessment questions were felt to be a little easy.	- Despite their ease, the early questions were left since they were directly related to trainee progress.
- The video was appreciated by all except two people who felt it was unnecessary.	- No action taken

The courses to be used in the field tests had now been developed. The search for "mirror image" courses between the two countries had allowed me to offer exactly the same training course to sales trainees in the two countries, thus eliminating the risk of distorting learning outcome through differences in course content and delivery. Such an

approach could also serve as a base for assessing learner receptiveness to the distance-learning medium across cultures.

The final stage in the development process concerned the definition of the research design. This will be covered in the following chapter which is devoted to the methodology employed in the research, the means of data collection and the problems encountered in operationalising the research model.

Chapter 7
Methodology

7.1. Fieldwork Methodology

Apart from straightforward comparisons between two or more countries, not a great deal of research appears to have been carried out in the field of cross-cultural education and training in Europe. Even less has been written on cross-cultural in-house training, despite the fact that the age of the European multinational company is now dawning.

As indicated in the opening chapter of this thesis, many of the present multinationals have training centres scattered around Europe with only a minimum of collaborative training effort between them. Apart from in the field of new product training, a lot of the conceptual work in training appears to remain the responsibility of each individual training centre and surprisingly little is known of what goes on in the training centres of neighbouring countries.

Contacts established by the researcher with multinational companies conducting training in several countries indicated the principle reason for leaving training to each individual country's training centre as being related to the cultural and/or educational differences between countries. Most people interviewed seem to accept that differences in culture and mentality render the transfer of training courses from one country to another difficult. U.S.-based multinationals such as Rank Xerox, Digital Equipment, Unisys and

Learning International have encountered dissatisfaction with American training programmes which have been imported lock, stock and barrel (particularly in the field of new product training) without success. It would seem, therefore, that language is not the only problem that the cross-cultural course designer must face, as has been discussed in Chapter 3 of this thesis.

The fact that there seemed to exist no precedent for this type of cross-cultural course design and development meant that considerable time needed to be spent developing an appropriate conceptual framework which would address the research issues. This section describes how the fieldwork design evolved from the conceptual framework and how the model for the collection of data was chosen.

7.1.1. The Conceptual Framework

The principal hypothesis of the research is that, for purposes of sales training, the same learning outcomes can be achieved across cultures using the same distance-learning materials in two languages. This was tested by comparing learning outcomes between samples in France and Britain using the distance-learning courses developed by the researcher (as described in Chapter 6).

If such a hypothesis could be confirmed, it is reasonable to assume that cross-cultural in-house distance learning for sales training could lead to major economies of scale at the level of programme conception in a multinational company. It is also assumed that such cross-cultural, in-house distance learning could help to foster a cross-

national corporate culture which companies may wish to develop when Europe is open for business after the beginning of 1993. From information received during the various interviews that the researcher has had in the course of this study with companies on both sides of the Channel, there is a rapidly-growing interest in developing a European training culture, particularly among management and trainers of the larger, multinational companies. Exchanges are taking place with increasing frequency between members of national training centres throughout Europe in Digital, Rank Xerox and IBM, either individually or though already-established European training centres.

This research thus sets out to determine the extent that these cultural/educational differences affect learning outcomes in courses specifically designed for cross-cultural exploitation.

The diagram on the following page summarises the conceptual framework of the research. The framework sets out four levels at which differences in approaches and attitudes can be compared.

Differences on the state level have already been discussed in Chapter 2. They revolve around state policies in the field of education (both in school and in institutes of higher education), the field of training, and the legal and institutional framework of the country.

Also on the contextual level, certain aspects of both the individual and group tier are dependent on the size of the investment that the company makes. Such investment may be made on three levels; an organisational level (training structures), a financial level (training

budgets) and an involvement level (training incentives and corporate perceptions of conventional training and self-learning).

There is a link here between the state and the company levels, since the investment that a company makes in in-house training for its personnel will, to a certain extent, depend upon the qualifications of its recruits (education), the training schemes and incentives offered by the State and the legal obligations laid down in the field of vocational training.

On the group level, the success of training courses such as those developed for this research will depend upon how they are perceived by trainers, who may see their development as a threat to the training profession (such was the case experienced by the researcher in Rank Xerox, France).

The position of trainees is also important on the group level since their perception of the usefulness of such training courses will depend upon the potential for self-development and career advancement within the corporate environment as a result of the training received.

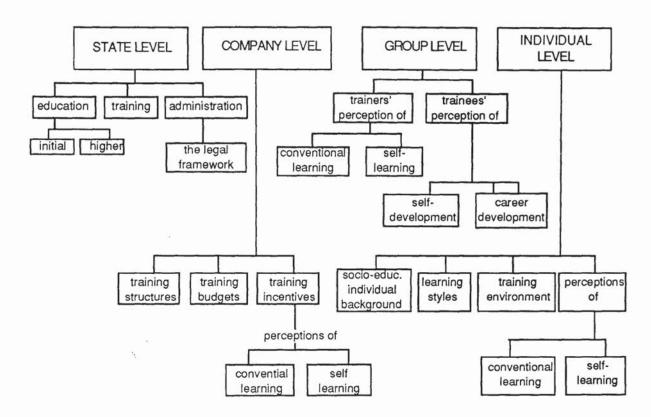


Figure 7-1: The Conceptual Framework of the Research

On the individual level, age, previous education and professional experience together with past training experience and preferred learning style represent the independent variables whereas perceptions of distance learning are dependent upon learner attitudes. Likewise, motivation in the learning situation is dependent upon whether the course is considered job relevant. There is a link here in the conceptual framework at the individual and at the group level.

Another link with the group level can be made between the trainee's and the trainer's perception of learning, since one is likely to have an influence on the other and may thus alter learning outcome. How the variables were operationalised in the research is described in section 7.1.6. below.

7.1.2. The Research Model

A model of cross-cultural comparison has already been presented within the context of course development (figure 6-1). For the purposes of explaining the interdependence of the variables on the contextual, course and learning levels, the research model can be expressed diagrammatically as in figure 7-2 below.

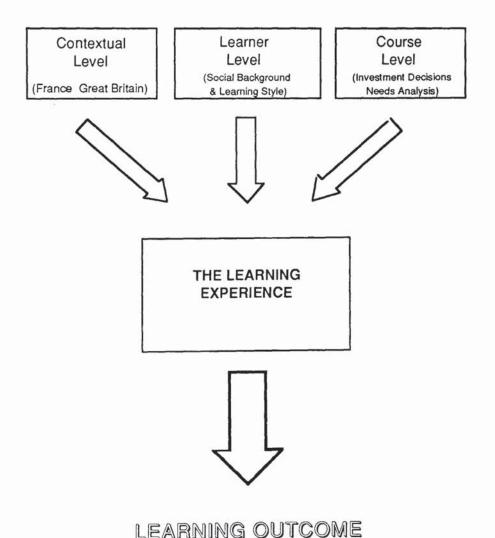


Figure 7-2: The Research Design

The contextual level includes differences in the training and legal framework of the two countries under review (as discussed in Chapter 2) and which may have an influence on learning outcome.

On the course level can be found the two courses developed for the research; one behavioural, one quantitative. The reasons for this choice are given in the opening section of Chapter 6. The part of this thesis concerning course design (Section 5.1.) points out the need to plan the development of training courses around training needs. The development of training courses for salespeople answered a particular need in Rank Xerox at the beginning of the research. Furthermore, courses in Applied Finance and Needs Analysis were identified as answering a particular sales training needs in Britain and France (Chapter 6).

On the learning level can be found the learning input, i.e. the samples from the two countries, classified according to either their preferred learning style or their socio-cultural-educational background and their attitudes to the experience of learning at a distance. The reasons for choosing the cognitive and affective learner predispositions can be found in Section 5.1. As pointed out below, the decision to include a preferred learning style dimension in the research came initially from Rank Xerox UK, but support for its importance in the measurement of learning outcome is given in Section 3.3. in which the choice of the L.S.I. as a test for determining preferred learning styles is also discussed.

The research design thus allows for an analysis of learning outcome from each of the two courses between British and French trainees, controlling for the influences of different socio-educational and learning variables through the use of statistical techniques such as t-tests and analyses of variance.

The choice of the types of courses has been covered in Chapter 6 dealing with course development. It was with the intention of achieving maximum harmony at the structural level that the two courses were developed from the same company's training programmes, one from France, the other from Britain. It was unfortunate that it was not possible to test the courses in the same harmonious manner with this company. This point is discussed further in Section 7.2.

If the research findings indicated that there were differences in learning outcome between the countries, it was essential to determine their source. It was argued that the most likely source of differences would be those relating to the participant's country and culture of origin. However, differences in age, educational background, level of studies attained and learning styles could also play an essential role in learning outcome.

It was hypothesised that the concept of distance learning was perceived differently between the two test countries and that the attitude of participants towards distance learning was another important variable to take into account when assessing learning outcome.

It was also envisaged that the individual's attitude towards distance learning could influence learning outcome, since the literature review highlighted differences in attitudes to learning between the two countries (see Section 3.1.). It was important to accommodate learner attitudes towards distance learning in the research model and this was accomplished through seeking learner opinions of

distance learning both before and after doing the course. In this way, it was possible to determine whether attitudes had changed through doing the course and, if so, for which type of trainee this change in attitude was likely to occur (nationality, learning style, age, etc.).

The level of studies attained in formal education could also influence learning outcome. Other factors affecting learning outcome which have been classified under socio-educational and cultural variables include previous experience in the areas covered by the courses, previous training experience and prior experience of distance learning. These points are more fully covered in Section 7.1.5.1.

The literature review emphasised the importance of defining the learning style of each participant in the sample. It was hypothesised that this could bring a further dimension to the research outside the cultural aspect and would allow comparisons to be made not only across countries but also between learners of similar learning styles.

Learning theory is discussed in Chapter 3, the conclusion of which justifies support for the Experiential Learning Model proposed in Kolb (1971). Originally, two tests coming out of the Experiential Learning Model were retained for this purpose; Kolb's Learning Style Inventory (1976) and the Learning Style Questionnaire of Honey & Mumford (1982). Kolb's LSI was finally retained for the reasons s t a t e d i n Section 3.3.

One further important reason for the choice of the Learning Styles Inventory was that Rank Xerox (UK) already used the LSI to

determine the learning styles of some of their trainees and they were convinced of the test's validity and reliability. Given the researcher's problems of distance and availability, this on-the-spot support was considered an important asset for those participants wishing to have instantaneous feedback on the results of the Inventory.

A list of the actual variables used in the study can be found in figure 7-4 below.

7.1.3. The Fieldwork Design

The fundamental aim in any sales training programme is to improve the performance of the sales force. The success of the course will therefore be judged on this improved performance, and it would seem evident that a research model in sales training should be ultimately based on how performance has been improved as a result of learning outcome.

Nevertheless, it is important to bear in mind that the primary aim of this research is not to determine the success of the courses themselves, but rather to show that the same learning outcome can be achieved with trainees from two different cultural/education backgrounds.

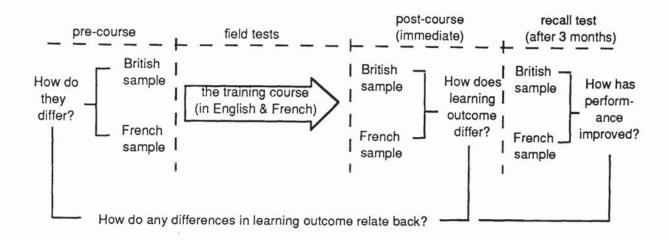


Figure 7-3: The Fieldwork Design

The model chosen for the design of the field-tests follows from the conclusions drawn from the chapter concerning course design (see Section 5.1.). It meant that the study could be broken down into four phases - knowledge level prior to completing the course (phase 1); reinforcement of learning through the self-assessed questions and exercises during the field tests (phase 2); knowledge level upon completion of the course (phase 3); improvement in performance once the knowledge acquired had been applied in the field (phase 4).

By conducting similar tests in the two countries in order to assess learning outcome, it was intended to show:

- how learning outcome resulting from the courses differed between individuals of varying socio-educational and cultural backgrounds and whether learning outcome could be influenced by previous experience of or attitudes towards distance learning.

- how learning outcome resulting from the courses differed between trainees of varying learning styles. This could be accounted for using the Learning Style Inventory.
- to what extent learning outcome improved field performance in the samples used. This later proved impossible for reasons covered in Section 7.2.
- to what extent differences in learning outcome relate back to the cultural differences suggested in the literature review.

7.1.4. Data Collection

Learning outcome was measured using a pre-test/post-test research design (Jaeger, 1990). Data was collected using two questionnaires, one administered immediately before the training course was carried out and the other at the end of a predetermined period (usually of two weeks), which left a sufficient amount of time for the subjects to complete the course. The development of the pre-test and post-test questionnaires will now be covered.

7.1.4.1. Questionnaire Development

Since the same core hypothesis was being tested with both courses, it was important to develop questionnaires with the same structure. As pointed out in the following chapter, learning was to be measured at two main stages in the fieldwork; first at the input stage and then immediately after completing the course.

The literature review indicated that five points at the input stage were defined as capable of having an influence on learning outcome.:

- Learner background, including country of origin, sales experience, educational background and training experience.
- Past experience of distance learning
- Attitude towards distance learning
- Preferred learning style
- Current level of knowledge in the course subject

Each of these points was given one section in the pre-test questionnaire. As far as possible, closed questions were preferred in all sections. In section 1 of the questionnaire, this was relatively easy, since only questions relating to fields of education and training needed to be open. The age of trainees was considered in three groups:

- less than 25 where the proximity of secondary and/or higher education might have some influence on the ability to learn
- 25-35
- over 35 where the gap between secondary and/or higher education might influence learning outcome and where

past experience was most likely to influence knowledge levels.

Section 2 of the questionnaire considered previous experience of distance learning in order to determine those trainees in the sample who might be more at ease with a self-learning package. For those who already had distance-learning experience, it was important to be aware of the type of medium used and whether or not the course(s) had been completed.

The third section of the questionnaire sought to learn of the attitude of the trainee towards distance learning. This could then be compared with the same question in the second questionnaire in order to determine whether and to what degree attitudes had changed through having completed the course. It would also be possible to determine how closely preconceived opinions relating to distance learning correlated with learning performance.

Section 4 was reserved for the Kolb Learning Styles Inventory. The decision to use the LSI is discussed under section 3.3, but the reader is reminded that determining the preferred learning style of each member of the sample was to allow the measurement of differences in learning outcome between learners of the same type.

One of the major problems with the determination of preferred learning styles was to find a French version of the LSI. Confirmation that a French version was not available was obtained through the Catholic University in Leuven, Belgium, where Kolb had worked. However, the seeds of doubt were sown when, several months after

having carried out a translation of the LSI himself for use in this study, the researcher met someone who had claimed to have seen a French version in Canada. Following up on the lead, it was determined that the person in question was talking about a French translation of Kolb, Rubin & McIntyre (1974) which did not contain the LSI itself.

Dr Claude Bourcier of the Rouen Business School, himself a bilingual Canadian and lecturer in Human Resource Development, back-translated the French version of the LSI in order to confirm its validity.

The final section of the pre-course questionnaire related to current knowledge in Investment Decisions and Needs Analysis. In both cases, the relevance of questions and their appropriate answers were confirmed with Rank Xerox in both Rouen and Newport Pagnell. Six of the questions in the final section of the pre-test questionnaire of both courses were designed to test knowledge levels before completion of the course. These questions were repeated in the post-test questionnaire. The remainder of the questions posed in the knowledge acquisition section of the post-test questionnaire were designed to check learning recall. These questions related to examples given in the course. It was decided that learning outcome from the courses should include both the improvement in knowledge due to completion of the course as well as the degree of learning recall. Details of how the questionnaires were scored can be found in Appendix C.

7.1.5. The Implementation

It was originally intended to use a sample from Rank Xerox U.K. and France for testing the courses used in the research but problems of obtaining comparable groups from the same company in the two countries proved a major obstacle (see section 7.3.). In the end, it was necessary to use salespeople from a variety of different companies as well as a small group of students from the business schools of Rouen and Aston. It was, however, possible to use trainees from Digital Equipment Corporation in both countries, although they, too, proved to be available only in very limited numbers.

In the majority of cases in France, the researcher was able to present the aim of the research and the test procedure personally to the participants in the sample. As a general rule, the participating companies arranged a meeting between the researcher and the trainees during which the pre-test questionnaire was completed and the course distributed. Depending on the wishes of the company, a period of two or three weeks was given to each participant for completion of the course. In the tests concerning the Needs Analysis course, it was often necessary to give each subject a copy of the video support on cassette. With the exception of Rank Xerox U.K. and Digital Equipment U.K., the copying of videocassettes was the responsibility of the researcher. Although this task was originally carried out in a professional studio, the cost of such an approach became rapidly prohibitive and the majority of video supports were copied from one videocassette recorder to another. In fact, the end result was of a satisfactory quality and both the participating companies and the researcher felt that any slight loss of picture quality would not interefere with learning outcome.

Digital Equipment U.K. and Rank Xerox U.K. had the facilities to copy videocassettes in their training centres and a copy of the master tape on high-band U-Matic was sent to these companies in order for them to organise their own VHS copies. Testing in Britain proved a problem for the researcher who was naturally less available to attend presentation sessions. A document was established which set out the testing procedure for the person presenting. This document can be found in Appendix E. For most of the tests in France, the researcher was also present at the second session during which feedback was obtained on the course and the post-test questionnaire was completed by each trainee.

Despite the attention given to ensuring that the tests were carried out in a supportive environment, response rates varied considerably between participating companies. It is difficult to determine the precise reasons for such differences but, as a general rule, response rates were considerably higher when the researcher was able to be present at the trainee meetings, both at the pre-test and the post-test stages. Apart from the possibility for trainees to put questions about the research directly to the researcher, it became a rule of the thumb for the researcher to give the results of the Learning Styles Inventory to each respondent during the second session, which possibily encouraged participation.

Learning gain was measured as the difference between the score obtained in the knowledge acquisition section of the pre-test questionnaire and the equivalent score in the post-test questionnaire. This score was then added to the score for learning recall and the result was the total learning outcome. Subjective data was obtained in the first four sections of the pre-test questionnaire. Any changes in a participant's opinion of distance learning before and after completing the training course was measured by comparing the opinion in the pre-test questionnaire with that stated in the post-test questionnaire. Feedback relating to the participant's method and appreciations of working through the training course was the object of two sections in the post-test questionnaire.

It was originally intended to leave the choice of period needed to complete the course to the trainees, but early experience during pilot testing indicated that, under such conditions, the return rate would be low (see problems encountered - Section 7.2.).

7.1.6. Data Analysis

The dependent variable being learning outcome, this was measured through the responses to the sections concerning current knowledge in both the pre- and the post-test questionnaires. Each response was measured on a 100-point scale as described in Appendix C. The score obtained for total learning outcome was then compared with the preferred learning style of the trainee to determine any correlation between learning outcome and learning style which might suggest that the degree of success for this type of learning is dependent upon a specific learning style.

Learning style was measured in two ways. The first was to define the learner type on the two axes proposed in the Learning Style Inventory. The first of these two axes contrasted concrete experience with abstract conceptualisation and the second contrasted active experience with reflective observation. The preferred learning style, together with the learner type, was then correlated with learning outcome in an attempt to determine whether the score obtained in each column corrolated with knowledge acquisition

Having defined the learner either as an experiencer or conceptualiser, an experimenter or a reflector, a second comparison was made between learning outcome and the preferred learning style on the accommodator/assimilator, converger/diverger level. This approach allowed for the integration of a second variable, independent of the socio-educational-cultural background of the learner.

The composition of the two questionnaires used in the research has been covered above. It is now appropriate to talk about the analysis of the variables and the reasons behind the choice of data. The research model favoured hypothesis testing rather than the construction of confidence intervals. As regards learning outcome, the null hypothesis when comparing French and British trainees was that total learning outcome would be the same for the two samples. The research model allowed for learning outcome to be controlled not only by country of origin, but also by other variables which, it was thought, may influence learning outcome.

The following section will describe the size and profile of the British and French samples sought for the testing of these hypotheses.

7.1.7. The Samples

For this comparative study, two samples of similar profile were required, one in France, the other in Britain. Since much of the course development was carried out in close collaboration with Rank Xerox, it was natural to look for samples within the sales force of the company in both countries.

A total sample of 200 was targeted, 100 from each country. Ideally, the samples needed to be as similar as possible. Since the sales force of the company receives regular training in the training centres of Newport Pagnell (now Wokefield Park, near Reading) and Aulnaysous-Bois (in the northern suburbs of Paris), taking individuals at different stages of their career in the company and, consequently, at different levels of sales experience, might have influenced learning outcome from the two courses being field-tested. If similarity between the samples was to be achieved, it was preferable to look towards new sales recruits who had little experience of the company and often little experience of selling. However, the field tests ran into serious problems in France where samples were not readily available. These problems are discussed in section 7.2. below.

Having defined the null hypothesis and with whom it was to be tested, it was necessary to determine the information required from each participant as well as the method of data collection. This is covered in the following section.

7.1.8. Operationalising the Research Model

The data required in order to measure learning outcome and account for any differences between the samples are summarised in figure 7-4:

DATA REQUIRED	METHOD OF DATA COLLECTION
Variables affecting learning outcome	
at the learning input stage:	
age of learner	pre-course questionnaire (sect 1)
previous education - type and level	pre-course questionnaire (sect 1)
learner attitude to distance learning	pre-course questionnaire (sect 3)
preferred learning style	pre-course questionnaire (sect 4)
previous training experience	pre-course questionnaire (sect 1)
previous experience of distance learning	pre-course questionnaire (sect 2)
level of subject knowledge	pre-course questionnaire (sect 5)
at the learning experience stage:	,
the conditions under which the learning was carried out	post-course questionnaire (section 1)
the type of course (quantitative/qualitative)	
feedback on progress	self-assessed questions and exercises
Research findings	6,6101363
at the learning outcome stage:	
degree of knowledge improvement degree of learning recall	post-test questionnaira (sect. 3)
learner reaction to the course	post-test questionnaire (sect. 1)
new attitude towards distance learning	post test questionnaire (sect. 4)

Figure 7-4: List of Variables and Method of Data Collection

Measurement of the effectiveness of the courses was limited to the changes in knowledge level that occurred as a result of the training. This is what Warr, Bird & Rackham describe as outcome evaluation (see section 5.2.). One of the difficulties encountered in conducting the tests at a distance concerned the distinction between knowledge acquired as a direct consequence of the training course and knowledge acquired through another, external factor. It was important to ensure that none of the tests was carried out at a time when participants in the samples were undergoing other training courses which may influence knowledge acquisition. In this way, the validity of the tests was protected.

Given the difficulties of measuring the effects of the training courses on the participants' sales performance, the evaluation model chosen for the tests was intrinsic, differences in knowledge level and attitude being limited to the pre-test and post-test stages.

The problem of measuring training effectiveness in the workplace was a point raised by Rank Xerox UK. Although it is possible to assess learning outcome from a training course immediately after the course, the company will seek to measure the extent to which training influences job performance (see section 5.2.). However, in practice this can present difficulties. In the case of sales training, this seems to be the case for two main reasons.

First, the distinction between changes in performance stemming from the training course itself and those coming from an external source, for example changes in the salesperson's customer or product base. The longer the period between completion of the training course and the time of performance evaluation, the more difficult it will be to attribute improved performance directly to the course.

The second problem concerns staff turnover rates. In the sales function, the rate can be relatively high. For example, in a company like Rank Xerox, salespeople will be expected to remain in their post for an average period of 2 to 3 years. This therefore reduces the database available for performance evaluation as time goes by.

In the case of the current research, two other problems intervened to make the measurement of the impact of the training course on performance impossible. One problem related to the availability of sales figures for individual performance. Such figures would normally remain within the company and would be difficult to obtain for external purposes.

The final problem was one of deadlines. Given the difficulties encountered in carrying out the field tests, the data for analysis were only available in summer 1992 (see section 7.3.), thus making it impossible to measure performance improvement after a reasonable period.

Added to these difficulties, and apart from during the pilot tests for both courses, it was impossible to obtain accurate feedback on learner reaction to the courses outside the information obtained through the post-test questionnaire. In an ideal situation, each participant would have participated in a face-to-face evaluation session, but to attempt to do so for tests involving participants in two countries would have been unrealistic.

However, it was hoped that the evaluation model chosen would allow the researcher to ascertain the efficiency and effectiveness of the two training courses and to determine their effectiveness in comparing differences in learning outcome from the two countries.

7.1.9. Summary

To summarise, the research sets out to compare learning outcome from sales training using the distance learning mode between trainees from Britain and France. It attempts to compare participants according to their socio-educational-cultural background as well as their learning styles. It takes into account attitudes towards distance learning as well as the learning context. Learning outcome is defined as the degree of knowledge improvement as well as the capacity to recall specific knowledge contained in the courses.. Knowledge improvement is measured as the difference between participant's knowledge level before completing the course and the knowledge level after the course. Learning recall is measured by way of questions relating to specific information contained in the course. Data were collected through questionnaires which participants were asked to complete immediately before and after completing the course. Learner types and preferred learning styles were determined using the Learning Styles Inventory (Kolb, 1976) in the pre-test questionnaire. Learner type was defined on the Experiential Learning Cycle as being either experiencer, reflector, conceptualiser or experimenter. The preferred learning style of participants defined them as either accommodators, assimilators, divergers or convergers.

The following section describes the problems encountered by the researcher in setting up the fieldtests. They were many and they influenced the type and the balance of the samples but, at the same time, they taught the researcher a certain number of lessons which may be of help to those carrying out similar cross-cultural learning studies.

7.2. The Problems Encountered in Field Testing

The aim of this section is to present the key problems encountered in operationalising the current research and to summarise the companies approached for participation in the empirical study.

The original research design was built around the assumption that one sole company would be providing the sample for field testing in both countries. Furthermore, a proposal made to obtain funding for the study under Strand D of the European Commission's COMETT programme at the end of 1987 meant that, if successful, funding would be available for the development of training courses and the operationalising of the research.

Moreover, a link between Aston University and Rank Xerox UK provided the prospect of being able to develop courses and to conduct tests with a company renowned for its in-house training and present in both Britain and France. A meeting in early 1988 at the training centre of the company confirmed the appropriateness of working with a company which had the added attraction of having an embedded interest in distance learning. Rank Xerox were

favourable to the idea of participating in a study for the development of cross-European training initiatives, although they had not at that time considered the role of cross-cultural course design within their training strategy.

Early discussions with the training centre of Rank Xerox UK led to the identification of a training need in the area of Applied Finance for salespeople, and it was agreed that this could be satisfied by a distance-learning course. In 1989, the first course, called "Investment Decisions", was completed and it received the go-ahead from the company. Contact was established with the training centre of Rank Xerox France, in Paris, and the transfer of the course into French was undertaken. The Business School in Rouen was also showing support for the study and everything pointed towards a successful study being carried out.

However, for a variety of reasons, the tide of good fortune began to turn shortly after the completion of Investment Decisions in both languages. First, the COMETT proposal was turned down by Brussels due to a heavy over-subscription of projects from France and a preference for supporting the country's universities and engineering schools. Secondly, there was a rapid turnover of staff in the French training centre of Rank Xerox and this left the researcher facing a new team of training managers with a new set of priorities within the company. Thirdly, changes at the Rouen Business School meant that less financial support was available to cover the frequent trips required across the English Channel. This meant that operationalising the British side of the study was to become much more difficult.

In order to compensate during this difficult period, contact was established with the local office of Rank Xerox in Rouen, with two objectives in mind. The first was to establish a base for the pilottesting of the Investment Decisions course, now that contact with the Paris training centre was more distant. The second objective was to identify another training need in the company in order to develop a behavioural training course from France, thus respecting the cultural harmony sought after in the original research design. Both of these objectives were fulfilled, thanks to the help of the Personnel Manager of Rank Xerox in Rouen, and the researcher was able to develop the Needs Analysis course as well as to conduct pilot tests on Investment Decisons in France. The contact with Rank Xerox in Rouen allowed a second approach to be made to the company's training centre in Paris as well as making the researcher more aware of the internal struggle that was taking place there. Despite several assurances to the contrary, a French sample for the testing of the Needs Analysis course using trainess from the Paris centre never materialised.

It was around this time that Rank Xerox accentuated its stop-go policy of recruitment and the successful completion of the empirical study was called into question. It was therefore necessary to begin looking elsewhere for suitable trainees, although it proved impossible to obtain a sample in both countries from one sole company. The prospect of dealing with several companies meant that the sample size in each would be smaller, although the need to organise and administer the tests would be multiplied. Promising but unsuccessful contacts were made at this time with Unisys and JCB in Britain and Magdebourg Insurance Company and Général Ultrafrais

in France. Other companies were contacted, particularly in France where visits could be arranged with relative ease. Virtually everywhere, both the project and the courses were well received but, inevitably, there was a good excuse for the companies not being able to take part in testing.

However, one useful contact was established with Learning International, a Paris-based company of sales-training consultants. Ironically, this company had sprung from the training arm of Rank Xerox during the 1970s and, until 1976, had traded under the name of "Xerox Formation" in France. Although the company used a salestraining programme developed by themselves in the United States and known as "Professional Selling Skills", they felt that the cross-cultural dimension of the current research was interesting and that the technique used in the Needs Analysis course for analysing customer needs was not incompatible with their training programme. Although contact with Learning International in London was not so fruitful, the French division of the company provided the cover for contacting the small and medium-sized companies which finally made up much of the French sample in the field tests of Needs Analysis.

In the meantime, Rank Xerox UK was able to provide occasional support from their sales trainees and eleventh-hour contact with Digital Equipment Corporation in both countries led to the final completing of the composition of the corporate sample of the study. A full list of the companies which participated in the empirical study can be found in Appendix F of this thesis. The remainder of the sample was made up of business students from Aston University's

International Business and Modern Languages programme and from the Rouen Business School.

It was thus a long and arduous road which led to the completion of the empirical study, the results of which are given in the following chapter. The aim of this section has been to describe the problems which may face those conducting quasi-experimental research in a similar environment. It completes the description of how the research was operationalised and paves the way for a discussion of the results of the field tests, beginning with details of the participants according to the responses obtained from the pre-test questionnaires.

PART 3

LEARNING OUTCOME

Part 1 of this thesis considered variables relating to what is brought to the learning situation. These were labelled as input and concerned the learning context as well as the elements that the learner brings to the experience.

The second part concentrated on the design, evaluation and implementation of the courses developed for the research. It concluded with a factual account of the problems encountered by the researcher to operationalise the field study.

Part 3 deals first with the analysis of the results of the field tests and their relevance to the area of cross-cultural in-house training.

The thesis then concludes with a series of guidelines for future research and development in the field of cross-cultural training.

Chapter 8 The Results of Field-testing the Courses

Having presented the methodology used in this study of cross-cultural learning for in-house sales training, the following pages will present the results of the empirical investigation carried out in Britain and France. It begins with a general description of the British and French samples from the point of view of their socio-educational background, as well as their preferred learning style according to the results of the Learning Styles Inventory presented in Section 3.3. The second section of the chapter discusses the way in which the participants carried out the courses and includes their criticisms of both form and content. The chapter continues with an analysis of learning gain and learning retention. The final section discusses the conclusions of the findings given in the other sections. In order to facilitate the reader's task, a summary of the findings presented is given at the end of each section.

The aim of the analysis is to provide a framework for a series of guidelines for the design and implementation of cross-cultural training. These guidelines will be the focus of Chapter 9 of this thesis.

8.1. A General Profile of the Participants

The information obtained concerning the general profile of the participants was gained from the responses to sections A to D of the pre-test questionnaire, the structure of which has been described in Section 7.1. The first point considered will be the composition of the

French and British samples and the institutions from which they were drawn. The profile will continue with a description of the participants' socio-educational and experiential background according to the responses given in Section A of the pre-test questionnaire (which can be found in Appendix C). There will then follow a discussion of the participants' past experience of distance learning and their overall opinion of this learning support prior to carrying out the courses developed for the study. Finally, the learning style profile of the participants will be considered.

The section which follows will describe the participants who began the test. The second section will look at the profile of the participants who completed the test. An attempt will be made to identify a pattern in those who completed the test and the conclusions will serve as a further basis for guidelines in cross-cultural course design using distance learning.

8.1.1. The Participants at the Pre-Test Stage

The aim of this section is to describe the 174 participants who began the test. This will be the basis for a subsequent search for any patterns amongst those who completed the test and those who abandoned before completing.

The difficulties experienced in obtaining the samples have been described in Section 7.2. The participants who completed the pre-test questionnaire were drawn from eight corporate environments and from three business schools. They can be divided into three categories: multinationals, such as Rank Xerox, Digital Equipment and

Esselte Meto; small and medium-sized companies such as EMS Chronopost, Datapage and Urgo; and finally educational establishments such as Aston Business School, the Rouen Business School and the *Institut Supérieur de Préparation Professionnelle* in Rouen. There was also one independent participant who carried out one of the two courses in the study.

Table 8-1 gives a summary of the institutional origins of the participants as well as the training course they carried out.

Origin of	Participants	Training	Training Course				
Company	Country	Needs Analysis	Invest.Decision	Totals			
Rank Xerox*	Britain	. 8	1 1	19			
Digital Equip.	France	5 4		54			
Digital Equip.	Britain	9		9			
Esselte Meto*	France	7		7			
Datapost*	France	4		4			
Chronopost*	France	10		10			
Urgo*	France	9		9			
Magdebourg*	France	11		11			
Aston B.S.	Britain	13	7	20			
Rouen B.S.	France	3 2		3 2			
I.S.P.P*.	France		8	8			
Independent	France	1		1			
Totals		148	26	174			

^{(* =} protocol institutions - see following paragraph)

Table 8-1: Institutional Origins of Participants

Of the total number of 174 participants, 126 were from France (72.4%) and 48 from Britain (27.6%). The main reason for this discrepancy has already been mentioned in Section 7.2. Since it was suspected that strict adherence to the testing procedure had an influence on the rate of completion, the institutional origin of participants was controlled for when comparing those who completed with those who abandoned. For this purpose, a distinction was made between "protocol institutions", i.e. the institutions which followed the guidelines given for testing (Appendix E), and "non-protocol institutions", i.e. the institutions where the testing was known to have been only loosely controlled. Most of the protocol institutions were those where the researcher was able to oversee the testing procedure personally. The one case where testing was correctly carried out without the researcher's presence was in Rank Xerox U.K. where the Sales Training Manager kept in close contact throughout the period of testing.

In the case of the tests conducted at the Rouen Business School, the participation of the students remained optional, since the tests were part of a course in Sales Negotiation under the supervision of the School's Marketing Department. In the case of the Aston students, the choice of doing the test also remained optional and, although the researcher was able to begin the testing procedure, he was unable to follow it through to its conclusion. Thus, in both instances, the tests were considered as non-protocol. Both Rank Xerox and Digital Equipment (in both countries) integrated the tests, to a varying extent, into their in-house training sessions. In the case of Rank Xerox U.K., the researcher was able to begin one sequence of testing early on but the remainder were administered by the company's

Sales Training Division. In Digital Equipment, the researcher was not able to oversee any of the tests which remained the responsibility of the various trainers in the French and British Sales Training Divisions. The degree of direct control over testing and its implications on test completion is further discussed in Section 8.1.2. below.

51% of the entire population came from large multinational companies, 14% came from small and medium-sized companies and 35% came from business schools in the two countries.

Before considering the socio-professional background of the two samples, the reader is reminded that the researcher was not able to select the participants and was therefore unable to ensure matched groups.

8.1.1.1. Gender, Age and Years of Selling Experience

The majority of the particiants were male (69%), reflecting the general profile of the salespeople in the participating companies. Participants were classified in three age groups; those with recent educational experience (including the part of the sample taken from business schools in both countries), those in the 25 to 35 year-old age group, who would have been educated during the 1970s and 1980s when many of the reforms in continuing education were taking place in both countries (see Chapter 2), and those in the over 35 year-old age bracket, who may perhaps have had less experience as adult learners. The spread across the three age groups was fairly

evenly distributed, with 36.8% in the under 25s, 27% in the 25-to 35 year-old group and 36.2% in the over 35s.

Generally speaking, there were more experienced salespeople among the French sample than among the British. The mean value for the number of years of selling experience for the whole population was 3.9, although this varied considerably between the French, with a mean of 4.9 years, and the British, with a mean of 1.03. This was a clear reflection of the fact that, as indicated in Table 8-2, the French participants were generally older than their British counterparts. Nearly half of the participants (44.2%) had had no previous selling experience, although a certain number of the experienced sellers had been selling for in excess of 20 years. Added to this, a number of the business school students had carried out traineeships in sales over periods of less than one year. Of those coming from the corporate environment, previous selling experience depended, to a certain extent, on the participating company's choice of test group. Both Rank Xerox in Britain and Digital in both countries gave priority to testing with new recruits, many of whom had either come straight from formal education or from other occupations. In both cases, previous experience in sales was either minimal or non-existant. Table 8-2 summarises the gender, age and past selling experience of the participants.

	Ge	nder		Age		Selling Experienc	Experience	
Country of origin	Male	Male Female under		25-35	over 35	under 1 year	1 year or more	
France	92	3 4	3 6	36	54	68	58	
Britain	28	20	28	11	9	3 3	1.5	
Totals	120	54	64	47	63	101	73	

Table 8-2: Gender, Age and Selling Experience of the French and
British Participants

One year was set as the critical point separating the inexerienced from the experienced salesperson. There were two reasons for this choice. The first was the desire to include, in the inexperienced category, the participants who had had no experience in selling as well as those who had carried out the type of traineeship in selling required by some of the participating business schools. It was felt that such traineeships aimed at giving sales awareness more than selling experience and the time spent doing them could not be justified as experience. The second reason concerned numbers. For those participants with one year or more of selling experience, given their distribution, it was not possible to subdivide them into several groups. A frequency table and histogram giving sales experience in years can be found in Appendix G.

The female participants had considerably less selling experience than the males. The mean for past selling experience for the male participants was 5.2 years and only 1.02 years for the female participants. The split between experienced and inexperienced sellers was relatively evenly balanced in the French sample (at 54%)

and 46% respectively), whereas there were more than twice as many inexperienced compared to experienced salespeople in the British sample (68.8% and 31.2% respectively).

We will now consider the past education and training experience of those who started the tests.

8.1.1.2. Participants' Education and Training Background

Participants were asked to give details of their higher-educational background, if any, by stating the type of degree course followed. Nine areas of study were identified (Appendix C). Participants from business schools (i.e. in the process of higher education) were classified separately. A similar approach was used to determine those participants who had professional qualifications and a third question identified the past in-house training experience of participants. A summary of the educational and training background of the 114 adult participants is given in Table 8-3 below.

Country of origin	Higher Education	No Higher Education	Professional Diploma	No Prof. Diploma
France (n=86)	59	27	3 2	49
Britain (n=28)	1_4	13	9	18
Totals	73	40	41	67

(1 non reply)

(6 non replies)

Table 8-3: Educational Background of French and British Adult
Participants

A total of 68.6% of the French adult participants had obtained a degree in higher education compared to 51.9% of the British. Added to this, 60 student participants were in the process of completing a degree course at the time of the tests, 40 of them French and 20 British. A quarter of all participants already held a professional diploma of some sort. 78% of these were French and 22% British. Consequently, in the area of recognised degrees and diplomas, the French appeared to be considerably more qualified than their British counterparts, with 44.6% having their degrees and/or professional diplomas in the field of business studies.

Given the legal nature of in-house training in France, it had been anticipated that the French participants were likely to have had more training experience than the British. However, a profile analysis of past training experience highlighted the fact that almost twice as many British participants had had in-house training experience when compared to their French counterparts (59.6% compared to 32.7% for the French). Furthermore, as is shown in Table 8-2 above, the French sample was much older than the British sample and, therefore, even more likely to have had experience of in-house training. Thus, the findings relating to past training experience, which are summarised in Table 8-4, were not expected. However, it must be remembered that participants came from a variety of occupational backgrounds and may not all have had the possibility of training in-house.

Country of origin	n° with training	n° with no training	Totals	
France	39	80	119 47 166	
Britain	Britain 28		47	
Totals 67		99	166	

 $X^2 = 8.97$; df = 1; p < .01

(8 non replies)

Table 8-4: A Summary of Past Training Experience (according to country of origin)

Allowing for the size of the sample, and taking account of the student population contained therein, this profile suggests that the training effort in France may not be directed in the same proportions towards sales training. It could be suggested that, as the French tended to have a higher level of education, and in particular in business studies, they were considered to be less in need of in-house training, although past training experience was split more or less equally between those with higher educational qualifications and those without. Thus, if the suggestion had been true, the lower qualified in the French sample would have had more in-house training experience. Such was not the case.

As far as the domains of past education and training were concerned, participants came from a wide range of backgrounds including Aeronautics and the Liberal Arts.

The analysis will continue with a look at how familiar the participants were with distance learning before beginning the test.

8.1.1.3. Previous Experience of Distance Learning

Of the 174 in the total sample, only 26 had had experience of distance learning before carrying out the test (14.9%). Of these, 15 were French (57.7%) and 11 were British (42.3%). 13 of the 26 had had one sole experience and four participants claimed to have had 5 or more. In 50% of these cases, the main medium used for learning was print-based and in 19 cases (73.1%) the course had been successfully completed. Of the 7 respondents who had reported having abandoned the distance-learning course before its successful completion (5 French and 2 British), 4 reported that the reason for this was loss of interest (all of them French). Of the 26 with distance-learning experience, 20 (76.9%) claimed they had found the courses previously encountered average to reasonably interesting (3/4 on a 5-point scale). The mean scores for participants' appreciation of the distance-learning courses, according to how interesting, easy and job relevant they found them, were as follows:

French (n=13)		British (n=11)
interest	mean score = 3.5 (s.d. = 1.2)	mean score = 2.9 (s.d. = 0.8)
ease	mean score = 3.1 (s.d. = 1.3)	mean score = 3.5 (s.d. = 1.1)
relevance	mean score = 3.8 (s.d. = 0.9)	mean score = 4.1 (s.d. = 0.8)

These figures suggest that the British distance learners were more critical than the French of the interest of the course(s) they had carried out, although they had generally found them more relevant to their professional context than the French had. A Mann-Whitney U test indicated that there was a significant difference between the way the French and British perceived the interest of the course(s)

carried out (U = 35.5, p<.05), although differences were not significant in the perception of the ease and relevance of the course(s)

One of the questions in this section of the pre-test asked participants with distance-learning experience where they had carried out the course(s). In 14 of the 26 cases, the course(s) had been carried out mainly at home, 4 in the learner's working environment and 8 elsewhere (principally on the train, according to the responses). There was no significant difference in the place of study according to country of origin.

Whether or not they had had distance-learning experience before carrying out the test, all participants were asked to give a personal opinion on the usefulness of distance learning in training. The results of this question will now be considered.

8.1.1.4. Participants' Opinion of Distance Learning (prior to the test course)

Participants were asked to give their opinion of distance learning as a training support in the pre-test questionnaire. This question was repeated in the post-test questionnaire to determine whether any change in opinion had taken place due to the test. The responses were given on a five-point scale.

Table 8-5 below summarises the findings obtained from the pre-test questionnaire. They have been classified according to the participant's country of origin.

Country				opinior	of dist	tance lea	ming			++	
of Origin		1	2 3					4		5	
France	18	100%	6	60%	11	65%	75	73%	10	62%	
Britain	-	0%	4	40%	6	35%	28	27%	6	38%	
Totals	18		10		17		103		16		

 $x^2=5.7$; df=3; p>.05

Table 8-5: Participants' Opinion of Distance Learning (pre-test)

As can be seen from the table, the majority of the participants (62.8%) considered distance learning as a useful alternative to conventional learning and this proportion was virtually identical between the British and the French. However, whereas no British participant considered that distance learning would never replace conventional learning, the French view in 15% of the cases was the opposite, indicating perhaps that the French were, to a certain extent, less ready to accept distance learning as a training alternative.

Apart from the cross-cultural dimension of the study, it had been considered important to take account of the preferred learning style of the participants. This will now be discussed.

8.1.1.5. The Preferred Learning Styles of Participants

Section 3.3. of this thesis explained the researcher's choice of test for determining the preferred learning style of each participant. The test used in the study was the Learning Styles Inventory of D.A.Kolb (1976). The responses coming from this part of the pre-test

^{5 -} it's a good way to learn - 4 - it's a useful alternative to conventional learning - 3 - it's fine but it doesn't really suit my style of learning - 2 - it's a poor second-best to conventional learning - 1 - it will never replace conventional learning

questionnaire were analysed on two levels. The primary level of analysis was according to the participant's preferred learning style on the accommodator/assimilator/diverger/converger scale described in Section 3.3. of this thesis. A secondary level of analysis was according to the participant's relative emphasis on the four learning abilities described in the Experiential Learning Cycle (Kolb, 1976) which, for the sake of this analysis, will be referred to as "learner type".

The manner of coding these two variables is given in the relevant section of the questionnaire in Appendix C. Where no one learning ability or preferred style was apparent, a value of 0 was recorded. Table 8-6 sets out the frequency of preferred learning styles among all the participants according to their country of origin.

Country	ntry Preferred Learning Style					
of Origin	Accommodator	Assimilator	Diverger	Converger		
France	15	30	1 3	3 2	90	
Britain	n 5 3 11	11	20	39		
Totals	20	33	24	52	129	

 $X^2=14.09$; df=4; p<.01

(the preferred learning style for 36 French participants and for 9 British participants was unidentified)

Table 8-6: Preferred Learning Styles of Participants (according to their country of origin)

Thus, at the pre-test stage, there was a significant difference between learning styles which suggested that the groups were not matched in this respect. The majority of participants (29.9%) were identified as convergers. The second group was composed of assimilators (19%), the third of divergers (13.8%) and the smallest was composed of accommodators(11.5%).

8.1.1.6, Summary of the General Profile of the Sample

A total of 174 participants completed the pre-test questionnaire. The overall population was composed mainly of participants from France, with just over a quarter coming from Britain. Participants came from three principal sources:

- large multinational companies
- small/medium-sized companies
- business schools

There was one independent participant who, at the time of the test, was between jobs.

The majority of the participants were male, reflecting the profile of the salespeople employed in the participating companies. Over 40% of the participants were new to selling and a further 13% had only very limited experience in the field. There was a fairly equal division between age groups, the smallest proportion being between 25 and 35 years old. A large number had first degrees and/or professional qualifications. Whereas the sample from France seemed to be more qualified in this sense, responses showed that far fewer of them had had experience of in-house training. Proportionately speaking, nearly twice as many British participants had had past training experience. About the same proportions were apparent when it came to analysing those who had already carried out a distance-learning course. Of those who had had some experience of distance learning,

half had carried out a print-based course. Nearly three-quarters of those who had carried out a distance-learning course had completed it. There was a relatively high proportion of French participants who were of the opinion that distance learning would never replace conventional learning (15%) whereas none of the British participants supported this opinion. Almost two-thirds of the sample felt that distance learning was a useful alternative to conventional learning.

The total sample included a majority of convergers, although in one quarter of the cases it was not possible to identify one particular preferred learning style.

The second part of this profile analysis concerns those who completed the test

8.1.2. A Profile of the Participants Who Completed the Test

The aim of this part of the analysis is to attempt to define, from the experience of conducting the tests used in this study, a profile of those participants who are more likely to complete a distance-learning training course of the type used in this study.

The overall completion rate for the tests, based on the number of participants who returned the post-test questionnaire, was 37.9%. The rate will be considered according to a series of variables including country of origin, company of origin, the course carried out, gender, age, educational and training background, selling experience, familiarity with and opinion of distance learning and, finally, preferred learning style. The analysis of completion will begin with a closer look at the cultural and institutional origins of those who completed.

8.1.2.1. Overall Completion Rate according to the Participants' Country of Origin

Of the 126 French participants at the start of the tests, only 43 actually finished. This represents 34.1% of the total French sample and compares unfavourably with the British sample, in which 23 of the original 48 participants completed (47.9%). The main reason for this difference can be put down to the testing procedure adopted and, in particular, in one company where the rate of completion was only 5.5%. Significantly, this was the one company in France which had insisted on conducting the tests itself and, consequently, the researcher had no control over test administration. After the testing

period, the researcher learned that the trainees in this company had been given "the time they required" to complete the test, rather than the two to three weeks recommended in the testing procedure (Appendix E). This meant that the learner appeared to be left to his/her own devices, which undoubtedly did little to increase the motivation to complete.

The institutional context in which the courses took place thus appears to have had a major influence on completion. In order to test this hypothesis, the participating institutions were divided between those which closely followed the testing procedure and those which did not.

8.1.2.2. Completion according to the Participant's Institution of Origin

Distinguishing between participants from protocol and non-protocol companies, Table 8-7 presents the number of completers according to the type of institution they came from.

	Non-protocol	Protocol	Totals
not completed	95	13	108
completed	21	4.5	66
Totals	116	58	174

 $X^2 = 55.6$; df=1; p<.001

Table 8-7: Numbers Completing (according to institution types)

The table indicates that strict adhesion to the testing procedures did have a significant influence on the rate of completion of the two courses. In order to confirm that there were no other significant factors influencing the distinction between protocol and non-protocol companies, Chi-square tests were carried out using the other socio-educational variables with the following results:

	Non-protocol	Protocol	Totals
Male	79	4 1	120
Female	37	17	54
Totals	116	58	174
French	87	39	126
British	29	19	48
Totals	116	5 8	174
Under 25 **	49	15	64
25 to 35 **	19	28	47
Over 35 **	48	15	63
Totals	116	5 8	174
No higher ed. dip **	11	29	40
Higher education dip**	53	20	73
In higher education**	52	8	60
Totals	116	57§	173
No experience in DL	99	49	148
Experience in DL	17	9	26
Totals	116	5 8	174

^{** =} p<.001

Figure 8-8: The Background of Participants (according to institution type)

^{§:1} non reply

There thus appeared to be significant differences in institution type according to the age and past educational background of members. As far as higher education was concerned, the number of students in non-protocol institutions had a strong influence on the results. There was also a significantly high proportion of participants in the 25 to 35 age bracket in protocol institutions. Both age and past educational background were crosstabulated with completion, controlling for protocol/non-protocol institutions. With significance levels at more than .05 for protocol companies in both cases, it was concluded that the type of institution was the best predictor of completion.

Table 8-9 gives more detail concerning completion rates company by company.

Origin of Pa	rticipants	Needs	Analysis	Investment	Decisions	Total
Company	Country	pre-	post-	pre-	post-	completed
Rank Xerox*	Britain	8	_ 3	11	11	14
Digital Equip.	France	54	3			3
Digital Equip.	Britain	9	2			2
Esselte Meto*	France	7	6			6
Datapost*	France	4	4			4
Chronopost*	France	10	5			5
Urgo*	France	9	7			7
Magdebourg*	France	1	1			1
Aston B.S.	Britain	13	7	7		7
Rouen B.S.	France	32	9			9
I.S.P.P.*	France			8	8	8
Independent	France	11				
Totals		148	47	26	19	66

^{*} protocol institutions

Table 8-9: Completion Rates (according to company and country of origin and test course)

The problems encountered when the tests were not closely monitored and deadlines set have already been described. It would appear that the relatively high completion rate in Rank Xerox UK, despite the researcher not being on hand, was thanks to strict adherence to the testing procedure by the Sales Training Manager as well as the fact that the first tests were launched by the researcher in the company's training centre. Rank Xerox UK ran the tests as an integrated exercise in their sales training programme and therefore the trainee had the impression of a certain coherence in what he/she was being asked to do. On the other hand, Digital Equipment France requested that the tests be entirely run as a Digital test and not integrated into the sales training programme. As such, the researcher was unable to participate in any way in the tests. The consequences of this were seen in the loose testing procedure and the low completion rate (see Section 8.1.2.1. above).

The group of tests that were carried out under the direct control of the researcher had by far the highest rates of completion. Esselte Meto, Datapost, EMS Chronopost and Urgo were all Paris-based companies and the pre-test and post-test meetings were conducted by the researcher with the full co-operation of the companies. It was particularly interesting to note the trainees' attitude to the tests. In the smaller companies, there was a general feeling of willingness on the companies' part to be able to give their sales forces free training and, from the trainee's point of view, a certain satisfaction to take part in a piece of research directly related to their field of activity.

With the student population, there was a relatively low completion rate and it appears that the non-compulsory, non-assessed nature of the tests played a role in this. Nevertheless, this seemed to be contradicted by the high completion rate of Investment Decisions tests with the I.S.P.P. in Rouen. Whether this was due to the short deadlines set for the test (5 days between the pre- and post-test stages) or the ease with which a group of qualifying accountants carried out the course is unclear.

There was a much higher rate of completion for the Investment Decisions course than for Needs Analysis. This, however, should be seen in the light of the small sample used for Investment Decisions and the fact that both Rank Xerox and the ISPP, the two suppliers of participants for the tests, kept close to the recommended testing procedure. It thus seems difficult to make any significant comparisons about probable completion rates between quantitative and behavioural training courses.

Above all else, the lessons learnt through testing in the various companies and schools used in the study indicated that tight control and rapidity are a key elements in successful testing of this type as well as clear presentation of the objectives of the tests (preferably direct from the researcher).

Bearing this in mind, we shall now look for other factors influencing the completion rate for the courses used in the study, beginning with the sex and age of the participants who completed the tests.

8.1.2.3. Overall Completion Rate According to the Gender and Age of the Participants

There was no apparent relationship between the sex of the participant and the rate of completion. 37.5% of the total of male participants completed the tests compared to 38.9% of the female participants. However, if completion rates were not dependent on the gender of the participant, they did appear to be closely linked to age. Table 8-10 represents the three age categories used in the analysis according to the numbers who completed the tests.

Completed	under 25	25 to 35	over 35	Totals
n o	3 3	28	47	108
yes	31	19	16	66
Totals	64	47	63	174

 $X^2=7.33$; df=2; p<.05

Table 8-10: Test Completion Rate for Both Courses (according to age of participants)

The results suggest that completion was dependent upon age; the older the participant, the less likely he/she was to complete the test. This was particularly true in the over 35 category where 74.6% of the original participants failed to complete. There may be some explanation for this in the fact that the younger the trainees, the more willing they are to learn, but given the choice of using age categories rather than absolute values, the last hypothesis cannot be confirmed and this, in itself, shows up a weakness in the questionnaire design.

The influence of the participants' level of education and past training experience on the rate of completion of the type of course used in the study will now be considered.

8.1.2.4. Overall Completion Rate According to the Participants' Level of Education

Table 8-3 put the original participants into three categories of level of education; those with a higher educational degree, those without one and those in the process of higher education. The analysis gave a significance level of less than .01 ($X^2=12.1$; df=2). Of the 40 participants with no higher education degree, 57.5% completed the test. Of the 73 with a degree, only 24.7% completed. Discounting the student population which made up the third category of level of education (of whom 40% completed), the analysis suggested that participants with a lower level of education were more than twice as likely to finish a course of the type used in the study. This appeared to be particularly true of the British sample of whom 69.2% of those with no degree completed, compared to 51.9% of their French counterparts. The fact that the student completion rate fell exactly halfway between the two other rates is perhaps an indication of an evolution in attitudes which suggests that those who have had less access to education are more willing to benefit from this type of training. This indication seems to confirm the higher completion rates of participants coming from smaller companies where training is often less available (see Section 8.1.2.3. above). It also lends support to the need for a more intrinsic learner motivation in the case of distance learning (see Chapter 3).

However, these findings were not supported by the influence of past training experience on course completion, since 41.8% of those who had had experience in in-house training completed compared to 34.8% who had had no past training experience (X²=.66; df=1; p>.05). Could this point to a sort of complacency on the part of the higher educated when taking part in this type of test?

8.1.2.5. The Influence of Past Selling Experience on the Overall Rate of Completion.

Table 8-11 compares the number of completed tests coming from those experienced in selling to those with little or no experience. As in Table 8-2 above, the point when the inexperienced become experienced has been taken as one year.

Completed	Selling	Totals	
	under 1 year	1 year and above	
n o	66	42	108
yes	3 5	31	66
Totals	101	73	174

 $x^2 = .79$; df=1; p>.05

Table 8-11: Completion Rate (according to past selling experience)

Of those with less than one year's selling experience, 34.7% completed the tests, compared to 42.5% of those with over one year's selling experience. Although the results were not significant, they

suggest that there is a stronger chance of obtaining results from this type of test with a sample of more experienced salespeople. A closer look at the influence of selling experience on completion indicated that the highest rate came from those with between 1 and 5 years of past selling experience (52.9%). Further analysis identified the highest completion rate from participants having between 2 and 3 years of selling experience (64.7%). One would, in fact, expect the highest learning motivation to come from the more professionally ambitious and the 2 to 3 year phase may well include the more motivated learners for this reason.

We will now consider the influence of both past experience and present opinion of distance learning on completion.

8.1.2.6. Completion Rate According to the Participants' Experience and Opinion of Distance Learning.

Only 26 participants had had experience of distance learning before beginning the tests and, of these, only 30.8% completed the tests (compared to an overall completion rate of 39.7%). Thus, the findings suggest that prior experience of distance learning does not provide added motivation to complete.

Table 8:12 below sets out the completion rates according to the participants' opinion of distance learning as given in the pre-test questionnaire.

Completed		-		opinion	of dist	ance lea	ming		++	
		1	2	2		3	4	1		5
n o	13	72%	7	70%	6	35%	64	62%	10	62%
yes	5	28%	3	30%	11	65%	39	38%	6	38%
Totals	18		10		17		103		16	

 $X^2=7.61$; df=5; p>.05

Table 8-12: The Influence of Participants' Opinion of Distance

Learning on Completion

Except in one opinion category, the figures suggest that there was no clear indication of a difference between attitude towards distance learning at the pre-test stage and completion rate. It was, however, interesting to note that the small differences that were apparent between the lower opinions and the higher opinions tended to suggest that the chances of successful completion were slightly higher among those who had a low opinion of distance learning, whereas one would have expected the opposite to be true.

It was among the participants who felt that distance learning was fine, but not suited to their own particular style of learning that a much higher rate of completion was noted, suggesting that a favourable or unfavourable opinion of distance learning does not have an influence on completion.

The final analysis in this section devoted to the profile of those who completed the field tests will consider the preferred learning styles of the respondents to the post-test questionnaire.

^{5 -} it's a good way to learn - 4 - it's a useful alternative to conventional learning - 3 - it's fine but it doesn't really suit my style of learning - 2 - it's a poor second-best to conventional learning - 1 - it will never replace conventional learning

8.1.2.7. Completion Rate According to Learning Style

The highest rate of completion of the tests came from the assimilators who were the only group in which over half of the original participants actually finished. Table 8-13 below sets out the completion numbers and rates for the four preferred learning styles (described in Kolb,1976).

Completed			preferred learning style				Totals			
acc	accom	modator	assim	ilator	dive	rger	conv	erger		
n o	13	65%	16	48%	17	71%	3 1	60%	77	60%
yes	7	35%	17	52%	7	29%	21	40%	52	40%
Totals	20		33		24		52		129	

 $X^2=4.46$; df=4; p>.05

(the preferred learning styles of 45 participants remained unidentifiable; 16 of these completed and 29 did not)

Table 8-13: Completion Rates
(according to preferred learning styles)

The assimilators appeared to achieve the highest completion rate, followed by the convergers. It is interesting to note that these two groups fall in the lower half of the Experiential Learning Cycle (see figures 3-8 & 3-9) between reflective observation and active experimentation. This places them at the farthest point from concrete experience which, when considering the characteristics of learning at a distance, is perhaps not surprising. It is, however, interesting to note that, in another study of completion rates among distance learners, the order of completion rates according to learning styles was virtually the opposite (see Gilroy, 1989:183).

Since, in the current study, participants had also been identified by learner type according to the Experiential Learning Cycle, it was possible to confirm these findings. In fact, experiencers (those with a tendency to look for concrete experience in learning) had a low completion rate of 28.6%, but so to did conceptualisers (26.2%). This suggests an oval-shaped profile of the participants most likely to complete a test of this type, flattened on the concrete/abstract axis and drawn out on the active/reflective axis, with the highest potential for completion coming from assimilators having more the characteristics of reflectors than of conceptualisers.

8.1.2.8. Summary of the Profile of Participants in the Tests

The findings coming from the study indicated that it was essential to establish a strict testing procedure in this type of research with a short time span of no longer than 2 weeks for the completion of tests. It appeared that testing in smaller companies brought more results because of the positive attitude of trainees from these companies to the idea of participating in such a study. There was also a need for the researcher to conduct the tests personally, where possible, since the personal contact appeared to pay dividends in getting trainees to complete the tests. The larger the company, the less likely it appeared to be to get a high completion rate, unless the tests were made an integral part of an established training programme. It seemed that any research carried out in the business school environment should respect the same criteria - i.e. compulsory, integrated and rapid.

Completion rates are, it would appear, not dependent on the gender of participants (men appear to complete in more or less the same proportion as women). Younger participants appeared to be more likely to complete as did participants not having had higher education. This seems a reasonable statement because young people are closer to their learning experience in school and there is perhaps more willingness for a person not having had the benefit of a higher education to be more intrinsically motivated to learn from this type of training.

The trainees the most likely to complete came from the group having between 2 and 3 years of past selling experience and those with past training experience appeared to be more likely to complete. Participants having the characteristics of experiencers (the preference for concrete experience in learning) appeared to be the least likely to complete, the most likely group being those able to cope with, and particularly reflect upon, abstract concepts.

Thus, the most important point inferred in the study of completion rates is that they appeared to be more dependent on the context in which the tests were carried out than on individual differences between trainees. Where the researcher was able to control the testing procedure, the completion rate was relatively high. Likewise, where the researcher was unable to control the tests directly but the administrator was prepared to follow the testing procedure closely, the completion rate was good. However, where the control of testing was handed over to third parties who used their own procedure, the completion rate was low.

This highlights the dependence the researcher has on the approach chosen by the participating company. It also emphasises the importance of establishing and respecting a strict testing procedure in close collaboration with the participating company. The researcher is at the mercy of third parties when conducting tests of the type used in this study and, unless he/she is allowed access to the training centre to present the objectives and procedures of testing on at least one occasion, the usefulness of testing in such an environment is debatable.

Having discussed the characteristics of those most likely to complete such field tests, the reader's attention will now be turned towards the manner in which the test courses were carried out.

8.2. An Analysis of the Participants' Approach to the Learning Experience

This section deals with the manner in which participants completed the test courses used in the study. It analyses the data obtained through the post-test questionnaire and therefore deals only with those participants who successfully completed the test and filled out the post-test questionnaire. This questionnaire began with a series of questions aimed at determining the participants' approach to completing the test courses. Given that control over the time, place and pace of learning was left to the participant, the first section of the questionnaire included questions relating to the number of phases taken to complete, the manner of tackling the self-assessed questions and exercises and the main place of study. Feedback was obtained on the participants' opinion of the general presentation through a series of questions in the second section of the questionnaire (see Appendix C). Finally, questions were put at the end of the questionnaire to determine any change in the participants' opinion of distance learning and to obtain an overall appreciation of the course carried out. The results of the analysis of the post-test questionnaire, according to the course carried out, are given on the following pages.

8.2.1. The Manner in which the Needs Analysis Test Was Completed

The aim of this analysis is to determine whether there was any difference in the way the groups of participants carried out the Needs Analysis course.

There appeared to be very little difference in the way the British and the French worked through the test. Within the deadlines set by each participating company for completion of the test, each participant was free to choose when, where and how to work through the test course. The mean for the number of phases taken to do the course was 2.8 for the French participants and 3 for the British. The duration of each phase varied considerably between 180 minutes and 50 minutes for the longest phase and between 120 minutes and 10 minutes for the shortest. The mean for the longest phase was 89 minutes for the French and 86.4 minutes for the British. The mean for the shortest phase was 42.1 minutes for the French and 37.7 minutes for the British.

Despite the fact that a time of 40 minutes maximum was recommended on the introductory page of both courses, both sets of participants tended to spend longer periods working through the course than had been anticipated. However, the initial intention of many of the participants was probably to spend shorter periods of study, but many complained of the inability to organise their study time. One example of a reply in the comments section of the post-test questionnaire stated the following:

"I wanted to do the course in phases of 15 minutes but I could only do it in two two-hour sessions" (French adult participant for the Needs Analysis course).

Virtually all the participants who completed the test did so respecting the order of the questions and exercises given in each course, regardless of nationality. The place of study was, for two-thirds of the respondents, at home, with the other third being mainly

in the work environment, although almost 50% of the British carried out the course in the working environment compared to only 10% of the French. This seems to be related to the study facilities available in the participating companies more than anything else.

At 2.87, the number of phases taken to carry out the course was identical for both male and female participants. Due to the differences in testing procedure from one company to another, it was not possible to make inferences about completion rates from one institution to another. There appeared, however, to be a progression in the mean according to the age of the participant. A one-way analysis of variance using the Scheffé procedure found no two groups significant at the .05 level. Table 8-14 summarises the results.

age group	mean n° phases	S.D.
under 25	2.5	1.28
25 to 35	2.8	1.46
over 35	3.5	2.11

Table 8-14: The Mean Number of Phases Taken to Complete (according to age of participants)

The apparent progression in phases in line with age may be explained by the proximity of formal education which may make the learning experience easier to cope with for the younger participants who would need fewer study periods to complete.

This completes the analysis of the way in which completers of Needs Analysis approached the course. The following section will look at the participants' impressions of the presentation of the course.

8.2.1.1. Feedback on the Presentation of the Needs Analysis Course

Participants were asked to evaluate the presentation of the courses and their supports using a five-point scale. The questions in this section of the post-test questionnaire concentrated on the clarity and density of the print-based support, the ease of the questions and exercises included in each course and the relevance of the course to the participant's professional context. Participants' opinions as to the clarity and relevance of the video support were also sought.

Generally speaking, there was little difference in the way the course was perceived by the French and British participants. There was no significant difference between the participants' appreciation of the density of the text, neither did they disagree on the ease and relevance of the exercises contained in the course. However, the French seemed happier with the clarity of the courses than their British counterparts. Why this should be so is difficult to interpret, but it has perhaps to do with the types of distance-learning courses available in France which, as has already been indicated, are often classic correspondence courses with little or no innovation in presentation.

The French also seemed to have a much higher opinion of the clarity and relevance of the video support. Comments such as "Using a video support was very effective" (French adult participant) could be contrasted with comments such as "The video had no relevance whatsoever" (British adult participant). From information collected by the researcher on the various visits to training centres, it would seem that the British trainee has more experience of using video supports in training than their French counterparts and, for this reason, they would perhaps be more critical of low budget productions such as the ones used in the current study.

Nevertheless, from the point of view of overall trainee perception, the general appreciation of Needs Analysis indicated that such a course could be used for training salespeople in both countries, which was the original aim of the study.

8.2.1.2. Changes in Opinion of Distance Learning Coming from the Needs Analysis Course

The penultimate question in the post-test questionnaire required participants once again to give their opinion of the use of distance learning in the training context. The question was identical to that posed in the third section of the pre-test questionnaire. It was reasonable to assume that any change in opinion could be put down to the participants' experience of carrying out the test course. At the time of the building of the pre-test and post-test questionnaires used in the study, it had been anticipated that a large number of participants would be doing a distance-learning course for the first time and that their opinion a priori would perhaps change after having had the type of learning experience proposed in the study. A comparison of the mean scores obtained for those participants who completed the test is given below.

Stage	Favourable 5-4	Neutral 3	Unfavourable 1-2	Total
pre-test	36	66	4	46 *
post-test	32	9	3	44**

^{* 1} non reply; ** 3 non replies

Favourable includes those participants who felt that distance learning was a good way to learn (5), or that it was a useful alternative to conventional education (4). Unfavourable includes those who felt that distance learning would never replace (1), or was a poor second best to conventional education (2).

Table 8-15: Changes in Opinion of Distance Learning

At the pre-test stage, those participants who were to go on and complete the Needs Analysis test recorded a mean score of 3.71 on the 5-point scale. After completing, the same participants recorded a mean score of 3.68. The results show that doing the course had no significant effect on the participants' opinion of distance learning as a training support. However, on closer analysis, a difference was apparent between the responses of those who had already had experience of distance learning and those who had not. At the pretest stage, the inexperienced distance learners who finally completed the test recorded a mean score of 3.67 which decreased to a mean of 3.61 after the test. The experienced distance learners recorded mean scores which evolved in the opposite direction from 4 to 4.2 respectively. This seems to suggest that the test was more suited to those who already had had experience of distance learning and was perhaps less acceptable as a first distance-learning experience. However, given the small numbers involved, this interpretation can only serve as a tentative assumption.

We will now consider the overall appreciation of those who completed the Needs Analysis test.

8.2.1.3. Participants' Overall Appreciation of the Needs Analysis Course

For the final question in the post-test questionnaire, participants were asked to give their overall appreciation of the course. The responses were measured on a five to one scale ranging from "very much" to "not at all". The mean scores obtained can be summarised as follows:

v a	riable	mean score	standard deviation
Country**	France (n=35)	3.21	.96
	Britain (n=12)	2.18	.87
Gender	male (n=31)	3.00	1.05
	female (n=16)	2.87	1.02
Age	under 25 (n=20)	2.63	1.01
	25 to 35 (n=13)	3.27	1.10
	over 35 (n=14)	3.14	.94
Selling Exp.	< 1 year (n=22)	2.72	.88
	1 year plus (n=25)	3.18	1.14
Learning Style	accommodator(n=4)	3.00	.82
	assimilator(n=13)	3.08	.79
	diverger(n=5)	2.20	1.30
	converger(n=14)	2.53	1.05

^{**}p<.001; U=80

Table 8:16: Participants' Overall Appreciation of the Needs Analysis

Course

With a mean score of 3.21 on the five-point scale, the French showed a higher appreciation of the Needs Analysis course than the British. According to the results of a Mann-Whitney U-test, the analysis of appreciation showed significant differences between the French and British.

There was no significant difference in the mean appreciation score between male and female participants, but it appeared that the under 25s were less appreciative overall. The more experienced salespeople showed a higher overall appreciation, although there was significantly more variance in their response to the question. In both cases, Mann-Whitney tests showed no significant differences between scores at the .05 level. As far as learning style was concerned, accommodators and assimilators seemed more appreciative of the course than were divergers and convergers, although once again the differences were not statistically significant.

Participants also had the opportunity of commenting on their appreciation of the course in an open question asking them to develop any comments they may have. The most frequent remark concerned the participants' lack of time and this was true in both countries. Some examples were:

"I had to complete the course faster than I would have liked. It took rather longer than I expected" (British business student)

"It was too lengthy and complicated" (British adult trainee)

"It wasn't clear at the beginning how long it would take to complete the course" (French adult participant)

Such comments indicated problems of learner availability as well as of respect for testing procedure. Nevertheless, one repeated comment concerned the length of the training course, and particularly the video support, which seemed to be considered too short. A French adult participant commented: "Although the video training seems short (30 minutes), the development of the questions is perfect."

A few of the corporate learners felt that there was too much theory and there were comments suggesting that the course was "heavy going". Remarks from British participants touched upon the problem of learner motivation and the fact that this type of training (presumably sales training) cannot be done without a trainer or some form of face-to-face learning reinforcement. There were one or two unusual comments given at the end of the post-test questionnaire, such as one trainee who claimed that:

"The conditions under which this course was delivered to me caused me severe headaches and frustration. Normally, I would excel and enjoy a course of this nature, but unfortunately I couldn't find the time to complete the course requirements" (British adult participant).

Such a comment seems to highlight the importance for the researcher to control the testing procedure directly.

In general, the video support for Needs Analysis was received well in France and badly in Britain, suggesting perhaps that the British expect a higher quality of video support. Some of the comments made by British participants were highly critical of what was termed as a "home video". On this point, the French were much more tolerant

and even complimentary. It should be once again emphasised that the British and French versions of the video were carried out in an identical manner and the quality was, in the researcher's opinion, similar (see Section 6.2.).

Having discussed the manner in which the behavioural training course was carried out, the following pages will look at the feedback of participants in the Investment Decisions course.

8.2.2. The Manner in which the Investment Decisions Course Was Completed

As for the Needs Analysis course, participants carrying out the Investment Decisions test were free to choose the time, place and pace of study, although with only 26 actually participating in the test compared with a total of 148 for Needs Analysis, the sample was too small to draw any significant conclusions from the results. However, whereas only 47 of the original 148 participants for Needs Analysis completed (31.8%), 19 of the original 26 completed the Investment Decisions course (73.1%). This can be linked to the separation between protocol and non-protocol institutions (see Section 8.1.2.2. above).

There was a difference in the pre-test knowledge of the French and British samples, since the French tests were carried out using a group of qualifying accountants and the British sample consisted mainly of learners new to the field of investments. It is for this reason that a comparison of the mean number of phases taken to complete the test according to country of origin gave a French mean score of 1.75

phases compared to 3 for the British. This compares to a mean of 2.8 phases for the Needs Analysis course. However, the French participants appeared to approach the course in much the same manner as the British, giving support to the appropriateness of such courses in a cross-cultural environment.

As with Needs Analysis, there was a clear indication that the older the participant, the greater the number of phases taken to complete the course. The under 25 year-old group took an average of 1.9 phases to complete, the 25-35 group 2.8 phases and the over 35s 4 phases. There appeared to be no difference between the number of phases taken according to gender or to past selling experience, although participants with distance learning experience took, on average, more than twice as many phases to complete (4.5 phases for those with distance-learning experience compared to 2.1 for those without).

8.2.2.1. Feedback on the Presentation of the Investment Decisions Course

The questions in the post-test questionnaire seeking feedback on the Investment Decisions course were identical to those used for the Needs Analysis course with the exception of the two questions relating to the video support.

Investment Decisions was not appreciated, it would appear, for its clarity of presentation; the French recorded a mean score of 1 and the British 1.27 on the five-point scale used. In fact, on nearly all counts, including density of text, ease and relevance of questions, the

course was less appreciated than the Needs Analysis course. This may indicate that one can question the user-friendliness of the quantitative course for distance learning. However, since Investment Decisions was the first course to be developed by the researcher, it contained all the pitfalls from which the development of Needs Analysis benefitted. Nevertheless, the French did generally retain a positive overall appreciation of the course according to the final question in the post-test questionnaire.

8.2.2.2. Changes in Opinion of Distance Learning Coming from the Investment Decisions Course

As with Needs Analysis, the aim of this section was to compare the ratings of participants' opinions of distance learning as a training support at the post-test stage with those reported at the pre-test stage. In this case, it was assumed that any change in opinion was due to the course itself.

At the pre-test stage and for those participants who were to go on to complete the test, the mean score for this question was recorded at 3.85 on the five-point scale. After having completed the course, the mean score dropped to 3.31, although the difference was entirely with those who had had no previous distance-learning experience. As with Needs Analysis, it thus appears that, for first-time distance learners, Investment Decisions was not entirely convincing as an introduction to this type of learning.

The final analysis in this section relating to feedback from the Investment Decisions course concerns the participants' overall appreciation of the course.

8.2.2.3. Participants' Overall Appreciation of the Investment Decisions Course

Table 8:17 below summarises the participants' overall appreciation of the Investment Decisions course on the five-point scale used in the final question of the post-test questionnaire.

Vä	ıriable	mean score	std deviation	
Country**	France (n=8)	4,12	.64	
	Britain (n=11)	1.81	1.17	
Gender	male (n=14)	2.79	1.48	
	female (n=5)	2.80	1.78	
Age	under 25 (n=11)	3.36	1.43	
	25 to 35 (n=6)	2.17	1.47	
	over 35 (n=2)	1.50	.71	
Selling Exp.	< 1 year (n=13)	3.23	1.48	
	1 year + (n=6)	1.83	1.16	
Learning Style	accommodator(n=3)	2.00	1.73	
	assimilator (n=4)	4.25	.50	
	diverger (n=2)	4.00	1.41	
	converger (n=7)	1.86	1.07	

^{**} p<.001

Table 8:17: Participants' Overall Appreciation of the Investment

Decisions Course

Given the limited numbers who actually carried out the Investment Decisions course, the following interpretations must be treated with caution. However, they may provide some small indication as to which type of trainee may be more likely to enjoy doing such a course.

The French were significantly more appreciative than the British of the course as a type of learning. A Mann-Whitney U-test showed a significance level of .001 (U=7.0). This confirms the findings relating to Needs Analysis and indicates the positive attitude of the French completers for this type of course. Comments gathered from the open question concerning the British participants' appreciation of the course included:

"It seemed a clumsy way of learning"

"I found some of the text heavy-going and would have appreciated more interesting, thought-provoking material"

One interesting comment concerning learner motivation was made by a British adult participant:

"Although I find this type of course a useful alternative to conventional learning, it would maximise its usefulness (to me) had I paid for the course or was really obliged to do it."

This type of comment brings out the problem of learner motivation to complete the test. It seems to suggest the need for some degree of extrinsic motivation, as discussed in Section 3.2., in the context of the literature review. The point was made in Section 3.2.4. that, for a

training course to be effective, the distance-learner must feel a desire to learn coming from an intrinsic source, although a lack of intrinsic interest can perhaps be compensated to a certain degree by an extrinsic motivating factor. The learner who made this comment seems to have felt the need for extrinsic motivation, presumably in the form of punishment avoidance (i.e. not wishing to waste money).

There was no significant difference concerning the participants' appreciation according to gender or age, although it was interesting to discover that the results according to age were the opposite to those of the Needs Analysis course. For Investment Decisions, it appears that that younger participants were the most appreciative and the over 35s clearly not at all. It is important to remember that the two groups were different in their pre-test knowledge of the topic and this would have perhaps influenced their appreciation of the course. The findings may also indicate that the more experience one gains in the professional world, the less one is appreciative of quantitative analysis and the more one can identify with a behavioural course. Predictably, this was confirmed in the findings according to selling experience where inexperienced participants were more appreciative of the course than their experienced counterparts.

It was not surprising to find that participants with learning styles at the opposite extreme to active experimentation were the most appreciative of the course (i.e. divergers and assimilators), since they were stronger at thinking and conceptualising the content of a training course such as Investment Decisions which required a more reflective approach and was less suitable to simulation and immediate practical application. The least appreciative were among the accommodators and convergers who perhaps favour the "try it and see" approach of the active experimenter.

An attempt will now be made to summarise the findings coming from the analysis of how the two courses were carried out.

8.2.3. Summary

From the total sample of 174 participants coming from the two countries, 66 completed the post-test questionnaire, giving a return rate of 37.9%. Further analysis indicated that the completion rate was closely tied to how the test was administered in the different test locations.

The participants' country of origin did not appear to have had any influence on the rate of completion, nor were there any marked differences in the way participants from both countries approached the learning experience. It can therefore be concluded that the types of courses used in the study would be suitable for cross-cultural exploitation.

Needs Analysis, the behavioural course, was completed in around three phases on average regardless of country of origin. The length of each learning phase was at the most 90 minutes and at the least 40 minutes. It appears that the recommendation to spend no longer than 40 minutes for each study session was generally ignored.

For Investment Decisions, the quantitative course, the French tended to require fewer study phases to complete the whole course, although this was probably tied to pre-test topic knowledge. The time spent learning at each study session was shorter than for the Needs Analysis course. In both courses, the older the participant, the more study phases were taken to complete, and this was also true of the selling experience of participants.

The French found the Needs Analysis course clearer than the British did and they appreciated the clarity and relevance of the video cassette more. Participants' opinion of distance learning as a training support was not significantly modified as a result of completing the tests, although a closer analysis indicated that the opinion of those who had had previous experience of distance learning before completing the tests improved and those who had had none regressed.

The French generally had a higher overall impression of both courses, but, whereas the younger participants had a higher appreciation of the Investment Decisions course than the older participants, the opposite was true in the case of Needs Analysis.

Finally, learners tending towards the profile of active experimentation on the Experiential Learning Cycle were less appreciative of the quantitative-based Investment Decisions course. Accommodators and assimilators showed noticeably more appreciation for the behavioural Needs Analysis course.

Having considered the responses gathered from the first two sections of the post-test questionnaire, relating to the manner in which the tests were carried out, the reader's attention will now be focused on the learning outcome from the two courses.

8.3. Analysis of Learning Gain

This section analyses the results of learning gain among the participants who completed one of the two test courses. As defined in Chapter 7, learning gain was quantified for each participant as the difference between the score obtained from the knowledge test in the third section of the post-test questionnaire and the score obtained from the corresponding section of the pre-test questionnaire (see Appendix C for details of how the questionnaires were scored). Since the two sets of questions were identical, it was assumed that any learning gain recorded in the post-test score could be put down to knowledge acquired through completing the course.

There were six questions in the pre-test questionnaire compared with nine in the post-test questionnaire. In the case of the Needs Analysis course, only five questions in both questionnaires were used to measure learning gain, a sixth question being used to analyse potential differences between the participant's conception of selling as an art or as a science.

Whereas the first six questions in the post-test questionnaire were an exact repetition of the questions in the pre-test questionnaire, the final three knowledge questions concerned specific information contained in the courses. The aim of these three questions was to measure the degree of learning retention and the scores obtained by each participant are the focus of Section 8.4.

The system used for scoring learning gain used a percentage scale for each knowledge question (see Appendix C for details). The score obtained at the post-test stage was reduced by the corresponding score in the pre-test questionnaire. This approach to scoring learning gain was based on the original research design which was to study the learning outcome of participants from one sole company in both countries, using trainees of a similar profile. Under these circumstances, the trainees were assumed to be at a similar level of pre-test knowledge in the areas of the two courses, thus allowing meaningful comparisons to be drawn between all participants.

As it turned out, participants came from a variety of backgrounds and began the tests with a varying knowledge base. This showed up a weakness in the scoring of learning gain in that participants with little or no pre-test knowledge in the area studied had a stronger chance of achieving a high score for learning gain. Those with a relatively good pre-test knowledge level would therefore do less well in learning gain since they would score high at the pre-test stage and thus limit their chances of showing clear improvement. In certain cases where the knowledge they already possessed at the pre-test stage was presented in a different manner in the course, a negative score was recorded.

In the following section, the results of learning gain will be dealt with according to the test course carried out and beginning with the Needs Analysis course.

8.3.1. An Analysis of Learning Gain from the Needs Analysis Course

Learning gain related to the difference between what was known about analysing customer needs before carrying out the test and what was known after. The mean learning gain for all participants was 46.71 (SD=103.04) with a range from -235 to 310 The results of analyses carried out on learning gain according to the group variables are summarised in Table 8:18 below. T-tests were carried out on each variable except for age and learning styles. For these two independent variables, a one-way analysis of variables was employed, using a Scheffé test to limit type I FW error.

The British showed a significantly higher learning gain than the French (p<.05). Moreover, the fact that learning gain was measured as the difference between pre-test and post-test knowledge of the subject treated in the training course, account was not taken for level of scores at the pre-test stage. Thus, a learner who achieved a high score at the pre-test stage stood a greater chance of showing low achievement in learning gain.

The analysis of variance carried out on age indicated differences in learning gain between the three age groups, although the final results of the statistical analysis indicated no significant differences at the .05 level. At first sight, there were strong indications that the under 25-year-old group performed appreciably better than the other two groups, particularly the 25 to 35 year-olds, although the F ratio, at 2.03, gave a significance level of .14.

Similarly, the analysis of variance conducted on learning gain in relation to the learning style of participants suggested that the scores of accommodators might be significantly different from the other groups. However, the statistical analysis showed no significant differences between the groups at the .05 level (F = 1.21; p = .32).

Fuller details of the analysis conducted on learning gain according to age and learning syle can be found on pages 302 & 303 in Appendix G.

Learning gain according to the other independent socio-educational variables analysed showed no significant differences at the .05 level.

Group Variable	Groups	no of	Mean	Standard Deviation	Standard Error
C'try of origin	France	3 5	29.47	98.19	16.6
	Britain	12	97.00	104.37	30.1
Sex	Male	3 1	47.05	104.11	18.7
	Female	16	46.06	104.31	26.1
Age	under 25	20	76.43	94.23	21.1
	25 to 35	1 3	4.08	110.27	30.6
	over 35	14	43.86	100.90	27.0
Higher	No	16	5.44	108.01	27.0
Education	Yes	15	52.33	92.51	23.9
Selling	under 1_year	22	66.30	95.58	20.38
Experience	1 yr or more	25	29.48	108.14	21.63
Learning	Accommodator	4	129.75	76.93	38.47
Style	Assimilator	13	60.88	67.56	24.28
(11 cases	Diverger	5	48.20	77.85	34.81
unidentified)	Converger	14	43.00	106.55	28.48

^{*} p<.05

Table 8:18: Learning Gain from the Needs Analysis Course

8.3.2. An Analysis of Learning Gain from the Investment Decisions Course

The difficulty in achieving a significant analysis of learning gain coming from the Investment Decisions course related to the small size of the samples. This must be borne in mind throughout this part of the analysis.

A total of 19 trainees completed the test and the mean learning gain coming from the course was 47.37 (SD=157.65) with scores ranging from -300 to +300. As with the study of learning gain from Needs Analysis, much of the learning gain was analysed by way of t-tests which attempted to determine the level of difference in scores around the mean. As for Needs Analysis, the independent variables relating to age and learning styles were the subject of a one-way analysis of variance using the Scheffé test. The results are presented in Table 8-19 below.

As in the case of Needs Analysis, a first look at learning gain according to age once again suggested that the mean scores of the three age groups would be statistically different. In contrast to the results for learning gain from the Needs Analysis course, it was the over-35-year-old group which recorded the highest mean score and the youngest group which showed the lowest mean. However, the analysis of variance, details of which can be found on page 306 in Appendix G, showed no statistically significant differences at the .05 level (f = .22; p = .80).

Group	Groups	no of	Mean	Standard	Standard
Variable		cases		Deviation	Error
C'try of origin	France	8	75.00	128.17	45.3
	Britain	11	27.27	179.39	54.1
Sex	Male	14	35.71	133.63	35.7
	Female	5	80.00	228.04	102.0
Age	under 25	11	27.27	161.81	48.8
	25 to 35	6	66.67	186.19	76.0
	over 35	2	100	0	0
Higher	No	7	0	191.49	72.4
Education	Yes	3	100.00	200.00	115.5
Selling	under 1 year	13	46.15	119.83	33.2
Experience	1 yr or more	6	50.00	234.52	95.7
Learning	Accommodator	3	0	300.00	173.2
Style	Assimilator	4	50.00	57.74	28.9
(3 cases	Diverger	2	100.00	141.42	100.0
unidentified)	Converger	7	57.14	139.73	52.8

Table 8:19: Learning Gain from the Investment Decisions Course

As for the analysis of variance conducted on learning gain according to the learning styles of participants, divergers showed a much higher mean score than those of the other three groups. However, the results of the analysis (see page 307 of Appendix G) gave an F value of .11 (p = .98) and it was not possible to draw any statistically significant conclusions.

The small size of the samples did not allow the analysis to be conclusive. None of the results was significant at the .05 level and it can be thus stated that, from the point of view of learning gain, the Investment Decisions course gave similar results regardless of the country of origin and the socio-educational background of the learner. The measurement of learning gain from Investment Decisions suffered from the same weakness as that of Needs Analysis in that differences in pre-test scores were not accounted for and the high-scorer at the beginning of the test was unable to show the same extent of learning gain as the low-scorer.

In the calculation of overall learning outcome from the two courses used in the study, learning gain was augmented by the score obtained for learning retention. The score for learning retention was the total obtained for the final three questions in the knowledge section of the post-test questionnaire. An analysis of these scores will be made in the following section.

8.4. An Analysis of Learning Retention

Learning outcome was considered as comprising the increase in knowledge brought about by completing the test courses (learning gain). This was measured through the difference in knowledge level at the pre- and post-test stages. However, it was also felt that the ability to recall specific information contained in the courses (and which would not be part of a participant's pre-test knowledge) was an important element in learning outcome. As this could not be measured at the pre-test stage, the post-test questionnaire for both test courses was designed to measure learning retention through the

final three questions in the knowledge section. The questions were scored out of a maximum of 300 points.

8.4.1. Learning Retention from the Needs Analysis Course

Table 8:20 summarises the results of learning retention from the Needs Analysis course. The mean learning retention score for all participants was 210.96 (SD=103.99) with a range from 0 to 300

Group	Groups	no of	Mean	Standard	Standard
Variable		cases		Deviation	Error
C'try of origin	France	3 5	209.00	108.63	18.4
	Britain	12	216.67	93.26	26.9
Sex	Male	3 1	197.42	106.09	19.1
	Female	16	237.19	97.67	24.4
Age	under 25	20	233.00	84.11	18.8
	25 to 35	13	224.62	105.86	29.4
	over 35	14	166.79	120.60	32.2
Higher	No	16	187.50	125.30	31.3
Education	Yes	15	191.00	113.06	29.2
Selling	under 1 year	22	240.45	78.28	16.7
Experience	1 yr or more	25	185.00	117.75	23.6
Learning	Accommodator	4	190.00	132.16	66.1
Style	Assimilator	13	241.15	91.93	25.5
(11 cases	Diverger	5	218.00	94.97	42.5
unidentified)	Converger	14	210.00	102.90	27.5

Table 8:20: Learning Retention from the Needs Analysis Course

There were no significant findings at the .05 level, suggesting that learning retention is dependent neither upon the country of origin nor upon the socio-educational background of the participants.

There remains the possibility that some participants referred to the training manual when answering the questions although, in the majority of cases, the post-test questionnaire was completed after the manual had been handed back to either the participating company or to the researcher himself. A t-test of learning-retention scores by protocol or non-protocol institutions indicated that there was no signicant difference at the .05 level.

Although the one way analysis of variance of learning retention scores according to age showed no significant differences at the .05 level, a Kruskal-Wallis test was carried out to confirm the findings. The test confirmed that learning retention was not dependent upon the age of the participant.

Further analysis of learning retention showed that five of the 47 completers of Needs Analysis recorded a zero score. Four of these showed blank responses to the learning recall questions, suggesting perhaps a lack of time to complete. The fifth contained a comment from a French participant claiming that the person had "a very bad memory" and was unable to reply.

Learning retention will now be considered in the context of the Investment Decisions course.

8.4.2. Learning Retention from the Investment Decisions Couse

Learning retention from the Investment Decisions Course was analysed in the same way as for Needs Analysis. The mean score for learning retention for the 19 participants who completed the course was 122.58 (SD=102.31) with a range of between 0 and 266. Table 8-21 sets out the results of learning retention for Investment Decisions according to t-tests and one-way analyses of variance conducted on the independent variables used in the previous three tables.

Group	Groups	no of	Mean	Standard	Standard
Variable		cases		Deviation	Error
C'try of origin *	France	8	187.13	87.04	30.8
	Britain	11	75.64	88.21	26.6
Sex	Male	14	128.36	105.15	28.1
	Female	5	106.40	103.60	46.3
Age	under 25	11	136.09	113.77	34.3
	25 to 35	6	99.83	103.22	42.1
	over 35	2	116.50	23.33	16.5
Higher	No	7	57.00	62.88	23.8
Education	Yes	3	144.33	126.08	72.8
Selling	under 1 year	13	143.30	107.30	29.8
Experience	1 yr or more	6	77.67	80.73	33.0
Learning	Accommodator	3_	66.67	115.47	66.67
Style	Assimilator	4	216.25	57.64	28.8
(3 cases	Diverger	2	133.00	141.42	100.0
unidentified)	Converger	7	90.29	85.34	32.25

^{*} p<.05

Table 8:21: Learning Retention from the Investment Decisions

Course

The analysis showed that there was a significant difference in learning retention scores between the French and British participants (p=.014). However, given the difference between the two samples, the results were not unexpected (it will be remembered that the French participants were all trainee accountants with a good knowledge of the subject matter contained in the Investment Decisions course). In all other cases, the analyses showed that there were no significant differences in learning retention between the groups studied.

The final part of the analysis of the results of the field study will look at overall the learning outcome coming from the two courses.

8.5. Overall Learning Outcome

The reader is reminded that overall learning outcome was measured as the sum of learning gain and learning retention coming from the two courses.

Given the particularly small size of the sample used to analyse Investment Decisions and given the difference in background between the completers of the two courses, it was considered unsatisfactory to group the learning outcome coming from the two courses together. For this reason, the analysis of learning outcome will be treated on a course-by-course basis.

8.5.1. Overall Learning Outcome from the Needs Analysis Course

Respecting the form of the analysis carried out for learning gain and learning retention, Table 8-22 summarises learning outcome according to the participants' background. The mean learning outcome score for the Needs Analysis course was 257.67 (SD=164.97) with a range from -155 to +560.

				Γ	
Group	Groups	no of	Mean	Standard	Standard
Variable		cases		Deviation	Error
C'try of origin	France	3 5	238.47	166.71	28.2
	Britain	12	313.67	152.65	44.1
Sex	Male	31	244.47	175.66	31.6
	Female	16	283.25	143.82	36.0
Age	under 25	20	309.43	135.67	30.3
	25 to 35	13	228.69	191.41	53.1
	over 35	14	210.64	168.02	44.9
Higher	No	16	192.94	189.20	47.3
Education	Yes	15	243.33	158.33	40.9
Selling	under 1 year	22	306.75	136.78	29.2
Experience*	1 yr or more	25	214.48	177.87	35.6
Learning	Accommodator	4	319.75	153.08	76.5
Style	Assimilator	13	302.04	132.43	36.7
(11 cases	Diverger	5	266.20	149.03	66.7
unidentified)	Converger	14	253.00	159.11	42.5

^{*} p<.05

Table 8-22: Mean Scores for Learning Outcome from the Needs
Analysis Course

With the number of years of selling experience recoded in two categories (under 1 year and 1 year or above), the level of significance was recorded at .055. Since this level using the two categories fell so close to .05, a further test of correlation was conducted using the Pearson product-moment approach. The results of the analysis showed a correlation coefficient of .18 and, thus, any influence of selling experience on learning outcome could not be shown.

In all other cases, the level of significance was more than .05, suggesting that none of the independent variables studied appeared to influence participants' learning outcome from the Needs Analysis course.

As with learning retention, a one way analysis of variance on learning outcome, controlling for age, showed no significant difference at the .05 level. A Kruskal-Wallis test confirmed these findings.

A further analysis of the influence of the participants' previous experience of distance learning was carried out using a t-test. The results showed a mean score of 251.01 for those with no previous experience of distance learning (SD=174.6) compared to 303.17 for those with previous experience (SD=59.5). The same was true when looking at the influence of past training experience on learning outcome for which the level of significance was recorded at .476.

The highest mean for learning outcome was recorded by the accommodators. In order to test the signifiance of the results of this

group, their scores were compared to all of the other learning styles put together (including those which remained unidentified). The level of significance was well above .05, suggesting that learning outcome from the Needs Analysis course was independent of the learning style of the participants.

The essential findings from the above analysis will be taken up in the conclusion relating to learning from the Needs Analysis course in Section 8.5. below. The reader's attention will now be orientated to learning outcome coming from the Investment Decisions course.

8.5.2. Overall Learning Outcome from the Investment Decisions Course

Table 8-23 gives the results of the mean scores for the Investment Decisions course according to the background of the 19 participants who completed The mean score for learning outcome was 169.95 (SD=198.35) with a range from -300 to +500.

Group	Groups	no of	Mean	Standard	Standard
Variable		cases		Deviation	Error
C'try of origin	France	8	262.13	78.63	27.8
	Britain	1 1	102.91	233.98	70.5
Sex	Male	1 4	164.07	172.65	46.1
	Female	5	186.40	282.32	126.3
Age	under 25	1 1	163.36	202.33	61.0
	25 to 35	6	166.50	242.21	98.9
	over 35	2	216.50	23.33	16.5
Higher	No	7	57.00	246.15	93.0
Education	Yes	3	244.33	222.01	128.2
Selling	under 1 year	13	189.46	134.87	37.4
Experience	1 yr or more	6	127.67	307.96	125.7
Learning	Accommodator	3	66.67	404.15	233.3
Style	Assimilator	4	266.25	66.50	33.3
(3 cases	Diverger	2	233.00	0	0
unidentified)	Converger	7	147.43	164.22	62.1

Table 8:23: Learning Outcome from the Investment Decisions
Course

None of the findings was statistically significant, suggesting that the independent variables analysed had no significant influence on learning outcome. Because of the size of the samples, it was not possible to determine the influence of past distance-learning experience on learning outcome, particularly as only 2 of the 19 completers had had such experience. However, significant differences in learning outcome were recorded for past in-house training

experience. Of the 18 who replied to the relevant question in the pre-test questionnaire, 9 had had in-house training experience and 9 had not. The mean learning outcome score for those with no previous training experience was 248.89 (SD=110.8) compared to a mean of 48 (SD=210.13) for those with training experience. The significance level for the t-test carried out was less than .010 suggesting that those with no past experience benefitted more from the Investment Decisions course. However, given the difference in learning retention scores between the French and the British participants and given the experiential profile of the two samples (the 8 French students were all accounting students with no past experience of in-house training), the difference in scores is less surprising.

The final section of this chapter will summarise the essential findings from the analysis of learning outcome from the two courses.

8.6. Summary of the Results of Learning Outcome

Overall learning outcome was measured by combining the score indicating the degree of improvement in knowledge resulting from the course carried out (learning gain) with the score showing the degree of retention of the concepts contained in the course (learning retention).

Learning gain from Needs Analysis indicated differences in scores obtained according to the participants' country of origin. The British participants showed significantly higher scores than the French, raising questions on the suitability of such a course in a cross-ultural context from a learning gain point of view. However, the other

independent socio-educational variables indicated no significant influence on learning gain.

For the Investment Decisions course, no significant differences in learning gain were recorded, either on the cultural or the socio-educational level. However, the small size of the sample did not allow any far-reaching conclusions to be made.

Learning retention from the Needs Analysis course suggested that there were no significant differences in score between participants at any of the levels of independent variables studied. However, learning retention from Investment Decisions showed that the scores of French participants were significantly higher than those of their British counterparts. Although it could be interpreted from this that the French were more likely to retain knowledge from a quantitative course, the size of the sample prohibited any confirmation of this.

An analysis of the combination of the learning gain and learning retention scores for the Needs Analysis course suggested that there were no significant differences between learning outcome scores on the level of country of origin. These findings support the null hypothesis which stated that the same learning outcome could be achieved across cultures using the same distance-learning materials in two languages. Analysis on other independent socio-educational variables showed no significant differences in learning outcome scores, with the exception of past selling experience. Here, the analysis indicated that participants with under one year of experience in selling obtained higher scores for learning outcome. However, no significant correlation could be found between learning

outcome and years of selling experience expressed in numbers of years.

Thus, the findings for Needs Analysis supported the hypothesis that this type of course was suitable for exploitation using similar populations to those used in the study. It was also found that learning style is not a significant factor in learning outcome.

The same conclusion was reached in the case of Investment Decisons, despite the unevenly-matched samples. However, the small numbers used in the study made it impossible to reach any significant conclusion.

In the case of both courses, past experience of distance learning and of in-house training appeared to have no significant bearing on the level of learning outcome.

It thus seems, from the conclusions given above, that it is possible to achieve similar learning oucomes between French and British learners using distance-learning sales-training courses, regardless of their background. The final chapter of this thesis will attempt to offer guidelines to those wishing to develop cross-cultural training of the type used in this research. However, before this, the findings of the empirical study will be discussed in the light of the anticipated results.

Chapter 9

A Discussion of the Results

9.1. Introduction

The aim of this chapter is to consider the points put forward in the previous parts of this thesis in the light of the results coming out of the empirical study described in the previous chapter. The principal objective of the study has been to determine whether cross-cultural training courses can be developed for use in more than one country. This objective has been considered primarily in terms of learning outcome; i.e. can the same learning outcome be achieved across cultures using the same training support?

However, the data collected for the study have allowed other hypotheses to be tested, some of the more important ones being the subject of Section 5.2.4. This chapter will therefore consider the importance attached to the choice of training media and the suitability of developing cross-cultural training courses in a corporate environment. The chapter concludes with a projection of the likely results, had the original sample of 200 participants been achieved, and the alternative approaches available for the training manager who is considering the development of cross-cultural training. The discussion begins with a look at the influence of attitude to distance learning on learning outcome.

9.2. The Effects of Participant Attitude to Distance Learning

Section 5.2.4.1. set out the expected impact the participants' cultural background could have on the attitude their towards distance learning. It predicted that the British would have a clearer perception of this mode of learning since they are perhaps more aware of distance learning as a training support. This would mean that the French response to the relevant question in the pre-test questionnaire might be closer to the middle reply of the five statements proposed; i.e. "it's fine but it doesn't really suit my style of learning". Table 8:5 in Section 8.1.1.4. indicates that, in fact, there was very little difference in participants' opinion of distance learning at the pre-test stage on all levels and, although some of the French were prepared to state that distance learning would never replace conventional learning, none of the British participants were prepared to go that far. This suggests that, although the majority of both the British and the French tend to think that distance learning is a useful alternative to conventional learning, the more extreme opinions of the French are more hostile to this mode of learning. It seemed important to discover whether this tendancy came from bad past experience of distance learning or no experience at all.

It was hypothesised that, given the availability of distance learning in the two countries, the French would have had less experience of this form of learning than the British (see Section 5.2.4.1.). In fact, this was the case, with 12% of the French having had experience against 23% of the British respondents.

Consequently, despite less familiarity with distance learning, a certain number of the French seemed nevertheless ready to dismiss this learning mode as a potential alternative to conventional training.

9.3. The Effects of the Participants' Cultural Background

The discussion surrounding the cultural differences between the French and the British was taken up in Section 3.1. of this thesis, looking at contrasts in the learning environment of the two countries. Section 3.4. looked for explanations for differences in the "cultural baggage" that learners brought to the learning experience. Section 5.2.4.1. took up the discussion in the context of the current study and looked at the expected impact of the participants' cultural background on learning outcome. It argued that the French appeared to be more familiar with a teacher-learning environment and, given that they would be carrying out a training course in the learnercentred distance mode, they might have more difficulties with the learning experience than their British counterparts. It was accepted that it would not be easy to predict exactly how such cultural differences might be translated in the findings of the empirical study, since other variables, such as the novelty value of carrying out a course in an unfamiliar learning mode, might produce a positive effect on learner motivation which could compensate for any difficulties experienced in working through the course. On a learning outcome level, it was hypothesised that the British would achieve a higher mean score than their French counterparts. However, a distinction was made between the way the two courses may be perceived, since it was suggested that the French might have a stronger affinity for the quantitative course (Invetsment Decisions) and the British for the behavioural course (Needs Analysis).

Although not statistically significant, these hypotheses were confirmed in the results of the empirical study (see Table 8:22 and Table 8:23). They suggest that there is a difference in learning outcome according to the type of training course, although the level of significance and the numbers involved in the samples need to be borne in mind when interpreting the findings.

It also seemed reasonable to suggest that such a difference in learner perception according to the quantitative/qualitative dichotomy would be translated in the participants' appreciation of the two courses, according to the results obtained in the post-test questionnaire. In the case of the Investment Decisions course, this hypothesis was confirmed, the findings being statistically significant at the .001 level (see Table 8:17). However, in the case of Needs Analysis, the expected outcome was not confirmed. On the contrary, it was the French who showed a greater appreciation for a course which they scored less well on (Table 8:16). Some explanation of these contradictions may be found in the feedback gained on the video support used for the Needs Analysis course (see Section 8.2.1.3.). The British were nowhere near as appreciative of the Needs Analysis video as their French counterparts and such perceptions would naturally be translated in the overall appreciation of the course.

It can thus be concluded that, according to the results of the current study, the learners' cultural background is a relatively effective way of predicting learning outcome of courses such as those developed for the field tests, although there remains some doubt as to its value in predicting how a training course will be perceived by the trainee.

The second dimension that was considered related to the preferred learning style of the participants.

9.4. The Effects of Participants' Preferred Learning Style

The analysis of the results was primarily conducted around the socio-cultural-educational background of the participants. However, the use of the Learning Styles Inventory allowed another dimension to be added to the study; that of the participants' approach to the learning experience. Section 3.3.1. describes the learning style profiles sought after according to Kolb (1971) and Section 5.2.4.3. puts forward a series of hypotheses relating to the expected influence of learning style on learning outcome. It was suggested that convergers and accommodators would perform better in the Needs Analysis course, given their tendency for active experimentation and concrete experience, with accommodators likely to achieve the highest level of mean learning outcome. On the other hand, divergers and assimilators would achieve lower mean scores in learning outcome in the case of the more practically-orientated Needs Analysis course, but a higher mean score in Investment Decisions, a course much more based on theoretical concepts. For the latter course, assimilators were expected to achieve the highest mean score of the four learning style profiles. Table 8:22 summarises the results of learning outcome coming from the study according to the participants' preferred learning style.

As predicted, the accommodators achieved the highest mean score in learning outcome for Needs Analysis, although the expected mean score for assimilators was considerably higher than anticipated. Furthermore, the convergers, who were expected to show a relatively high mean score in learning outcome for Needs Analysis, in fact performed the least well of the four groups.

As far as Investment Decisions was concerned, the learning outcome from the four learning-style groups was precisely as anticipated, with the assimilators scoring highest, followed by the divergers and the convergers, and accommodators showing the lowest mean score. However, it is important to bear in mind the size of the samples as well as the fact that the results of learning outcome according to the preferred learning style of the participants showed no statistically significant differences between the groups.

It was also interesting to consider the overall appreciation of the courses according to the learning style profile of the participants. It was to be expected that those who showed a higher appreciation of the courses would follow the same order as the mean learning outcome scores. In fact, as far as Needs Analysis is concerned, once again the assimilators had a much higher appreciation of the course than was expected, being slightly more appreciative than the highest scoring group, the accommodators (see Table 8:16).

Appreciation for the Investment Decisions course more or less followed the results expected and was therefore closely related to success in learning outcome (see Table 8:17). The highest-scoring scoring groups - the assimilators and the divergers - were the most

appreciative of the Investment Decisions course, as was predicted in Section 5.2.4.3.

It was of interest to consider the results of the analysis of learning outcome according to learning styles in the current study with the findings of Gilroy (1989). She considered the appreciation of the courses developed in her study through learner motivation and came up with the conclusion that her divergers were the least motivated by her courses, followed by her assimilators and accommodators. The most motivated group consisted of the convergers (Gilroy, 1989:226)

Gilroy discusses the researcher's dilemma between learning about the ways trainees learn in their preferred style and encouraging them to adopt a more versatile style which incorporates characteristics from all four styles, thus minimising the weaknesses of any one approach. She preferred the latter strategy, but pointed out that forcing trainees to learn in a style which they were not accustomed to would threaten the level of their motivation which is so important in distance learning.

Learning outcome corresponded to the term "learning gain" in Gilroy's study of credit controllers in Rank Xerox UK. Her findings indicated that the highest learning-gain score came from her convergers, followed by the assimilators, divergers and accommodators. Significant differences were found between the convergers in her study and the three other learning styles combined.

It is, nevertheless, important to bear in mind the comparability of the two studies before drawing conclusions about the discrepencies between them. There were differences in the profile of the samples of Gilroy's study and the profile of the participants used in the current research. Gilroy's sample was made up of 146 employees of Rank Xerox of whom 64 were youth trainees, 24 graduate trainess, 30 "other employees" and 28 credit controllers (Gilroy, 1989:171). As previously mentioned, in the current study the Investment Decisions course showed assimilators having the highest mean score, followed by divergers, convergers and accommodators. In the Needs Analysis course, the accommodators attained the highest mean score, followed by the assimilators, divergers and convergers. The reason for the difference between the results of the two studies may well be connected to the profile of the participants. Two-thirds of those who completed courses in the current study were from the sales profession, whereas Gilroy's sample was clearly from a different background. Making allowances for the relatively high number of student completers of Investment Decisions (42%), it is perhaps significant that, as predicted in Section 5.2.4.3., the theory-based approach of the course might have appealed less to the practical needs of the salesperson and, for this reason, the mean scores of the assimilators and divergers were higher than those of the convergers and accommodators. This hypothesis may be substantiated to a certain degree by the results of the Needs Analysis course, in which 66% of the sample were from the selling profession. Here, the accommodators attained a higher mean score for a course which made use of practical simulations and exercises. Once again, account should be made for the size of the samples when interpreting the findings.

One final point should be made about the learning styles test used in the two studies. It must be accepted that the above interpretations of the contrast between the present study and that of Gilroy (1989) presuppose the reliability of the Kolb Learning Styles Inventory. In order to test this, it would have been necessary to conduct a study using a sizeable heterogenious sample, which was outside the scope of the current research, although the original aim of testing learning outcome with 200 trainees of a similar profile would have allowed a study of this nature to have been conducted.

The next section considers the effects of the age of the participants in relation to learning outcomes and the way in which the courses were approached.

9.5. The Effects of Age on Learning Outcome

Section 5.2.4.3. suggested that age could have an effect on learning in three main areas - motivation, pace and learning outcome The first related to the motivation of the learner, although no substantial evidence was acquired from the literature search to suggest that an older participant would have a lower level of motivation in the learning situation. In fact, the findings from the responses to the final question in the post-test questionnaire concerning the overall appreciation of the courses showed no correlation between the mean scores of each age group to suggest that age had any influence as regards the Needs Analysis course (see Table 8:16), although the older participants showed the least appreciation for Investment Decisions (Table 8:17).

Evidence was found, however, that older participants may differ from their younger counterparts when it came to the pace of learning. In Section 5.2.4.3., it was hypothesised that the time needed to complete the courses used in the study might be longer for the older participant and that the number of study phases they would need to complete would be greater. The results of the number of phases taken to complete, which are summarised in Table 8:14, gave justification to the hypothesis, with the number of phases needed to complete increasing with the age of participants.

The third possible effect of age on learning related to learning outcome. It was suggested that, following the findings of Kausler (1991), the levels of both learning gain and learning retention would be lower in the case of the older participants and, therefore, the score for overall learning outcome would also be lower. The findings of the empirical study indicated that, for Needs Analysis, the mean learning gain score for the over 35-year-old group was considerably lower than for the under 25s, although the lowest-scoring group was the 25 to 35-year-old group. In the case of learning gain coming from Investment Decisions, the suggestion that older participants would score lower was not at all confirmed by the results. On the contrary, the older participants had the highest mean score and the youngest group the lowest (see Table 8:19). It can be therefore concluded that, whilst the type of course carried out seemed to influence learning gain according to age, there was nothing to suggest that older participants would be at a disadvantage in learning from training courses such as those used.

As for the ability to recall specific information contained in the courses (i.e. learning retention), the older participants achieved the lowest mean score in the case of Needs Analysis (Table 8:20). However, for Investment Decisions the trend was not confirmed, the lowest group being the 25 to 35-year-olds. Through a compensatory effect, overall learning outcome for the Needs Analysis course placed the older participants in the lowest-scoring group (Table 8:22), giving some support to the hypothesis that older people may achieve a lower level of learning outcome but, in fact, the opposite appeared to be the case for Investment Decisions. The case for age having an influence on learning outcome cannot therefore be substantiated in the study carried out.

One of the problems attached to drawing conclusions from the study about the influence of age on learning was a result of the choice to classify age in three categories in the pre-test questionnaire. The reasons for this choice have been pointed out in Section 7.1., but it is important to bear in mind that, in the original research design, participants in the study would have been mainly sales recruits and unlikely to have shown any major variation in age, since the company tended to recruit among younger members of the population. The fact that the original design could not be pursued led to an unexpected spread of ages among the participants. Had this been anticipated, the pre-test questionnaire would have sought more precision about the age of the participants in order that the hypotheses put forward in Section 5.2.4.3. could be tested more accurately.

9.6. Conclusion

In this final section of the discussion of the results emanating from the empirical study, some comment must be made concerning the usefulness of the distance-learning technology adopted in the study in relation to the potential of cross-cultural training in the corporate environment. The discussion will remain as objective as possible and will consider alternatives to the type of training proposed in the research. However, it will begin with a forecast of how the results would have differed if it had been possible to obtain the samples hoped for in the original research design.

The reader is reminded that the original research design anticipated a total of 200 participants, divided equally between the two countries studied (see Section 7.1.2.). Thus, the total sample would have comprised 100 French participants, half of whom would have carried out the Needs Analysis course and the other half the Investment Decisions course, and 100 British participants in the same proportions. Furthermore, the original design anticipated trainees of a similar background, for example new recruits from one single company present in both countries. Moreover, it was envisaged that tests would be carried out both before and after the learning experience (to measure learning outcome) as well as a few months later (to measure improved sales performance). It would then have been possible to determine how any difference in learning outcome related back to the socio-cultural-educational differences between participants as well as to the preferred learning style of each. If the original research design had been used, it would have been possible to arrive at a greater predictability of how the sociocultural-educational variables could affect learning outcome and to confirm the practical usefulness of using a learning styles inventory as a further dimension for supporting the development of crosscultural training courses using distance learning. The fact that the samples actually used in the study were not perfectly matched weakened the hypotheses and the arguments put forward in the empirical study. With perfectly-matched samples, it would have been possible to make more meaningful suggestions and hypotheses concerning knowledge improvement coming from the courses, since samples coming from just one company would have meant that the pre-test knowledge would have been easier to interpret and, consequently, learning gain would have been much more clearlydefinable. Past education and training experience would also have been easier to harmonise when comparing the results, since the profile of the participants would have corresponded to the participating company's recruitment profile.

Conducting the research with just one company in both countries would also have been beneficial for the company. It would have undoubtedly given a much stronger argument for the development of cross-European training in an expanding environment. The possibility of conducting a cost/benefit analysis would also have been stronger, since a new level of mutual confidence would have been possible. The risk of leaking confidential information about turnover and sales targets would have been less acute and an accurate picture of the potential return on cross-cultural course development much more feasible.

One other important advantage of working with one participating company would have been the opportunity to look into the suitability of the various training media proposed in Chapter 4 of this thesis. The choice of print-based distance-learning material was guided by the need to accomplish a study at a low cost. The complications of integrating a video support have been described in Chapter 6, although it is likely that, with the backing of one company in the two countries, it would have been possible to achieve a higher standard of course presentation both on paper and on video-cassette. Furthermore, it would have been interesting for the company to test other learning media, such as computers or audio-cassettes, and thus have a clearer idea of the usefulness of such learning supports in a cross-cultural training environment.

As it stands, the current study is, nevertheless, a useful starting-point for anyone from the corporate training environment who is interested in developing cross-cultural training using distance learning. It uses low-cost materials which are relatively familiar to everybody and the research design takes the reader from square one and covers cross-cultural course design, development, testing and analysis.

Naturally, there are alternatives to developing cross-cultural training courses. The current research has set out identify differences between cultures in order to make the cross-cultural course designer aware of a certain number of pitfalls to avoid. It does not attempt to encourage the development of courses in skeleton form and for which each country would just need to add in the cultural content to make it suitable for their use. On the contrary, the aim behind the

research has been to help the corporate environment to work towards a European culture and, therefore, not to discount cultural differences but to be aware of their existence. The approach of breaking down training courses to their bare, culturally-neutral minimum is a possible alternative strategy to the one proposed in this study, but one which the researcher feels will not necessarily encourage the work towards a European corporate culture.

Another alternative would be to continue developing training courses in the various countries and to offer specific training in cultural adaptation. There is no reason why a salesperson should not be given training in selling in one country and, when the need comes to sell abroad, to be given specific training in how to adapt a sales approach in the new country. Once again, this approach will not necessarily encourage an understanding of other cultures, although it may well encourage a tolerance of them. This, in the researcher's opinion, is not the aim of efforts to build a European corporate culture.

However, the above alternatives are quite justifiable in their own contexts and it is not the researcher's intention to criticise any of them. The final chapter of this thesis will attempt to offer guidelines to those wishing to develop cross-cultural training of the type used in this research.

Chapter 10
Conclusions and
Recommendations

10.1. Aims of the Chapter

The aim of this final chapter is to reconsider the research undertaken in this thesis. It will attempt to bring out the relevant issues of the literature review before considering how the research has built onto the existing body of knowledge. The chapter will then continue with a series of guidelines designed to help those involved in the development of cross-cultural training in the corporate environment. It will conclude with comments aimed at helping the future researcher in this field. The chapter begins with a reiteration of the reasons for undertaking the study and the way in which the problems of analysing the potential of distance learning in cross-cultural sales training were tackled. It will attempt to highlight the strengths and weaknesses of the approach chosen by drawing on the experience gained by the researcher in the course of the study.

10.2. A Summary of the Research

10.2.1. The Background to the Study

At the outset, it was the coincidence of events which led the researcher to become interested in cross-cultural training using distance learning. In the Europe of the mid-1980s, discussion was rife in political circles concerning the development of a single European market. Although January 1st, 1993 was still a long way off for the majority of businesses, talk about the free movement of labour and the opening up of a market of 320 million consumers looked bound to influence business strategy in an increasing manner over the years to follow. This appears to be still the case now, at the end of 1992 and on the eve of the opening of the Single Market. Initial expectations that thoughts and reflections about the implications of opening up Europe for business would be the domain of the larger company have proved correct. It seemed equally probable then that Europe's business schools would be increasingly looking for ways to supply the corporate environment with a new breed of person ready to integrate into a European culture.

However, it appeared that little had been done to promote a European culture in the business environment, both within and without the multinational giants. Given that one of the more efficient ways of creating and reinforcing corporate culture is through the training programmes offered to employees, it seemed reasonable to take a closer look at the differences which existed in in-house training in the different countries of Europe. In order to manage such

an ambitious project, two countries were chosen for the study: Britain and France.

It became evident that, in order to test cross-cultural training courses in the two countries, it would be necessary to use courses of cross-cultural design as well as to find a suitable mode of delivery. On the first point, it became clear from an early date that cross-cultural courses would have to be created for the purposes of testing, since none appeared to exist. However, it was the choice of the delivery mode which presented a bigger problem since it was going to be difficult to ensure that trainees received the same learning content in both countries and that changes in course delivery would not affect learning outcome.

A visit to the United States led the researcher to find a solution to the problem of delivery mode. If course delivery in a conventional face-to-face environment was going to be impossible, the distance-learning mode first seen in the United States appeared to overcome the problems of consistant delivery of learning content. Despite the fact that the delivery mode was later modified for the courses developed in the study, the use of distance learning still provided the most satisfactory solution.

Since the development of cross-cultural distance-learning courses required the identification of a training need, discussions with a multinational company in Britain and France led to the two courses being developed for sales training. It was hoped to show that it was possible to develop sales-training courses which could be exploited in more than one country and which would ensure a similar level of

learning outcome. It was assumed that the development of such courses could lead to a harmonisation in the approaches and content of sales training programmes across Europe and thus encourage a European business culture in the years to come.

10.2.2. The Existing Knowledge Base

In order to achieve the initial objective of developing test courses, the factors which might influence the learning outcome of trainees following this type of course had to be identified. Although there existed a body of knowledge in the field of cross-cultural learning, it was mainly limited to the pedagogical field and, even then, was much more concerned with education than with training. In the andragogical field, it remained for the researcher to study the variables which could influence learning, including the past educational experience of the adult learner, in order to identify potential differences in approach. This is one area in which the research was innovative and has made an important contribution to a field of cross-cultural learning

One of the most important factors identified concerned the training environment and major differences came to light between the way the two countries approached training. Whereas Britain left the corporate environment a certain freedom to choose who to train and how much to invest in training, France had developed a series of laws which centralised the training effort and ensured a certain control on the part of the state.

Thus, at least on the surface, it appeared that the French had an awareness of the importance of training which the British did not have to the same degree. However, the training levy in France has led to a complex system for distributing the funds received for training and the levy, designed to encourage the training effort, is frequently perceived as a tax burden instead of an investment in the future. The British, on the other hand, have more recently favoured a competence-based approach designed to encourage companies to invest in training and people to invest in vocational qualifications.

The literature review identified other differences in approach to the teaching/learning dilemma which appeared to be relevant when testing the learner-centred approach being developed in the courses. It suggested that a common understanding of what learning implied was perhaps difficult to achieve between the two countries since the concept of learner-centred training courses was not so well developed in France. Reasons for this seemed to go back to the cultural and educational background of the two countries under review. However, there did appear to be a mutual understanding between the British and the French of the needs of the adult trainee which pointed towards courses designed to build on learner experience and which stressed the practical utility of what was being learnt. Moreover, in the distance-learning context, the literature review indicated that the course designer should be familiar with the learner's need to be intrinsically motivated and that this need could be satisfied in part by giving the learner the possibility of measuring learning progress against improvements in professional competence.

The literature review brought out the importance of catering for the different learning styles of trainees when designing courses together with the need to help the learner develop an all-round style which may facilitate future learning. For the study undertaken in this research, it was decided that making a comparison of learning outcome between trainees according to their country of origin would not allow for differences in learning style and, for this reason, a learning-style dimension was added to the analysis of learning outcome, independent of the learner's cultural background.

In the cross-cultural context, the existing literature indicated the importance of developing an awareness of cultural differences when designing and developing courses for use in more than one country. This appeared to be particularly relevant in courses where interpersonal communication is used as a learning support (for example in sales training).

After considering the different media supports available for learning at a distance, it was decided to develop two print-based cross-cultural courses, one using a video support, in the hope of determining whether a certain type of course was more suited to a certain type of learner. In this way, it was felt that any significant differences in learning outcome between the two countries could be explained by contextual, psychological or structural differences between learners. The research model therefore took account of contextual variables, learner variables and structural variables when considering the level of learning outcome from the two countries.

A review of literature relating to course design led to the drawing up of recommendations for the development of courses at the preparation and writing stage. These recommendations are summarised at the end of Section 5.1. Following on from the review of literature relating to learning, the essential element for the course designer to bear in mind appeared to be the development "of-self" through the expansion of the "world" of the learners by building on their experience.

The search for an existing model of evaluation pointed towards the need to give the learner a structured approach based on the educational process, taking account of learner attitudes during the learning experience and oriented towards the ultimate objectives of the course.

10.2.3. The Setting Up of a Design for Field-Testing

Operationalising the study was not easy. The choice of training medium for each course had to be considered, not only for its user-friendliness in the distance mode but also for its efficiency and effectiveness in communicating the course content. For the quantitative course, the mode chosen was print-based only, since the course required little simulation.

The behavioural course developed used a combination of print-based and video-based material, since it contained concepts which called for the simulation of selling behaviour and which would have been difficult to communicate on paper only. The producing of the video support gave some valuable experience to the researcher about

problems and difficulties to avoid when designing courses of this sort and the feedback given by participants indicated significant differences in expectations for this type of learning support. Pilottesting in France also gave interesting indications about the design of print-based distance-learning courses and feedback from participants in both countries also showed up differences in expectations from this delivery mode.

The study also offers a detailed description of the developmental stages of the courses in the hope that future cross-cultural course designers and developers may have a clearer idea of the way to tackle the writing of training programmes of this sort and the problems and pitfalls to avoid. An effort has been made to give an honest account of the stages of course development encountered in the study, in order to show up the weaknesses in design and implementation. In this sense, the account is designed to give the cross-cultural course designer an idea of problems to avoid as well as of guidelines to follow.

The methodological approach to the study explains how the three levels of variables - contextual, learning and structural - were integrated into one model designed to measure the learning outcome of participants from the two countries and to explain the differences found. The research model developed was quasi-experimental in design and called for an assessment of knowledge immediately before and immediately after carrying out the courses. It is accepted that there are weaknesses in using the pre-test/post-test model to measure learning outcome from distance-learning courses, since the researcher was unable to clearly distinguish between knowledge

improvement resulting from internal and external factors. In this sense, it has been assumed that, given the limited time allowed for participants to complete the tests, knowledge improvement resulting from factors external to the courses was negligible, and therefore ignored.

However, the need to limit the time allotted to participants was partly responsible for the low response rate to the post-test questionnaire. In order to overcome this problem, it appears that the only solution would be to make completion of the course compulsory, but to do this would imply the full backing of the participating companies. A chapter of this thesis has been reserved for a straightforward account of the problems encountered by the researcher in the quest for corporate support for the study. From this, it is hoped that future researchers in cross-cultural in-house training will fully understand the difficulties of choosing a quasi-experimental model of the sort used in this research. In fact, the numbers of participants coming from the corporate environment proved too limited and it was necessary to complete with students from business schools in France and Britain, although even this solution was not without its complications.

Learning outcome was defined as the sum of the improvement in knowledge gained through carrying out the courses together with the level of learning recall. The latter was assessed by questions at the post-test stage designed to measure the participant's ability to recall specific points given in the courses. Since these points were relevant to the courses, it was not possible to measure the participant's knowledge of them at the pre-test stage. One weakness of the study

was that the distance-learning nature of the courses made it impossible to state that one group had learned more than the other or that one had a greater capacity for learning recall, since the conditions of learning could not be controlled. Although feedback was obtained on the way participants approached the tests, it was not possible to measure the level of attention paid to the course by each participant. Once again, the voluntary nature of the tests probably meant that many did not take the courses as seriously as they would have done if the tests had been given the full support of the participating companies.

Bearing in mind the size of the samples and the imbalance of numbers between France and Britain, it would not be wise to draw too many conclusions of a generalised nature. However, within the context of the research, the findings of the field tests indicated that close monitoring of questionnaires and courses was essential in order to achieve a reasonable completion rate. For this reason, it is important to determine a testing procedure giving full details of the objectives and deadlines set. Furthermore, as more than one person is likely to be administering the training, it is essential to ensure that the trainee is receiving the same instructions and recommendations before, during and after the course.

In order to achieve similar learning outcomes across different cultures, the trainees' pre-course knowledge level in the subject treated should also be similar. Although the trainees' country of origin did not appear to influence learning outcome to a significant degree in the current study, other independent variables did. The number of years of selling experience appeared to have some

significant influence on learning outcome from the behavioural course. Those with little or no past selling experience achieved higher levels of learning from the behavioural course. The tests also indicated that, the younger the trainee, the higher the level of learning outcome from a quantitative course and also the higher the level of trainee appreciation. However, the opposite appeared to be true for learning outcome from a behavioural course. Thus, it may well be that a straight-forward theory-based distance-learning course such as Investment Decisions will have less success with an older trainee, who will do better with a practical-based course oriented towards the behavioural concepts of selling.

10.3. Guidelines for the Development of Cross-Cultural Training Courses in the Corporate Environment

The research carried out in the study of cross-cultural sales training using distance learning resulted in a unique opportunity for the researcher to gain experience in a field which had no previous references of this kind. Apart from the findings coming from the field study, which make a contribution to existing knowledge in cross-cultural in-house training, the final pages of this thesis will offer a series of guidelines to those from the corporate environment interested in the development of this type of training.

The aim of the guidelines which follow is to offer assistance and advice to corporate training managers pursuing cross-cultural inhouse training, whether from the point of view of course design, development or evaluation. Some of the guidelines are relevant to all types of training; some are particularly relevant to distance learning;

some apply to the national as well as the cross-cultural environment. Nevertheless, the one common factor is that they have all been taken from the experience gained in carrying out the research described in this thesis.

The guidelines take the form of key recommendations addressed to the different actors in the corporate training environment. Care has been taken to give the recommendations an order of priority at each level and a note at the beginning of each section clarifies to whom they are addressed. They have been organised in four levels. The first is that of training strategy, the second course design, the third course development and the fourth at the level of training implementation.

10.3.1. Guidelines at the Strategic Level of Training

These recommendations are specifically aimed at the strategic decision-makers. These are the people who will be taking the initial decision of whether or not to go ahead with the cross-cultural training initiative in their company. Two main questions will be asked at this stage:

How much is the initiative likely to cost and is it worth the investment?

What is the best way approach the initiative?

An order of priority has been given to the following guidelines which respects the order of these questions.

- 1 Conduct a cost/benefit analysis of the training programme and agree, at the outset and in detail, how this will be measured. Misunderstandings are common in the international environment and not everyone will agree on what a cost or a benefit represents.
- 2 Once the cost/benefit analysis is ready, compare the solution of cross-cultural course development with other alternatives. Some of these alternatives have been discussed in the conclusion of the preceding chapter and the choice will depend upon the training strategy you wish to implement.
- 3 If a multi-media design is being considered, make sure that all costs are included in the initial cost/benefit analysis. For example, video standards vary from one country to another and the costs involved in decoding and recoding can be high enough to abandon the idea of using such supports. Moreover, video is greeted with a varying degree of popularity as a training support from one country to another and the novelty effect of such training supports will probably not be the same across cultures. It is better to recognise these points at the outset.
- 4 When the decision to develop cross-cultural training has been taken, define the target countries or cultures. A thorough knowledge of the cultural and training context is advisable, since different cultures seem to have different interpretations of learning, training, the working environment and the learning environment. Moreover, distance learning may not be understood in the same way by the country or company in question, by the trainer and by the learner. The benefits of establishing cross-cultural training may well be

outweighed by the difficulty of having all parties work towards the same goal.

- 5 Determine precise training needs in each country. Nobody is interested in satisfying a non-existent need. This may seem obvious, but an example will make the point clear. A need for sales training may be identified in more than one country. The need is, for example, in the negotiation field. However, the way a British salesperson approaches the negotiation with a customer may have nothing to do with the way a salesperson from another country works. If the person-to-person rapport is the key to successful selling in one country and the product is the key in another, crosscultural training may not be the solution.
- 6 Do not assume that the training background of trainees in different countries is the same or holds the same importance from one institution to another. Although, in the current study, past training experience did not appear to have any significant influence on learning outcome, participants from the smaller French companies with less experience of in-house training of the type offered appeared more willing to participate.
- 7 Establish one common set of learning objectives for the course with each partner abroad. It is only by doing this that everybody involved will be working towards a common goal. It is also in this way that misunderstandings about course aims will come to light and a decision to abandon may be taken at an early stage.

8 - Draw up standards of achievement for the course which can be applied from one country to another.

10.3.2. Guidelines for the Design of Cross-Cultural Training Courses

At this point, the task will be passed over to someone specialised in course design, in order to establish the structure within which the course-writer will work. The following recommendations for course design have been organised on three levels. The first level concentrates on the design of the training course itself, the second on the approach to the evaluation of the course and the third on the design of media supports. The training medium chosen in the current study was primarily print-based, with a video-based support for one of the courses. Section 5.1.1. of this thesis presents guidelines for the design and writing of print-based distance-learning supports. Consequently, the recommendations given in the third part of this section dealing with the design of media supports will concentrate only on the design of video-based supports.

10.3.2.1. The Design of the Course

9 - Approach course design on four levels: the countries of application and their educational and training context; the corporate or institutional environment in which the course will be used; the group perceptions of the type of learning to be proposed; the individual profile of the end-user (the trainee). The design of the course should recognise all four levels.

- 10 Ensure the overall design of the course is learner-led. Although this is important for all forms of training, it is particularly relevant for distance learning, where the course-writer will be addressing learners individually and in their own context.
- 11 Make a thorough study of the socio-educational and experiential background of the trainees targetted. There will be differences between trainees' expectations from one country to another and the course will have to adapt to this. For example, page layout, font and section numbering may influence a trainee's motivation to complete. A set of rules to follow for course writing should be established at the design stage. They may be based on the recommendations given at the end of Section 5.1. of this thesis.
- 12 The study of national culture should highlight the use of distance learning as an in-house training support. This will affect trainees' opinions of the delivery mode which may, in turn, influence their motivation to participate. Such general opinions should be anticipated at the course design stage.
- 13 Get to know the attitudes, perceptions and motivations not only of the trainees who are likely to use the course but also of the people around them. Superiors and subordinates will have an influence on a trainee's motivation, particularly in a distance-learning environnment where the level of encouragement from those around the trainee will give external reinforcement to the trainee's intrinsic motivation to complete successfully.

- 14 Make the design of the course as culturally neutral as possible. It is essential for the course-writer to avoid using stereotypes or culturally-sensitive contexts. If there is a risk of this, it should be eliminated at the design stage. This is particularly important when using one course-writer per country.
- 15 Identify, at an early stage, whether a learner-group is likely to be available. If so, make sure the design encourages its exploitation. Distance-learners do sometimes have the opportunity of meeting up, linking up through telephone networking or using electronic mailboxes in order to exchange experience of training courses and this can benefit learning. In such a case, the course should be encouraging trainees to compare notes.
- 16 Ensure that the methods used in the training course (approach to calculations, algebric symbols, etc.) fit the culture of the learner. For example, the French do long multiplications and divisions in a different way to the British.
- 17 Make sure that the methods used fit the mental equipment of the learner and that they will be clearly understood. For this, it is important to have a good knowledge of the learner-profile of the target trainees. If, for example, salespeople are recruited with differing educational levels in the countries under review, the course developer must take account of this in order to pitch the course at the appropriate level. In the tests undertaken in the current study, there was a problem with Investment Decisions, since the same approach and pitch was used in tests with two unmatched groups. Had it been possible to predetermine the profile of the groups, the

course could have been developed using an approach suited to the trainees in both countries.

- 18 Co-ordinate and communicate the stages in course design to collaborators in each target culture. Respect their knowledge and their expertise.
- 19 Within the overall design of the course, offer trainees the opportunity of commenting on or improving on the training in order to suit their needs better
- 20 Take account of how the course will be administrated and monitored. If it is too long, it needs to be broken down into manageable units. Determine how much time will be available to the trainee for completion of the course and make sure the course-writer states this clearly.
- 21 If individual face-to-face feedback on the course is likely to be available, cater for this in the course design.
- 22 Take into account the professional background of the trainees targetted. In the findings relating to the current study, past selling experience had some degree of significance on the level of learning outcome. If the trainees are likely to have a thorough grounding in the subject treated in the course, it should be designed to build on this grounding in order to achieve a higher level of learning outcome.
- 23 Since cross-cultural comparisons of training effectiveness and efficiency of distance-learning courses are likely to be made, make

sure that the trainees' writing and reading abilities are similar. The same applies to their attitudes, outlooks and general intelligence.

- 24 Ensure that the subject matter is matched to the learner's stage of development. The learner will become demotivated if the course starts at too high a level or if the progress expected is too rapid. This is particularly the case in distance learning.
- 25 Make sure that the course is professionally relevant for the trainee and that the connection between the content and the professional context is repeated throughout the course.

10.3.2.2. The Design of Evaluation

- 26 Design and employ only one questionnaire for all cultures. Cross-cultural pilot-testing of the questionnaire will check that all the important socio-cultural and educational details of the trainees have been considered and their pre-course knowledge of the field can be compared from country to country.
- 27 Take care over instructions for the completion of questionnaires. The French, for example, do not understand the concept of ticking boxes. If a learning-style test is included in the questionnaire, arrange for the results to be given to the trainees in order retain their motivation. People are always keen to learn more about themselves.
- 28 Accepting that the training need will be the difference between the desired performance and the pre-course performance, ensure

that the latter elements are considered in the questionnaires, both from a qualitative and quantitative point of view. Ensure validity in knowledge acquisition assessment by repeating the pre-course questions in the post-test questionnaires.

- 29 Cater for a changing training need over time by designing evaluation for developmental purposes. This is particularly relevant in the design of post-course questionnaires.
- 30 Only look for essential information in the questionnaires and respect the time available to the trainee for completion as well as the conditions under which the questionnaire will be completed. Remember also that the questionnaires will need to be relatively quick and easy to analyse.
- 31 Allow for a series of self-assessment questions (SAQs) to be inserted in the course at appropriate stages. Ensure that the course-writer understands the role of SAQs as learning reinforcers.
- 32 In order to harmonise the evaluation effort and obtain data which can be analysed cross-culturally, determine who is going to evaluate at the post-course stage and when. Coordinate the evaluation process in both method and time and cater for the needs of evaluators (through learner-groups, feedback sessions, etc.).
- 33 Establish an on-going system of evaluation after the course is completed. Try to distinguish between internal and external learning outcome and account for this in the evaluation.

- 34 Measure learning outcome both immediately after the course as well as later. Try to determine the thinking and feelings of the trainee through the evaluation immediately after the course. A questionnaire three or four months after the course could measure how much learning has been retained. Look also for improved performance indicators (e.g. sales figures). However, bear in mind staff-turnover rates when evaluating performance. If performance evaluation is carried out after too long a period, trainees may have moved on and, consequently, may no longer be available.
- 35 Measure learning gain on an interval scale in order to avoid giving a score-advantage to those who had little subject knowledge at the pre-course stage and are therefore able to show disproportionate progress at the post-test stage.
- 36 Consider the success of the course from three angles: the context, the learner, the course.
- 37 Ensure excellent communication between evaluators from different cultures.

10.3.2.3. The Design of Media Supports

As mentioned above, this section aims at giving the course designer one or two recommendations concerning the design of video supports. The reader is reminded that recommendations concerning the design of print-based supports can be found in Section 5.1.1. of the thesis.

- 38 Decide on the video standards required. The master tape should be high-band U-Matic using the PAL standard since studios on the Continent generally use this support, even when copying onto other standards (for example VHS SECAM in France). Across Europe, most countries use one of the PAL standards for playing back. France is an exception to this rule. The French SECAM standard can be played back on PAL systems but only in black and white. It is essential to check all of these problems at the design stage.
- 39 Short video-tapes are the most robust and, since the video support is likely to be played, stopped, rewound, etc., on many occasions, it is probably wise to use no longer than 60-minute tapes.
- 40 Video should be used for illustrating dynamic, real-life situations. For example, in a sales situation where interaction between people is simultaneous and several variables are combined in one environment, it is often extremely difficult to transmit the desired training content through the written word. Video should also be used where analysis of a situation is essential to learning, since it offers the learner the possibility of reviewing at will.
- 41 Unless there are no budgetary constraints, film sequentially (i.e. film Scene Two after Scene One and before Scene Three). In any event, this will save an enormous amount of time at the editing stage.

10.3.3. Guidelines for the Development of Cross-Cultural Training Courses

Once the design of the training course has be defined, it will be used by the course-writer as a framework for the development of the course. The following recommendations relating to course development are given at two levels. The first relates to the writing of the training course and the guidelines should be used in conjunction with those given for the writing of print-based distance-learning materials in Section 5.1.1. of this thesis. The second set of recommendations concerns the development of video supports and they come from of the experience gained in the study conducted in the current research.

10.3.3.1. The Writing of the Training Course

- 42 Cater for all learning styles when writing the course. The results of the study carried out in this thesis indicated that all learning styles can benefit from cross-cultural training. It is hoped that this was a consequence of the researcher's desire to develop courses in which each learning style would find some degree of satisfaction. The course developer should therefore be familiar with the needs of different learning styles before beginning the writing.
- 43 Ensure that the subject matter is properly ordered and is in accordance with the course design. Learners will lose interest in their work if they do not have a clear idea of what they are learning and how it fits into the overall structure. If the training course is part of

- a larger training programme, its place within the programme should be stressed at frequent intervals.
- 44 Develop the entire course in one language before transferring to another. Failure to do this may mean a loss of co-ordination which will result in the development of two different courses.
- 45 Avoid stereotyping and irony. This point goes back to the design stage, which should be as culturally neutral as possible.
- 46 When transferring from one language to another, avoid wordfor-word translations as well as culturally-specific idioms (for example, money doesn't grow on trees in France).
- 47 Check for accuracy of transfer of the course content by using back-translation. Although the back translation will not correspond word for word, it will ensure that the content is the same. Word-forword translating leads to unsuitable expression which indicates to learners that the course was not written for them but for some "distant foreigner".
- 48 Use only native speakers of the target language for transfer. They should also be experts in the appropriate area of training. Once again, failure to do this will lead to awkwardness in expression, a loss of rapport with the learner and an eventual loss of learner interest. If possible, the people used should also be familiar with distance learning.

- 49 Ensure that written and visual aids recognise the implications of the cultural environment. Avoid culturally-specific connotations which, in any case, do not translate from one culture the another in the same way.
- 50 If the course is being written by bilinguals, check that words and structures from one language do not filter through into the other. Bilinguals change from one language code to another with relative ease but external factors, such as stress and fatigue, can lead to code "mix-ups" and the resulting expression often lacks clarity.

10.3.3.2. The Development of the Video Support

- 51 If comparisons in learning outcome are to be made at some stage, use exactly the same camera shots and timing for each version filmed. This needs to be prepared in advance of filming. Variations in shots between versions may influence learner concentration in different ways.
- 52 Script the film in detail but, unless using professional actors, do not insist on the scripts being learned by heart. The key elements of each sentence are what must be communicated.
- 53 Ensure that the set is culturally neutral (e.g. if filming is taking place in a foreign environment, a portrait of Queen Elizabeth II on a wall may interfere with a French learner's concentration).
- 54 Do not use sound-dubbing for the same reasons and do not consider getting away with the "foreign touch", since such approaches

will divert the learner's attention away from the content of the training course and, therefore, interfere with learning outcome.

10.3.4. Guidelines for the Implementation of Cross-Cultural Training Courses

This final set of recommendations relates to the running of crosscultural training courses. It is relatively short, since the researcher had only a limited experience of running the training courses developed in the current study. The following recommendations are given on two levels, the first concerning the pilot-tests and the second the operation of the course.

10.3.4.1. The Running of the Pilot Tests

- 55 Pilot-test the course in each country and, if possible, at around the same time. The experience gained through simultaneous pilot testing in all the target countries will allow comparisons to be made between the countries and any changes made to the courses will effectively be cross-cultural.
- 56 During and after pilot-testing, make modifications to the course simultaneously and keep all people involved in the development of the course completely up to date at all times.
- 57 Once the pilot-testing period is over, turn the page on everything accomplished so far and answer the following questions: Does the course satisfy the training need (i.e. valid)? Is it effective? Is it efficient?

10.3.4.2. The Implementation of the Training Course

- 58 The first time the course is used, present it to the trainees of each country in the same way (and if possible by the same person). If it is not possible to have this done by one person, ensure that the approach to the course is clearly presented in a document explaining how to work through the course. This document should be inserted at the beginning of each copy of the course, video support, etc.
- 59 Keep deadlines for completing the course short and establish a system for chasing up on late-finishers.
- 60 Give each trainee the opportunity to comment on the course in its overall form and in its detail. Not only will the training need change over the years, but also the profile of the trainee. It is important to recognise this in the course and questionnaires.
- 61 Provide the facilities for trainees to carry out the course in different places (i.e. at work, at home, while travelling, etc.).

10.4. Concluding Remarks

The guidelines set out above relate more specifically to the needs of the in-house course designer, developer and administrator. There are, however, some points that the external researcher should be aware of when setting up tests of the type used in the current study. Section 7.2. has attempted to point out some of the pitfalls the researcher should try to avoid when setting up field tests. There are six further recommendations aimed specifically at the external

researcher and which come from the experience gained in carrying out this study.

The first two relate to the initial stage at the beginning of which it is important to determine whether there is a training need in the target countries and ensure that the need is comparable in type and importance. Even in multinational companies, many decisions are taken on a national basis. The worst thing that can happen is that cross-cultural agreements are set up, course development is in its final stages and the company in one country unilaterally pulls out. This advice comes from the researcher's own bitter experience. Furthermore, in order to avoid such disappointments, which may throw the whole project for cross-cultural training into question, it might be advisable to work with several institutions and thus reduce the consequences of institutional drop-out. If the research is being conducted by an independent researcher, try to negotiate contracts with interested institutions. Apart from reinforcing the base for course development and implementation, it should be remembered that cross-cultural research can cost a lot of money, particularly in travelling expenses. A contract should include participation in the costs.

At the design and development stage, it is important to use products (as examples) which are as neutral as possible. If the researcher of this study had used the example of selling a photocopier as the product in the sales simulation, it would have been impossible to test the course with such a broad learner-base.

The next two points are important at the implementation stage. The first is particularly relevant for researchers using their own funds (as was the case for the current study). Unfortunately, the researcher must be prepared to "lose" a lot of support material when pilottesting in a real distance-learning environment. For reasons unbeknown to this researcher, video-cassettes seem to command a return rate of only 50%. The only way to avoid such losses might be to establish a system of "signing out" such material. However, in order to do this, it is necessary to have the full support of the participating institution. Leading on from this, it is highly desirable for the researcher, course designer and/or developer to be at the presentation of the test to participants. By being present, those directly responsible for the course will reinforce the seriousness of the tests. They should also be prepared to answer any questions that may arise. It is wise to make a note of everything that is said at this meeting, since it will provide valuable information relating to learner motivation and attitude.

The final recommendation relates to the fieldwork design and should be considered as early as possible in the research. It is essential, when making cross-cultural comparisons, to ensure that the groups match. The use of unmatched groups has been one of the main weaknesses in the study presented in this thesis.

From the above points and recommendations, it is hoped that a complete picture of how to develop cross-cultural distance-learning course for in-house use has been given. In setting the guidelines out in this way, the researcher has gone over the experience gained in conducting the present research. He does, however, accept that other

suggestions may well arise when developing other types of training courses in other circumstances. He does not pretend that the list of guidelines is complete for all situations.

If there has been one overriding lesson that has been learnt from the research it is this. Given the difficulties experienced in operationalising the research model in the two countries, the need to obtain full company backing for this type of research cannot be emphasised enough. To achieve a valid sample of trainees for this type of quasi-experimental design, it is essential for the researcher to have first obtained the written commitment of a company. With this, it is possible to obtain the right level of trainee commitment for the tests. It is also a way of ensuring that when the decision-maker has moved on, as is frequently the case over a period of research, continuity is more easily assured. Furthermore, without the commitment of the company, there is no guarantee of the trainee carrying out the tests correctly and, therefore, the results are thrown into doubt. If the researcher has made one principal miscalculation in the current research, it is this.

However, the work has provided an insight into the development of distance-learning training courses across national boundaries. To a certain degree, it has anticipated the need for the European corporate environment to train employees in a more co-ordinated manner in order to encourage the building of a new Europe in which there is a greater potential for employee mobility.

Another of the innovative aspects of the research design has been the integration of three levels of variables capable of influencing learning outcome into one model. On the learning level, the study has considered differences in the learning approach of two countries and has attempted to find reasons for these differences in the socio-educational-cultural context of the country. On the contextual level, it has reviewed and compared the training contexts of the two countries, offering cultural explanations for the differences in approaches. On the structural level, the study has offered guidelines for the design of both print-based and video-based distance-learning materials for exploitation across national boundaries

The research has offered an alternative to cross-cultural learning comparisons by defining learners not only according to their country of origin and socio-educational background, but also according to their preferred style of learning. In this way, it has attempted to suggest which type of learner is likely to benefit most from the type of learning proposed in this study.

Through a first-hand account of the experience of the researcher in operationalising the research, this study has given a unique insight into the problems attached to developing and testing training courses across national boundaries. In the researcher's personal opinion, the development of cross-cultural learning for in-house training will have an increasing influence on corporate training policy over future years, but it is likely to go hand-in-hand with the development of corporate Europe. It is for this reason that cross-cultural training will probably slowly filter down from the multi- to the trans-national company in a first time. As more cross-cultural business is conducted in Europe, this type of training is likely to be used first to encourage a better understanding of another country. Undoubtedly, it will take

many years for corporate Europe to become a generalised concept in the smaller business environment, but, in the researcher's opinion, with the impetus coming from larger companies, Europe-wide corporate training policy will become a reality.

For those wishing to pursue research into the area of cross-cultural adult learning of this type, the study has offered a conceptual framework, highlighting those variables which may influence the level of learning outcome. It has also offered a yardstick for those wishing to measure the progress of efforts in the harmonisation of in-house training in the two countries under review. Although the study has limited itself to training in the field of selling, its application might be equally useful to other areas of business where the free movement of labour has perhaps more potential. It is true that, during the course of the research, many people were interviewed and, on several occasions, it was suggested that efficient salespeople in one country would not necessarily be efficient in another. Nevertheless, for reasons stated in the previous paragraph, cross-cultural in-house sales training does have its place.

One area which was not the aim of this research, but which is nevertheless worthy of study, is that of the cost savings attached to developing single training programmes across Europe. By costing training-course development in each training centre of a multinational across Europe and comparing the total cost to that of centralising course development in one centre, the cost/benefit ratio may well be found to be profitable to the company.

By attempting to provide a broad approach to developing crosscultural distance learning for in-house sales training, this research has offered an account of how trainees acquire knowledge of their profession through in-house training and some of the problems which must be overcome in the establishment of training programmes across national boundaries. The conceptual model proposed in the study, together with the research and fieldwork designs, could be applied to other divisions of the company apart from sales, thus opening up the horizon for further research which could benefit both the corporate and the educational and training environment.

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