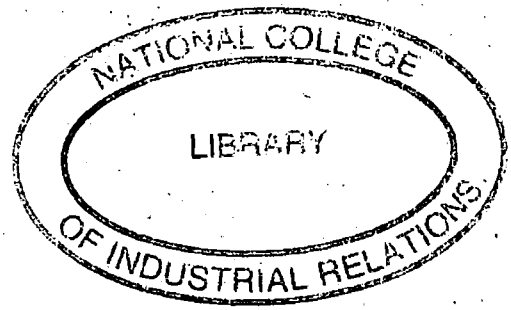
NATIONAL COLLEGE OF INDUSTRIAL RELATIONS



A MODEL OF TRAINING AND DEVELOPMENT FOR THE IRISH MOTOR INDUSTRY

BY

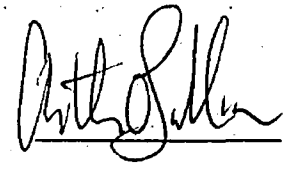
ARTHUR J. O'SULLIVAN, B.Tech.(Ed.)

A DISSERTATION SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS (TRAINING & DEVELOPMENT)

DECLARATION

This thesis is the result of independent investigation. Where it is indebted to the work of others, acknowledgement has been made.

I hereby declare that no portion of this thesis has been submitted in support of an application for another degree or qualification of this, or any other, institution of learning or university.



Arthur J. O'Sullivan

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ACKNOWLEDGEMENTS

The author wishes to thank the following for their help, encouragement and support:

Ms. Candy Murphy, Goodbody Economic Consultants.

Mr. Trevor Woods, Dublin Institute of Technology, Bolton St.

Mr. Stephen Byrne, Motor Distributors Ltd.

Mr. Jim Farrell, Motor Distributors Ltd.

Mr. Eamon French, FAS.

Fr. John Brady S.J., National College of Industrial Relations.

Messrs. Pat Doyle and Henry Acheson, WRTC.

Mr. Patrick Malone, DRTC.

Mr. Dominick Tuite, Dublin Institute of Technology, Bolton St.

DEDICATION

This work is dedicated to my parents, parents-in-law, family and friends and most importantly, my wife Grace - my inspiration.

PREFACE

The author, Arthur J. O'Sullivan, is employed as the training instructor for an Irish motor distributor, having previously qualified as a Motor Vehicle Technician; graduated and worked as a teacher of Engineering and Technical Graphics in the second-level education system for a number of years.

As part of the author's current role he is charged with responsibility for the introduction of new technologies and test equipment to a nationwide dealer network.

This study is undertaken in pursuance of a personal ambition of the author's: to encourage the management of the Irish Motor Industry to examine the type of training that they provide, compare it with best practice and implement appropriate change.

GLOSSARY

GLOSSARY

Dealer	Retail Outlet of the Motor Industry.
Department of Education	The Department of Education of the Irish Republic.
Distributor	Importer and wholesaler of motor vehicles.
DIT	Dublin Institute of Technology.
FAS	The Irish Training and Employment Authority.
Franchised Dealer	Retail Outlet of the Motor Industry with a commercial agreement to sell and service a particular vehicle manufacturer's products.
IBEC	The Irish Business and Employment Confederation.
IMI	The Institute of the Motor Industry.
IOMTR	International Organisation for Motor Trades and Repairs.
IRTE	The Institute of Road Transport Engineers.
Junior Trades	The Junior Trade Examinations of the Department of Education.
Manufacturer	Manufacturer of motor vehicles.
RTC	The Regional Technical Colleges of the Irish Republic.
Senior Trades	The Senior Trade Examinations of the Department of Education.
SIMI	The Society of the Irish Motor Industry.

ABSTRACT

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The work that follows sets out to examine the training system that exists to serve the Irish Motor Industry and to propose a model for its improvement. The basic hypothesis is that the system is poorly poised to serve the Industry's future needs and is in need of improvement and refinement.

The examination begins by establishing the demands that exist on this training system and then continues by evaluating the system in educational and philosophical terms. A review of the training practices of other countries is undertaken.

Public sector trainers constitute the largest grouping of training practitioners in the Industry. They also have an important role to play in the shape of the training system of the future. A major part of this work is devoted to a unique study of the opinions and experiences of this group.

Public and private sector training policy and practice is also examined with particular reference to future training provision and planning.

In the course of researching this topic, the findings indicate that the demand for non-technical training is not adequately met by current provision and that non-technical training arrangements in many areas of the Industry are ad-hoc. Before suggesting improvements to these arrangements it was first of all necessary to analyse the skills that will be required in the primary occupational roles of the Motor Industry in the future. This skills analysis allowed for an informed assessment of training provision to be undertaken, covering roles that heretofore were not analysed in such a way.

The final chapter recommends a comprehensive method of improving Industry training provision. This method involves the establishment of a central council that would oversee all facets of the training function of the Industry, both in the private and public sectors, and serve as the awarding and certification body for all crafts and occupations in the Industry.

CHAPTER 1

INTRODUCTION

This chapter presents an overview of the study, spells out its objectives and outlines the key methodological tools used in the study.

1.1 BACKGROUND TO THE STUDY

The Irish Motor Industry, like many other retail and service industries, is undergoing continual and profound change. Such change is the result of many factors. Its consequences are most keenly felt by those that implement that change: Motor Industry Personnel.

The demands put on the personnel working in the Industry are compounded thus:

- The customer is becoming more and more demanding
- Technology is putting more and more demands on the intellect of the individual.
- Cost is a factor in every action and decision taken
- Manual tasks are becoming less arduous but also less called for
- Ireland has truly taken its place in Europe and become very much attuned to European standards and thinking
- The computer has infiltrated every aspect of life
- Change is always present.

It is impossible not to get caught up in the waves of change that sweep through the Industry with every "all-new" model that is introduced, or "revolutionary" new machine offered, changing a particular task forever. Every month some new development occurs that has technological progress included, with ramifications for some element of the Industry.

For those at Manufacturer,or Distributor, level within the Industry change is more an evolution, it never ends. There are endless model face-lifts, technical modifications and improvements that require varying degrees of knowledge upgrading for the personnel involved. At individual garage level the same can be said.

Irish Motor Industry Training Provision

Irish motor distributors serve a very important role in the provision of training for the Industry generally. Three aspects of training provision are important to this study:

- The role of the distributor in providing training
- The type of training provided by the distributor
- Non-technical training and training for non-technical occupations

The Role of the Distributor

In the Irish market the distributor, or importer, assumes responsibility for ensuring that their retail outlets workforces have the opportunity to upgrade their knowledge and skills to meet changing demands. The Irish distributors effect a lot of control on the standard of CVT offered to Motor Industry personnel.

In fact, the various Irish motor distributors influence the technical upgrading that is available to the workforce of franchised dealers in every corner of the country. The standard of personnel within the Industry is, therefore, largely dependent on the particular distributor to which a dealership is affiliated.

Irish motor distributors and importers serve a cornerstone function in the training and development of the many thousands of individuals that make up the Irish Industry. If such key bodies fail in their function then many people are professionally ineffective as a result.

An examination of the overall training system of the Irish Motor Industry, with a particular emphasis on the function and role of the distributor, will be undertaken. The outcome of the study is intended specifically to assist Irish distributors to formulate and implement training plans for the future, and to develop a national approach to training.

This study will also examine the future skills needs of Industry personnel and compare those needs with current training provision.

Nature of Training Provision

Current methods employed to train technical personnel are conventional and primarily of the tried and tested lecture, with some practical experience, format. From an

educational viewpoint they are "re-active", i.e. a reaction to some development, rather than "pro-active", i.e. along pre-determined and planned lines which can accommodate change when it arises.

The possibility for more "pro-active" planning as the most effective method of training the personnel of the Irish Motor Industry for the future, will be investigated.

Non-Technical Training Provision

Within the Motor Industry training system there is an almost exclusive emphasis on technical training, with a large proportion of available training resources being devoted solely to upgrading technical staff. Further, there are a number of equally important occupational roles that receive inadequate, or inappropriate, training intervention. The training needs of these areas of non-technical training will be examined in later chapters. Also, non-technical training interventions for technical staff will be discussed.

Other Issues arising

Aside from distributor training, a number of other issues will require analysis in the course of this study. Primarily, these are as follows:

- The possibility for the introduction of new occupational roles
- Public sector training provision and policy
- Methods of improving training
- Previous Research and Published Material

1.2 FOCUS OF STUDY

Occupational Roles

This report will examine the area of job description and demarcation of occupational roles, particularly in terms of craftspersons and the systems that exist in other countries

such as Germany. It may be desirable to introduce new occupational roles to the Industry to cope with increasing technological demands.

Public Sector Training Provision

Public Sector Training in Ireland plays an important role in initial training for the Irish Motor Industry. A large number of trainers work in the area of Apprentice Training in the various FAS training centres and in Department of Education controlled colleges. Given the long term impact that these trainers have on the standard of personnel within the Industry, their views and experiences are vital to any study of the training system within the Industry. A survey of a large number of these trainers forms an important part of this work.

Training Approaches

The study will also examine the possibility of fundamentally altering the present training systems to reflect a more individualistic and holistic approach. The author will evaluate the appropriateness of current methods of disseminating information and general skills upgrading and suggest improvements that can be made.

Previous Research

A review of related published material will be presented in order to allow for a more comprehensive and informed analysis of the various issues to be undertaken.

1.3 AIM OF THE STUDY

To evaluate the existing training system and develop a model of training and development suited to the future development of the Irish Motor Industry, taking

cognisance of various factors that may impact on the training function of the Industry over the next number of years.

Objectives of the Study

1. To identify key factors affecting the industry and its training function.

2. To identify the training needs of the industry.

3. To examine training systems in other countries.

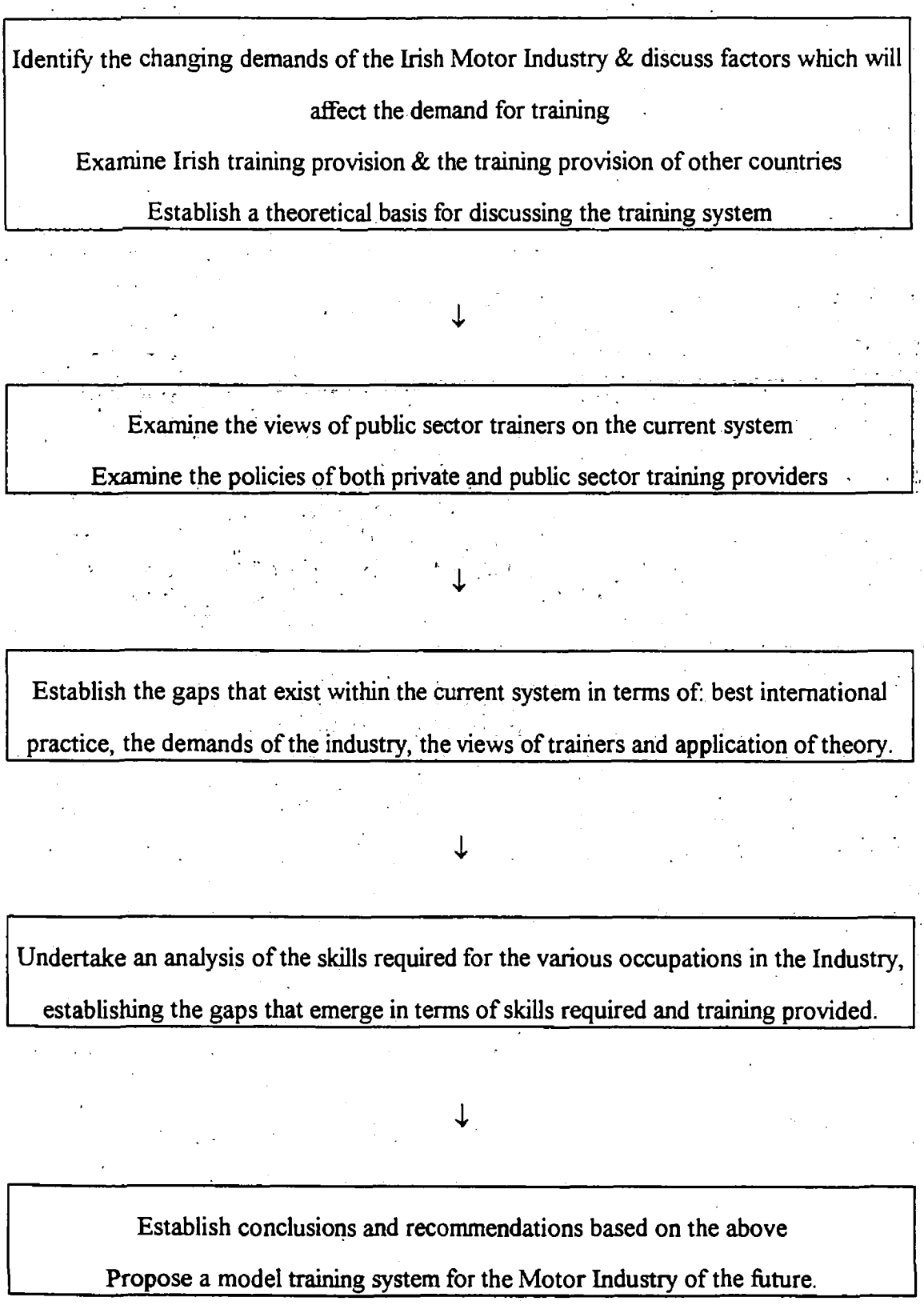
Using 1, 2 and 3 to:

A. To evaluate the existing training system in the Irish Motor Industry.

B. To formulate a new model of training and development for the industry.

Figure 1, on the following page, provides a schematic presentation of the study.

Figure 1. Outline of Study



1.4 STUDY OUTLINE

The study will take the following chapter format:

Ch.1. Introduction

Ch.2. Research Methodology

Descriptions of the methods employed to gather information in order to achieve objectives.

Ch.3. The Motor Industry

In order to identify the key factors affecting the training function it is important to understand the structure and relationships that exist between the Irish Industry and the world-wide Industry. Other factors, such as changing vehicle design, legislative issues, environmental constraints and customer requirements, that will influence the future of the Industry, will be outlined.

Ch.4. Literature Review

Analysis of published material pertinent to the issues arising from the objectives.

Ch.5. Training Practices in Other Countries

Examination of training practices in other countries with the aim of determining the best standard of international practice.

Ch.6. Irish Motor Industry Private Sector Training Practice:

Overview of system existing in Irish market; results of primary research on participant satisfaction; government / employer / association policy and likely developments. Systems employed by the various Irish distributors to train their personnel; shortcomings and advantages of these systems.

Ch.7. Irish Motor Industry Public Sector Training:

Primary research results, issues raised, outcomes and a general overview of public sector training as applied to the Irish Motor Industry.

Ch.8. Occupational Profiles and Identification of Training Needs:

Models of skills analysis applied to the various roles in the industry; Identification of key skills for the various occupational roles in the industry; matching of skills analysis and training provision, as discussed in chapters 6 and 7, in order to identify the key training needs for each occupation.

Ch.10. Conclusions, Recommendations and Model of Training and Development for the Irish Motor Industry:

Proposal of model that encompasses the best of current practice, compensation for shortfalls and provision for the future.

Appendices and Bibliography

CHAPTER 2

RESEARCH METHODOLOGY AND DESIGN

2.1 INTRODUCTION:

Research undertaken for this study is comprised of two different strands:

1. Primary Research

Consisting of a postal survey of public sector training personnel and of participants on motor training programmes. The public sector survey forms a vital part of the overall evaluation of the current Irish training system and is discussed further below. The participants' survey aimed to assess participant reaction to a typical training course in the Industry and to compare this to the reaction of a similar group from a public sector course.

2. Secondary Research

A comprehensive literature review was undertaken to formulate a theoretical framework for the training system itself and to allow for an informed analysis of that system. This review follows in the next chapter.

2.2 PRIMARY RESEARCH

In order to evaluate the training system that is currently employed by the Irish Motor Industry it is important that some insight be gained into the current practices employed and how the system is perceived by the experts in the area of training. In the Irish situation, the bulk of public resources allocated to training are consumed in the provision of Apprentice training and further education as supplied by the Dept. of Education and FAS. The FORCE Report states[1] that:

> "The number of training days by day per employee is small after apprenticeships..."

As a result the biggest group of practitioners of training in the Motor Industry are to be found in the Regional Technical Colleges and Dublin Institute of Technology (DIT)

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[1] Dominick Tuite, "Employment, Work and Training in the Irish Automobile Repair and Distribution Sector", FORCE Report, Dublin Institute of Technology, Feb. 1994, : p.36.

under the control of the Department of Education, and in the FAS Training Centres under the control of the Department of Enterprise and Employment.

At no time in the past has any survey been published which sought and reflected the views of this important group of Trainers. It is obvious that any analysis of training, in the context of the Irish Motor Industry, should seek the views of this influential body of people.

Therefore, the most important primary research carried out, for this study, was a survey of the training instructors and lecturers in FAS and the Dept. of Education.

Objectives of Primary Research

- To determine the scale and cost of training apprentices
- To determine the educational standard of entrants to the Motor Industry
- To determine the views of the trainers on alternative standards for the Industry of the future
- To examine the relevance, structure and design of the Apprentice Curricula
- To assess attitudes to and reaction to the new modular approach to Apprentice Education and Training.
- To determine the demand for, and extent of, non-technical training within the public sector of the Industry
- To determine the adequacy of funding for such public sector training
- To examine In-Service training provision for trainers in the public sector
- To assess future skills requirements and occupational roles within the Industry

Research Design

There are two distinct strands within the training system for apprentices: **FAS Training Centres** catering primarily for 1st year apprentices, and the various **Dept. of Education Colleges** catering for other apprentice and post-apprenticeship studies. These training centres and colleges are scattered throughout the country. It would have been extremely difficult to visit each one individually and attempt to interview the individual lecturers/trainers. For this reason a postal survey was undertaken.

The survey document took the form of a questionnaire which sought to elicit both quantitative and qualitative information. Furthermore, there were both open-ended and closed questions asked of the participants.

In order to pilot the questionnaire, initial drafts were sent to a sample of persons from the proposed respondent cohort that were known to the author. Choosing such a sample for the pilot was necessary as it was important that those chosen were likely to respond and spend the time necessary to analyse the design of the questionnaire. Such feedback was vital if the survey was to be successful in achieving its objectives.

In particular with attitude seeking questions, it was important that the respondent should not be asked a "loaded" or "leading" type question. The sample survey asked that the respondents comment on any question that appeared to be of this nature.

Survey Cohort and Sample

There are between 60 and 80 persons engaged by FAS and the Department of Education in providing training for Motor Industry personnel. Estimates are imprecise due to the possibility for overlap of teaching duties for lecturers in the Colleges, and the possibility of secondment for FAS Instructors to other, non-instructional, duties.

50 questionnaires were initially sent out with as wide a geographical spread as possible. In most cases, more than one person was employed in each training location. Where this was the case, a survey was sent to a number of persons in order to broaden the outcome of the replies. Personal contacts were used to establish the identity of as many of the 'motor specific' public sector trainers in Ireland as possible, and questionnaires were despatched accordingly.

A stamped addressed envelope was included at the time of posting in order to improve the reply rate. The covering letter was written on company stationery with an offer of technical information and / or assistance if the respondents so required. The offer of personal assistance to the cohort at any time in the future was intended to assist in eliciting a greater response rate.

Training Locations that were sent surveys were as follows:

FAS Centres: Tallaght, Ballyfermot, Sligo, Waterford, Cork, Limerick, Galway,

Department of Education Centres: Dublin Institute of Technology, Dundalk R.T.C., Waterford R.T.C., Athlone R.T.C., Tralee R.T.C., Dun Laoire V.C., Wexford V.C., Cork R.T.C., Galway R.T.C., Limerick R.T.C.

Response Rates

The response rate was 48%, or 24 replies being received from the 50 questionnaires that were despatched. At least one reply was forthcoming from each centre which assisted the regional/demographic balance. The non-respondents were not different in any way to the overall group.

The level of non-response could have been partly influenced by the state of flux that existed within the public sector system at the time of the survey. Much change was looming and there were various union and professional implications pending. The cohort group may have, albeit mistakenly, believed that the survey information was to be used in some way as a part of the change process. Another possible inhibiting factor was the lengthy nature of the questionnaire itself, which some of the cohort may have found off-putting.

A personal interview was conducted at the request of one individual. It was believed that this individual's views and experience were of particular importance to the overall outcome of the survey. The outcome of this interview was a list of answers to the same questions asked in the survey. These answers are simply included in the same manner as all postal replies received.

2.3 SURVEY OF TRAINING COURSE PARTICIPANTS

In the course of the preliminary research it became apparent that little work had been done on longer term evaluation of training outcomes. It was decided to carry out a small survey of two groups of people that had completed similar courses but in diverse situations; one group completed a Fuel Injection course at a Regional Technical

College during late 1993; the other group had completed a Fuel Injection course at the author's distributor training centre.

As a group of people personally known was surveyed; and a group of people personally unknown; doubts regarding partiality could arise. However, the results are indicative of the views and experience of other technically trained personnel in the Industry.

Questionnaire Design

The purpose of the questionnaire was to assess the participant's views on the type of training undertaken; in other words, one year after the course, how the individual 'felt' about different aspects of that course.

In choosing a questionnaire type the following criteria were employed:

- All questions were primarily concerned with 'attitude' to different aspects of the course.
- Reply format must be kept simple to avoid dependence on the individual's grasp of the vernacular.
- Question format to be kept simple to avoid misunderstanding.

As described by Oppenheim[2] Likert Scales are primarily concerned with

> "... Uni-dimensionality- making sure that all items would measure the same thing.."

in this case, attitude. A Likert Scale eliminates the need for judgements during the analysis by getting the respondents[3]:

> "to place themselves on an attitude continuum for each statement - running from 'strongly agree' to 'agree' , 'uncertain', 'disagree', and 'strongly disagree'."

A Likert Scale was devised and used to evaluate the attitudes of two groups:

- The R.T.C. trained group comprising 11 people
- The distributor trained group comprising 16 people

The issues on which it was wished to elicit information were as follows:

- The personal enjoyment of the participant of the training received.
- The relevance of the training received to the everyday needs of the participant.
- The adequacy of the amount and type of technical training received.

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[2] Oppenheim, A.N. "Questionnaire Design and Attitude Measurement", Gower Publishing Co. Ltd., Aldershot, 1981, : p.133.

[3] *Ibid.*, : p.133.

- The perception of the participants of the individual ability of the trainer.
- The appropriateness of this type of training for ill-equipped garages.
- The individuals desire for further and / or different types of training.
- Overall value in providing such training.

Response Rates

The percentage response rates of 69% for the distributor group and 73% for the RTC group were considered adequate for this survey. Chapter 7 contains more detail.

2.4 SECONDARY RESEARCH

The subject of training in the Irish Motor Industry is, of its very nature, a very specialised one. As a result very little is published in this area. Related journal articles and conference proceedings are in short supply.

This dearth of material is both daunting and inspiring. Daunting, in that it has taken considerable effort to come up with the limited amount of information contained in this document. Inspiring, in that this study is breaking new ground and is, therefore, a potential source of information for studies of the future.

Only two previous studies have been published in the area of training and the Irish Motor Industry; one commissioned by AnCO[4] and the other by the EU FORCE Programme[5]. Both will be referred to at later points in the study. Neither report is specific to the topic of the future of training in the Motor Industry, and both were written from the Public Training Sector perspective, not from the Motor Industry perspective.

Other Sources

Secondary research is not confined to published information, however. In some cases information has been obtained from sources internal to the Motor Industry. In such cases detailed references to sources will not be included. In the event of authenticity being in question, these sources can easily be outlined.

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[4] Aidan Moloney et al, "The Retail Motor Trade 1983 - 1990" - A study of Markets, technology, employment and training: AnCO The Industrial Training Authority, Dublin 4, 1983:

[5] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb. 1994.

THE IRISH MOTOR INDUSTRY

3.1 BACKGROUND

Before attempting to review the training system that exists in the Irish Motor Industry we must firstly establish a reason for that review. The reason is simple: Progress! The study is undertaken in the belief that the existing training system is inappropriate for the Industry of the future and needs to be changed. It is neither poised to react to, nor poised to lead the progression of the modern Industry. This progress is an inherent part of the Motor Industry and cannot be halted but must be examined and the training system amended accordingly.

Before examining the training system, this chapter will present an analysis of the major issues affecting the growth and development of the Motor Industry in Ireland and in an overall world context. The key factors considered here are:

- Customer satisfaction trends
- Technological progress
- Nature of the Irish Motor Industry
- Nature of the World Motor Industry

3.2 CUSTOMER SATISFACTION TRENDS

The Motor Industry of the 1990's is characterised by technological progress and change, with an increasing focus on customer care. This type of customer focus is a relatively new phenomenon. In previous decades, particularly the 60's and 70's, the Industry was simply interested in selling new products with no obvious long term strategy for building up customer-product allegiance. Limited supply ensured a healthy customer base with relatively high sales volumes and profit margins for manufacturers. The 1980's was marked by a world-wide slump in vehicle sales with manufacturers struggling to survive while customers were reluctant to purchase new vehicles, due mainly to economic pressures.

The Industry has come through these decades in good shape and manufacturers are now more competitive than ever before; both in terms of the range of product options they offer and their increasing awareness of the need for customer retention. Unlike earlier decades, it is now very difficult to maintain customer allegiance in the face of improved competition and ever improving product quality. All manufacturers are very keen to retain their existing customer base while building a new customer base, thus increasing market share and profitability. Such an emphasis on retaining customers is based on the premise that it is considerably easier to retain an existing customer than it is to attract a new customer.

Increasingly, manufacturers are aware that customer retention is dependent on the customers relationship with the retail dealer from which the vehicle is purchased and maintained. While the physical facilities provided in retail outlets are important, the "human factor" is also important. Quite simply, interpersonal relations between the customer and the dealer are crucial for customer retention and satisfaction. All of the major manufacturers employ market research companies (such as the J. D. Power company of America) to evaluate their customer satisfaction ratings and use the feedback obtained from these companies to address their perceived shortcomings in order to improve their market performance.

3.3 TECHNOLOGICAL PROGRESS

While customer satisfaction is a relatively new item on the manufacturers' agenda, technological progress is not. Technological progress has been so much a part of the Industry and so prevalent that manufacturers have always provided a training organisation for their technical staff. As it would have been impractical to wait for the public sector to provide this training, the Industry has taken the lead and provided its own technical training. As technology becomes more complex so too does the range of knowledge and skills required by technical staff. Technical staff's ability to repair and maintain complex systems has a direct bearing on the level of satisfaction experienced by customers but is complicated by the rise in customer expectations. Such a rise in the

level of service expected by customers is a result of the increasing commercialisation of society in general, ever improving vehicle quality, high purchase prices and an increasing awareness of customer "rights".

3.4 LEGISLATIVE DEMANDS

External influences also come to bear on the Industry. Legislative change can result in demands being made on Industry personnel. For instance, the introduction of noise and exhaust emission regulations and the banning of asbestos and CFC materials have provided a considerable technical challenge for the Industry.

More importantly, however, is the increasingly litigatious tendency of Irish society and the need for members of the Industry to be aware of their legal obligations in dealing with customers. This aspect of legislation is becoming more and more important.

In summary, the Irish Motor Industry is subject to increasing demands in terms of:

- Increasing customer demands and the need for customer satisfaction and retention
- Increasing levels of technological complexity
- Increasing legislative demands and consumer litigation tendencies.

3.5 IMPLICATIONS FOR THE MANUFACTURER AND DISTRIBUTOR

These increased demands on the Industry will be experienced by all members of the Motor Industry. A failure to meet these demand will lead to :

- Increased costs for manufacturers and customers
- Decreasing customer satisfaction levels
- Lower staff morale and increased disaffection, leading to further decreases in customer satisfaction levels.

Increased costs will result if technical staff are unable to execute a successful repair, with the resulting increase in warranty costs to the manufacturer. In the case of cars that are not covered by a warranty the customer will be expected to bear these costs. As will be witnessed in the media on a daily basis, customers resort to litigation more readily than ever before with high legal costs and awards for damages when litigants

are successful. Costs can also result from adverse publicity received by manufacturers in the reporting by the media of court claims; whether these claims are defended successfully or otherwise. Such costs, through loss of sales, are difficult to quantify but are best avoided.

Even where court hearings are avoided, unsuccessful repairs can lead to legal correspondence between customer and manufacturer and necessitate the use of independent technical expertise. Invariably, the manufacturer pays a share of such costs.

Manufacturers also provide more comprehensive warranties than heretofore. A three year warranty is now much more common than the standard one year warranty of some years ago. It is likely that a three year warranty will be introduced for European manufacturers in the coming years, thus bringing them into line with the Japanese manufacturers. Further, many manufacturers also offer free break-down insurance cover for vehicles covered by their warranty.

Both of these developments have implications for dealerships as customers spend less and less money on the maintenance and repair of their vehicles and manufacturers take more financial responsibility for their product.

Improving the level of technical competence in the Industry is, therefore, in the best interests of the manufacturer and their agents, if costs are to be minimised. Improving interpersonal skills will lead to improved customer satisfaction and retention and, ultimately, to improved profitability. Current methods of improving technical competence and interpersonal skills centre on providing training intervention with little activity in Organisational Development or other non-training type programmes.

3.6 THE "UNIQUENESS" OF THE IRISH MARKET

The Irish market provides a number of challenges that make it unique among European countries:

- There is no indigenous manufacturer of motor vehicles and no car assembly is undertaken.

- New car prices are amongst the highest in Europe due to the high level of taxation.
- Profit margins on new car sales are small, due to the high number of dealers appointed for almost all franchises and the relatively small customer base.
- Motor insurance premiums are high; particularly for high performance vehicles and young drivers.
- As all cars are imported, the market is affected by international monetary exchange rates.
- Our island and peripheral status means that transportation costs are higher than those of mainland Europe.
- The car ownership rate is amongst the lowest in Europe (fig. 3.1)
- The national population is very small by international standards, in fact it is exceeded by many European cities.
- Of a car population of approx. 900,000 units, 58.7 % are over 5 years old or more and 23.6% are 10 years old or more[1].

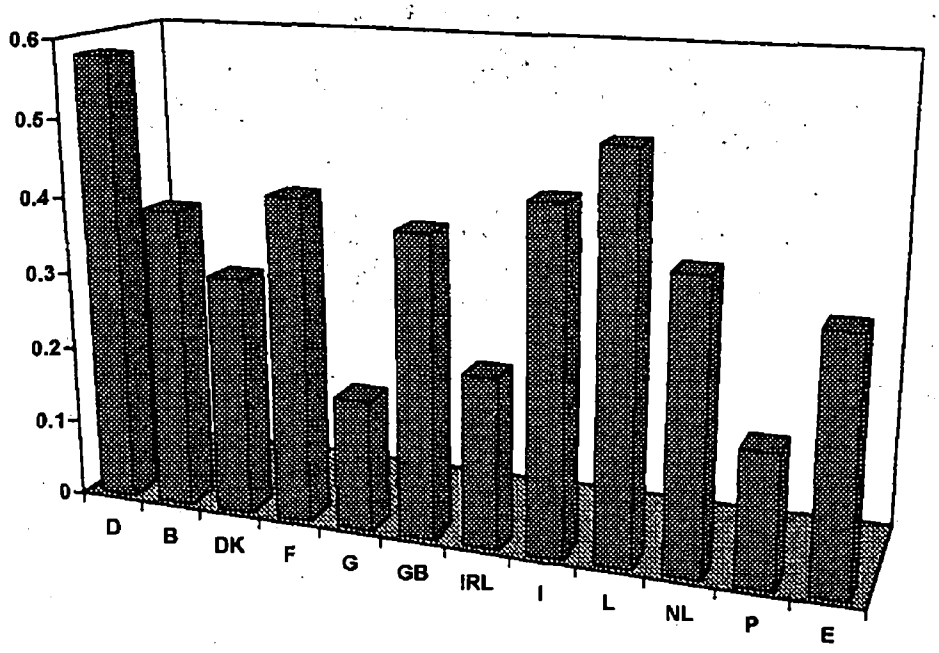


Figure 2.1: Car Ownership per Capita in European Countries [2]

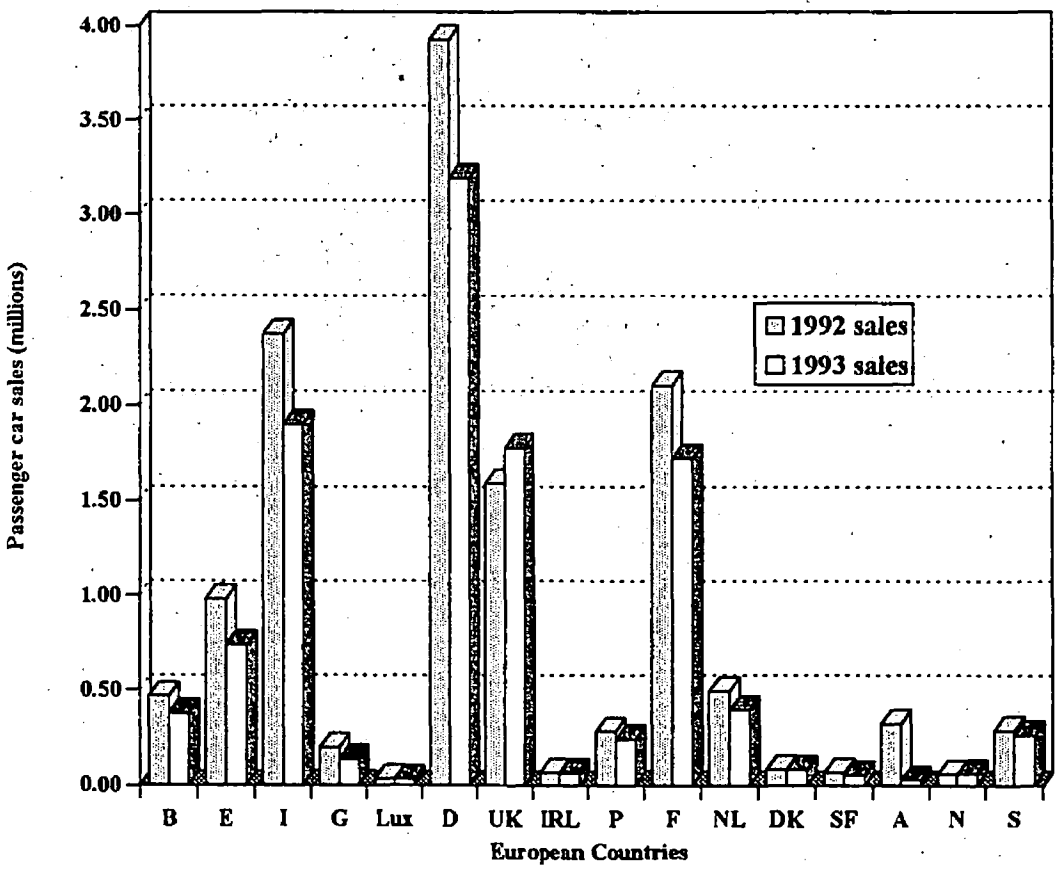
[1] Society of the Irish Motor Industry, 1995 Budget Submission of the Society of the Irish Motor Industry, pps. 15 & 17, Dublin, Nov. 1994.

[2] Volkswagen - Audi, Internal Data.

Structure of the Irish Motor Industry

With no manufacturing base, Industry activity is largely confined to vehicle importation, sales and service. Ireland's Motor Industry is amongst the smallest in Europe if levels of new car sales are used as a comparative device. The only countries in Western Europe that sold fewer new cars in 1993 were Norway, Finland and Luxembourg. Figure 3.2 demonstrates this point. In comparison with the major world markets, Europe, as shown in Figure. 3.3, is the largest market for new cars. Irish new car sales, however, represent a tiny fraction of the European market. Out of an overall European market of 10.6 million units in 1993, Ireland accounted for 64,149 units[2] or, approx. 0.6%, less than 1% of the total.

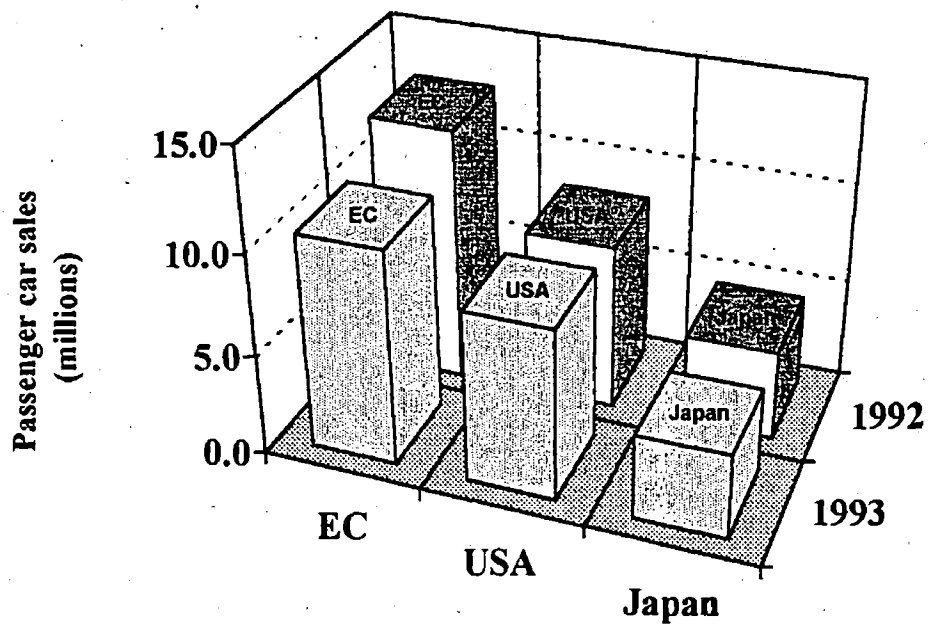
Figure 3.2: European Passenger Car Sales, 1992 & 1993 [3]



[3] Volkswagen - Audi, Internal Data.

In later chapters analysis of some other European national training systems is undertaken. As part of this analysis the working of the German dual system will be discussed. When comparing German motor industry training practice with Irish motor industry practice, the relative sizes of both industries must be borne in mind. Motor Industry publications report new car registrations for 1992 in Germany as 3,929,558 with the equivalent Irish figure reaching **68,084** for that year. This would suggest that the Irish new car market is approximately equal to 1.73% of the German new car market. Training activity and expenditure must be analysed with these differences of scale borne in mind.

Figure 3.3: Major Passenger Car Sales Markets , 1992 & 1993 [4]



[4] Volkswagen - Audi, Internal Data.

Number and size of retail outlets

Some data regarding the size of retail outlets in the Irish Motor Industry is to be found in the Census of Services 1988. Examination of these figures shows that the majority, i.e. 99.8 % of Repair Garages and 89.1 % of Car Sales Outlets employ 19 persons or less. Over 60% are employed in Car Sales Outlets that have 9, or less, employees; while 97.8% of Repair Garages have 9 or less employees. In other words, the vast majority of garages within the Irish Motor Industry are small work units and all discussion must take cognisance of that fact. The following is the actual information contained in the Census:

Figure 3.4 Number and Size of Retail Outlets [5]

No. of Persons Engaged	Car Sales Outlets (%)	Repair Garages (%)
1 to 4 persons	36.8	85.6
5 to 9 persons	26.1	12.2
10 to 19 persons	25.2	2.0
20 to 49 persons	11.9	0.2
50 persons or more	0.0	0.0
Number of Outlets/Garages	777	1,769

(Source: Census of Services 1988)

Employee Number Forecasts

During the 1990's the number of employees in the Irish Motor Industry remained static, falling from highs attained during the boom years of the early 1980's. The increase in new car sales in 1994 has changed this situation. Figures published by the Society of the Irish Motor Industry[6] (SIMI) reveal that an extra 1,200 jobs were created during 1994 as a result of improved new car sales; giving a total, as of December 1994, of some 14,000 persons employed in the Retail Motor Industry. The

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[5] Central Statistics Office, Census of Services 1988, Government Publications Office, Dublin 1988.

[6] John Grant, "Vitality remains troubled", *Irish Motor Industry* , Vol.1, No.20, December 1994: 13.

increase in new car sales is mainly attributable to a revised motor taxation policy in the Governmental budget of 1994. The SIMI, in the same article, have impressed upon the Government the need for further changes. Should such changes take place then a further increase in employment within the Industry is possible.

3.7 THE WORLD MOTOR INDUSTRY

Improved trade arrangements, transportation and global communication networks have made the concept of a "global village" a reality in the 1990's. The Motor Industry now serves as an example of how 'small' the world can be, but this was not always the case. In recent years there was a perceived division in the motor industry between Japanese and non-Japanese cars, particularly in Europe. This division was encouraged by a host of agents whose interests were best served by the division. The division has manifested itself in the decision of Irish buyers to ostensibly purchase either:

- Japanese Vehicles or,
- European Vehicles

In the late 1970's and early 1980's, the Japanese car industry came from being a minor force in the motor industry to becoming a major one. This was primarily due to vastly superior production methods and high standard quality control systems, coupled with a host of electrical devices on even the cheapest models; European cars seemed relatively unattractive.

As Japanese exports in electrical goods and high value items, such as cars, were very strong, Japan's economy boomed and its trade balance with Europe and the USA moved into surplus. In the late 1980's the European and USA car markets fell into decline and the indigenous manufacturers looked to their respective governments for support. This support included the introduction of import tariffs and a marketing campaign aimed at encouraging people to be more patriotic in their purchasing of new cars. The result of this campaign was effectively to stereotype cars as being either Japanese or European. The Japanese car was perceived as being more reliable while the European car was perceived as being more sturdy and enduring.

Developments in the Industry during the early 1990's have seen Japanese manufacturers set up manufacturing plants in the USA and in Europe, in order to circumvent import restrictions and to minimise exposure to fluctuations in the international monetary exchange rate markets. In tandem with this, co-operation agreements have been reached between a bewildering array of manufacturers; breaking down international and idealistic barriers:

Ford and *Mazda* have combined at board level to share ideas and management techniques. *Ford's Probe* model uses *Mazda* components. *Mazda* have declared their intention to build *Mazda* cars at the *Ford* plant in Dagenham, England from 1995. *Ford* sell the *Nissan Terrano* model as a *Ford Maverick* in Europe. *Nissan* produce the *Primera* range at Sunderland, England.

Volvo cars are fitted with *Renault* engines. *Mercedes-Benz* will fit a *Volkswagen* engine to its forthcoming new E range. *Fiat*, *Renault* and *Peugeot* jointly manufacture a van and market it separately under their respective marques.

The German *Volkswagen* Group now also own the Spanish *SEAT* and Czech *Skoda* brands, sharing technology and research and development facilities with both.

Fiat Auto now own *Alfa Romeo* and *Lancia*, while the *Fiat* HGV operation *Iveco* owns the *Ford* machinery group for Europe. The Irish office of *Fiat Auto* now distribute *Alfa Romeo*.

The *Vauxhall Nova* which is marketed as an English car is in fact Spanish or Belgian built and known as an *Opel Corsa* in other markets. *Opel* are a German company, owned by the American *General Motors Corporation*. The *Opel Vectra* and the *Mazda 323* are fitted with an *Isuzu* engine, of Japanese manufacture. *Isuzu* are owned by *GMC* also.

All of the above examples serve to illustrate the links between the various manufacturers. There is really no longer any such thing as a "German" car or a "Japanese" car. There are simply too many variables at play, in terms of component sourcing and research and development co-operation, for a modern car to be described as the product of a single country, or manufacturer.

Commercial links such as those listed above, are likely to increase in number and complexity. This will lead to a change in the current line-up and arrangement of Irish distributors. As already pointed out *Fiat Irl.* are now responsible for distributing *Alfa Romeo* and a new distributor, with commercial links to the *BMW / Mitsubishi* distributor has been established to handle the *Hyundai* franchise. Some new importers will be established as a number of car manufacturers, most notably those from the Far East, are currently trying to break into the Irish and European markets. Flux in the distibutor situation is likely to continue.

The Impact of Computers on the Industry

As in all forms of business, the Personal Computer (PC) is having a dramatic effect on the Motor Industry. Many retail outlets possess at least one PC, on which the accounts and administrative records are kept. Many bigger outlets have a small network of PC's which allow for administrative work to be centralised and for accounts and stocks to be updated instantly. Records of warranty work and customer and vehicle data files are also easily included in such systems.

Many franchised dealers are availing of the opportunity to go "on-line" to their distributor. This arrangement allows the dealer limited access to the mainframe computers that are part of everyday life in the distributors. Distributors, in turn, are in contact with their respective manufacturer mainframes. On-line facilities allow the retail outlets to check on new vehicle movements and stocks, spare parts stocks and orders and, sometimes, the facility to communicate with the distributor "without paper". The Industry is, however, lagging a little behind the U.K. in adapting this type of communication system and still relies heavily on telephone, fax and postal methods of communicating.

There can be no doubt that a communications revolution has begun, but it has not yet reached its peak in the franchised dealer-distributor link. Growth in this area will continue.

3.8 SUMMARY OF DEMANDS ON INDUSTRY PERSONNEL FOR THE FUTURE

- Customer Care standards and customer expectations are likely to continue to increase
- The tendency toward using litigation as a method of resolving problems is likely to continue to grow.
- Technological change will continue at a rapid pace.
- Environmental regulations will continue to force change for the Industry.
- The relatively small size of outlets is unlikely to change.
- Sales volumes are difficult to predict but the cyclical nature of the market is unlikely to change. Volumes are unlikely to change significantly.
- Profit margins from new car sales are likely to remain low.
- Car ownership levels and the average age of cars are unlikely to change dramatically, even though they are amongst the lowest, and highest respectively, in Europe.
- Employment levels are not likely to change dramatically.
- Co-operative projects between manufacturers are continuing to increase in number and complexity. This may well lead to the amalgamation / rationalisation of the smaller distributors in the relatively small Irish market. Some new distributors may also be established.
- The use of PC's and computer peripherals will continue to grow, probably at a greater rate than in the past.
- Vehicles are likely to become more and more reliable with further extensions of warranty cover likely and customer repair bills continuing to fall.
- Transportation costs for new vehicles and for spare parts will continue to remain high, even though certain freight costs have been reduced in real terms in the past number of years (with the introduction of more air and sea crossings and the removal of internal EU customs restrictions).
- Investment in training must take into account the different size of the markets concerned.

Implications for Future Training Provision

- Training focus must reflect changing customer care standards.
- Industry personnel will need to be more concerned about, and informed on, legal issues.

- Increased levels of co-operation between manufacturers may necessitate increased levels of co-operation between Irish distributors in the area of training provision.
- The Industry's increasing dependence on computers will necessitate planned training intervention at national level.
- Industry personnel will have to be better informed on Environmental Issues.
- Training systems and policies must reflect the technological sophistication of the product and nurture the technological skills and understanding of Industry personnel.

CHAPTER 4

LITERATURE REVIEW

4.1 PURPOSE OF LITERATURE REVIEW

The purpose of the review of published literature is as follows:

- To examine past research in the subject area of training and development and the Irish Motor Industry. This examination will constitute Section A of this chapter.
- To examine relevant theory underpinning training, development and education. This examination will constitute Section B of this chapter.
- To examine the role of training in the socialisation of the individual, constituting Section C of this chapter.

4.2 OUTLINE OF LITERATURE REVIEW

SECTION A - EXAMINATION OF PAST RESEARCH

The examination of past research will serve to inform the reader of recent and relevant material published that relates to the training and development function of the Irish Motor Industry. It will be sub-divided as follows:

Government policy and reports commissioned on Irish Industrial Training

A number of reports have analysed and made comments on the Irish training system in general. The outcome of these reports will serve to stimulate thought for discussion on motor industry training in later chapters.

Employers comments on the Irish Training System

The employer group IBEC have issued a report on training policy and the role of FAS. Given the important role FAS plays in the Irish training system, published comment from this group will be compared with views of the Motor Industry personnel in a later chapter.

Research into training in the Irish Motor Industry

The FORCE report as prepared for the European Commission is the most recent piece of research undertaken in this area. The findings of this report are very important to this study and will come up for discussion at many points in later chapters.

Conclusions of Section A

SECTION B - EXAMINATION OF RELATED THEORY

STRUCTURE

The examination of related theory serves to inform on the philosophical and theoretical basis of the study and will cover the following topics:

Definitions

This section will offer an explanation of important terms that appear throughout the report. This is necessary in order that the philosophical perspective employed in this report is understood, when discussing the training system.

Theory of training methods

In order to evaluate current training methods an explanation of the various training / educational philosophies will be offered for the reader. This section will also examine a method of evaluating training methods. The overall review will form the basis for the development of a new training model for the Irish Motor Industry training system.

Conclusions of Section B

SECTION C - SOCIALISATION FUNCTION OF TRAINING SYSTEMS

One important outcome of the training system is the effective socialisation of the trainee, an aspect of training that is usually unstated and often unintentional. This socialisation function is the subject of two important commentaries that will lead to discussion in later chapters regarding the role of technician.

Conclusions of Section C

4.3 SECTION A : EXAMINATION OF PAST RESEARCH

In outlining the findings of research into training activity in the Irish Motor Industry attention is drawn to the fact that very little directly relevant published material exists. In fact, only two directly relevant research projects have been undertaken in the past. As will be discovered, these two projects made only limited reference to the subject matter of this study. Both studies lean somewhat toward the public sector, were written by public sector personnel, and were undertaken at the request, and with the funding, of public bodies.

In light of this lack of previous research, the scope of the literature review has been broadened to include research that is applicable to the more general sphere of Irish Industrial Training. This approach allows for a broader examination of the issues involved in providing training for the Irish market.

Government Policy and Reports Commissioned on Irish Industrial Training

Of the recent reports published on Irish industrial training the most incisive and insightful views on Governmental policies in this area, are to be found in the report commissioned by the National Economic and Social Council (NESC) published in 1993 and titled "***Education and Training Policies for Economic and Social Development***". Unlike other reports, this report looks at the direct effect of education on the world of work and vice-versa. It is the authors' view that, due to the very relevant and important nature of the report, some consideration be given to its contents.

This report was prepared at the request of the government in order to ascertain links between the education of individuals and the net worth to the economy of that education.

If it is necessary to justify the provision of education and training for employees then it can be stated in common with the NESC[1] that ..

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[1] National Economic and Social Council (NESC), "Education and Training Policies for Economic and Social Development", Dublin, 1993, p.15.

"education and training ultimately lead to increased productivity and competitiveness."

The report also underlines the key policy aims (which are the stated aims of the Irish Education System) included in the Green Paper on Education, 1992.

Dr. Tom Kellaghan was commissioned by the Council to undertake a comparative study of vocational education and training in Ireland with that of Denmark and the Netherlands. These countries were chosen as they are more comparable with Ireland than the other EC countries in terms of geographical size in the case of the Netherlands, and in terms of population size in the case of Denmark. The comparison is generally restricted to the nature of educational provision and the kind of curriculum and experience to which the individuals are exposed.

Hierarchy of Skills Attainment

The European Community (now European Union, or EU) has defined a hierarchy of skills attainment for the various technical occupations. These are set out in the Official Journal of the European Communities, 31 July 1985, and explained[2] as follows:

> "..**Level 1** refers to knowledge and skills attained at the end of compulsory education with perhaps some initiation to work. Individuals at this level are regarded as semi-skilled. A holder of a **Level 2** qualification is regarded as fully qualified to carry out work in a variety of trades (e.g. motor mechanic, electrical fitter, carpenter, dental technician, office worker, hairdresser, hotel receptionist, telephonist, etc.)...Activity at **Level 3** involves technical work which can be performed independently and/or executive and co-ordinating duties and usually involve a greater degree of theoretical knowledge than that required to function at Level 2. Examples: accounts clerk, bank clerk, lab. technician, master craftsperson, foreperson and legal secretary.." A **Level 4** qualification normally requires post-second level education "Work at this level requires sufficient mastery of the scientific basis of an occupation to allow autonomously pursued vocational activity in management or administration as an employee or self-employed person."

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[2]Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, pps 96-97.

In setting out this type of hierarchical occupational structure the EU is also opening up the possibility for cross-occupational pay structures, and although more implied than stated, is the possibility of introducing a social status hierarchy based on the "level" of a persons occupation. In later analyses the level accorded to the role of Motor Mechanic will be addressed. Attention is drawn to the parallel between motor mechanic and telephonist; both are accorded level 2.

Occupational and Personal Skills

In comparing the different systems of vocational education Dr. Kellaghan places particular emphasis on the acquisition of technical skills. Vocational education, he points out, is[3]

> "not only the acquisition of the particular technical skills required for specific occupations"..

but in addition to specific occupational skills ..:

> "preparation for work involves the knowledge and skills of general education (such as literacy, numeracy, the ability to solve problems, to cope with complex situations, to communicate clearly) as well as personal and social competencies, the ability to adapt, work habits and attitudes and enterprise skills."

In the next section which will deal with personal and "overarching" capabilities the personality traits deemed desirable for employees will be mentioned. Dr. Kellaghan goes further than just deciding on the technical abilities that a potential entrant to the workforce should possess by describing[4] the more general characteristics of an individual who has been prepared for work:

1." Basic competencies in literacy, numeracy, science and information technology.

2. The ability to apply the knowledge and skills which have been acquired in school or training in the work situation.

3. The ability to work with others and a sense of responsibility.

4. Positive attitudes towards flexibility, innovation and entrepreneurial activity.

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[3] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993,, pps. 96-97.
[4] *Ibid.*, 1993, p.97.

5. General and specific knowledge and skills relating to a particular occupation which are acquired in special training or apprenticeships."

Kellaghan goes on[5] to suggest:

..."It is generally accepted that vocational education or training should be preceded by a sound general education".

Standards of Educational Attainment

In attempting to compare the vocational and training systems of other European Countries with those of Ireland, a number of variables must be considered; not least of which is the calibre of student. Dr. Kellaghan compares attainment in basic standards of education between Dutch, Danish and Irish students and finds[6] that ..

" Mathematics surveys have found the performance of Irish 13 yr. old students to be just above the international mean.", whereas the performance of Dutch students.. "exceeded the international mean..". In reading tests .."Irish students performed above the international mean for 32 countries in all reading literacy areas. Their performance was close to the performance of Dutch students in all areas. Danish students, who were somewhat older on average, performed better than both Irish and Dutch students.".. In comparisons with other countries in terms of science achievement ..."The performance of Irish students was well below the international average." p.99

Given the above information we can conclude that Irish students are on a par with their European counterparts and are no less able than them academically, except for Science attainment. In comparing European training systems with the Irish one it will not be necessary to make allowances for the variable of student attainment.

However, the proportion of Irish students enrolled in technical / vocational and apprenticeship programmes is low by international standards. In 1988, 17.4% of Irish students were enrolled in vocational, technical and apprenticeship programmes, in Denmark 71.7% were in these programmes and 60.4% in the Netherlands. Since that

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[5] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, p. 97.
[6] *Ibid.*, p. 99.

time the Department of Education has introduced various Vocational Preparation and Training programmes and incentives. These incentives may have changed the situation; the Report does not take account of such incentives. Reasons for these low participation rates include the perceived low-social status of technical occupations and the tendency for second-level students to aspire to academic occupation. These reasons will be expanded on in a later section. Also, the number of designated trades, where formal apprenticeship training is possible, is much lower in Ireland than in other countries such as Denmark, the Netherlands and Germany.

Apprenticeship Intake Educational standards

Dr. Kellaghan analyses the educational attainment standards of the registered apprentice population[7] as of October 31st 1992:

Inter Cert. 38% Group Cert. 12% Leaving Cert. 47% Exempt 3%

He then compares them with similar 1983 and 1991 statistics from the Dept of Education

Year	1983 (%)	1991 (%)	1983-1991 (+ or - % change)
Inter	49	38	-22
Group	21	14	-33
Leaving	25	44	+76
Exempt	54		-25

By examining the figures above, a trend toward a higher level of attainment is abundantly clear. The report does not suggest which trades are using the Leaving Cert. as the entry requirement, however. It is not possible to decide if this trend is typical of all apprenticeships or whether it exists for particular trades only. It will be possible to compare these official figures with the experiences of the trainers and lecturers of the public sector in a later chapter.

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[7] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993., p. 100.

Kellaghan also refers to the findings of the Culliton Report when he says[8]:

> "The Industrial Policy Review Group (IRPG) 1992 concluded that there is not enough emphasis on technical and vocational education at second level and that the educational system is not attuned to the economic needs of society"....(the system)..."provides a poor platform for subsequent vocational or industrial training" The IRPG .."recommended that industry should be more involved in policy development and that on-the-job training should be supported by study in vocational and technical schools."

However, the Council contradicts one of these contentions by stating[9] that it..

> "is not aware of any evidence that would support the view of the Industrial Policy Review Group (1992) that the educational system in Ireland provides a poor platform for subsequent vocational or industrial training" p.122

Certification and Recognition of Awards

Kellaghan highlights[10] some "major problems" with vocational preparation courses in Ireland. These arise :.."

> ".. from the lack of systematic formal assessment and certification procedures. Formal assessment and certification procedures serve several purposes. They promote labour mobility; they reduce costs to employers who do not have to invest in their own testing system; they set standards of achievement that can guide curriculum development; and they serve as criteria for monitoring the performance of training institutions...In Denmark and the Netherlands, formal examinations are assuming an increasing importance in the assessment of students."

Given the move toward continuous assessment and the standards based approach to apprenticeships which will end the current system of examinations for apprentices, it is interesting that he comments[11] that ..

> "It is believed that examinations for apprentices,... will serve to raise standards."

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[8] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993., p.122.
[9] *Ibid.*, p.122.
[10] *Ibid.*, p.125.
[11] *Ibid.*, p.125.

An important observation[12] is made by Kellaghan in discussing the possibility of the introduction of a National Framework for certification that would allow students to progress to higher levels of training,...

> "The co-ordination and rationalisation of the efforts of a variety of bodies engaged in certification, including FAS the Department of Education's Technical Schools Examination Branch, and other agencies, will not be a trivial task"; going on to state that.. "Whatever system of vocational preparation is adopted in Ireland, experience in both Denmark and the Netherlands would indicate that it should be kept under continual review."

There is currently no national framework for certification and review procedures are informal and largely unreliable. However, the Minister for Education has recently announced[13] the establishment of a new body to be called "National Education and Training Certification Board" This board will:

> " .... ensure quality and standards in all non-university institutions including regional technical colleges, private colleges, FAS and Teagasc centres, the Farm Apprenticeship Board and elsewhere. The new board will set in place a framework to allow a young person to start with a basic vocational course and build up credits to allow them to progress to degree courses in universities or regional colleges. The forthcoming National Education and Training Certification Board (NETCB) will be the regulatory and supervisory body for all vocational training programmes and all third level education, except the universities.
>
> It is proposed that the Minister appoints the chairperson of the board which will have eleven other members - two from industry and commerce; one ICTU nominee; a nominee of the Minister for Agriculture; an expert from the EU; a student nominated by USI; and five others active in education and vocational training... The experts from industry and the training area will consider the relevance of the courses to the world of business and ensure that they keep abreast of changing technologies."

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[12] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, pps. 125 - 126.

[13] John Walshe, "Reform of Education Awards Planned", Irish Independent, 16th Jan. 1995: p.1.

This is a welcome development but will take some time to make any impact on current training systems and certification arrangements. It is interesting to note the explicit exclusion of the universities from the remit of the Board, particularly in the light of the RTC's efforts to attain university status in the future.

Prestige and Up-Take Levels of Vocational Education

Dr. Kellaghan then continues[14] by addressing a problem long known in Ireland,..

> "that problem in both Denmark and the Netherlands relates to the prestige of vocational education relative to more academic education".

High achieving students aspire to an academic education leading to a University place and there is a lack of gender equality among apprentices regarding uptake. The aspiration of a University education[15] ..

> "seems to have created a particular problem in the Netherlands, where students who would like to go to a school leading to a university education choose a general secondary in preference to vocational education in the hope that they will acquire the necessary qualifications for university entrance. They do this even though the likelihood of qualifying for university entrance and job prospects at the end of general secondary education are poor, while there is a shortage of individuals with craft skills in the country.
>
> A further problem arises in relation to gender stereotyping, which is common in vocational education in Denmark and the Netherlands. Training in certain areas (e.g. motor mechanic) is confined almost exclusively to males, while in other areas, females predominate (e.g. dental assistant). A similar pattern, of course, is to be found in Ireland. A further problem relating to gender which appears specific to Ireland is the large proportion of boys, relative to girls, among low-achieving students in reading literacy."

The education system in Ireland is broadly similar to that of the Netherlands; the secondary education and examination system is geared towards the individual gaining a University place. In common with the Netherlands, insufficient places exist and so the

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[14] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, p.127.
[15] *Ibid.*, p. 127.

majority of students are studying for something that they can never have. Only a small section of the Irish secondary education system is vocationally oriented. The issues of prestige and gender equality are very relevant to training and the Motor Industry generally, and will have to be considered in the outcome of this study.

Personal Skills

Dr. Kellaghan continues by making some more general comments on the general training system

> "There is already a greater appreciation throughout the EC of the importance of training, both initial and continuing. In future there will have to be a much stronger emphasis in that training on quality and higher standards of both general and technical skills. The capacity to respond to changes in demand from the labour market will have to be developed."

The capacity to respond to change as mentioned by Kellaghan has implications for role demarcation within industry and is something which is not formally included in any training programme even though many observers have suggested that it should be.

Kellaghan concludes[16]:

> "Human capital, nurtured by education and training policies, is an important ingredient in economic progress in an era characterised by rapid technological change and the development of a knowledge-based society... education and training policies must address a range of goals simultaneously; to provide the knowledge base for society as a whole; to equip people with the skills and attitudes the need for a fulfilled and productive life and with the capacity for life-long learning and development; and to ensure that all members of society receive education and training which enable them to develop their talents and become productive members of the community"

Many points made by Dr. Kellaghan are made in the general context of Irish industrial training policy, not specifically the Irish Motor Industry. It is possible, however, to take much of the content of his concluding remarks and apply it to the Industry, particularly the notion of "human capital" and the need to nurture a "capacity for life-

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[16] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, p.199.

long learning". Such philosophies will underpin the overall model of training and development as it evolves.

The NESC Report concludes with a number of statements and findings that are important to the deliberations of an "ideal" training and development system. Firstly, as a guiding philosophy, for the education system the report states[17]:

> "..the primary role of education is in developing the qualities of integrity, reliability and a sense of justice and other moral attributes in every student".

This is a somewhat moralistic philosophy and while it is desirable, in the commercial world very often a different set of values are the norm. Importantly, the Council draw the readers attention to the[18]

> ..."general lack of comparative analysis of the Irish education and training system."

This lack of analysis is borne out by the experience of the author in researching the various topics. A great deal more research and comparative analysis is necessary in many areas of public sector training. Particularly so, given that[19] :

> ..The Council is firmly of the view that systems of education cannot be replicated or transported from one society to another. National education systems are complex structures, reflecting the history, culture and values of each society."

Skills Gaps

In assessing the training and education systems that exist in other countries in a later chapter the non-transportability of systems from one culture to another must be considered. In encouraging employers to invest in training it can be concluded that [20]

> "..competitive performance is adversely affected by poor quality human capital.. (and) ..there is a skills gap between Ireland and best practice firms in competitor countries.."

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[17] National Economic and Social Council (NESC), "Education and Training Policies for Economic and Social Development", Dublin, 1993, p.200.
[18] *Ibid.*, p.200.
[19] *Ibid.*, p.200.
[20] *Ibid.*, p. 206.

This alleged skills gap can be discussed in later analyses of the European Motor Industry. One area where it is possible to agree entirely with the Report is in that of supervisory and management training. The NESC Report concludes[21]:

> "In particular, supervisor and management training needs to be improved. This led the Industrial Policy Review Group to recommend the linking of the provision of some publicly-funded services and aids to the willingness of firms to undertake management training."

The report further suggests that[22] :

> "..flexibility and adaptability.. (are).. key skills. Flexibility and adaptability emerge as key competencies which have been acquired by our competitors to a greater extent. ...our relative under-training, which in turn stems from less investment in training and retraining, has to be remedied... recent changes in the Irish apprenticeship training system... moves us closer to practice in Denmark and the Netherlands. The success of the revised apprenticeship scheme will demand significant retraining and upgrading of skills for the current stock of employees, particularly those who will be involved with on-the-job training for new apprentices."

Commentators in a later section agree that the success of the revised apprenticeship scheme will depend, to a significant degree, on those current employees that will play the role of on-the-job assessor for new apprentices. An important area which will also be commented on in greater depth at a later stage is that[23]:

> "...a developed system of accreditation is necessary to develop linkages between the various strands of adult and continuing education, and thus to encourage adult, as well as young people, to progress through the education and training system at their own pace and in accordance with their own requirements."

The National Vocational Qualification system, introduced to the training and education systems of the United Kingdom during 1991-92 and explained in a later chapter, is an attempt at such a system of accreditation. A proliferation of awards and awarding bodies in the UK meant that there was only limited cross-linking and mutual

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[21] National Economic and Social Council (NESC), "Education and Training Policies for Economic and Social Development", Dublin, 1993, p. 207.
[22] *Ibid.*, p.207-8.
[23] *Ibid.*, p.217.

recognition by awarding bodies. The introduction of a new apprenticeship system may well herald the need for a similar system here, although the proposed new NETCB may well fill this role.

In-Service Provision

The need for improvements in In-Service training provision for public sector trainers is suggested[24]:

> "The most important resource in formal education is the teaching profession. New initiatives and programmes....demand a well-prepared teaching staff... The Council is concerned that provision for in-service training... will continue to deliver this training on an irregular and ad-hoc basis... in-service training should be an institutionalised,.. accepted, regular constituent part of teacher education.... Necessary changes in organisational and other arrangements must be effected to enable this to happen."

The idea of staff development programmes will be discussed in the light of the comments of the public sector trainers survey at a later point in this work.

A number of difficulties for employers which the Council have highlighted[25] are that..

> "Apart from the apprenticeship system, employers in Ireland have had limited involvement in the design of course material, the development of appropriate assessment, accreditation and even work placements."

Any new training and development system will need to take cognisance of these facts; employers have not been involved in the design of public sector curricula or assessment procedures to any great extent in the past. Any future developments will have to address these issues.

Summary Findings

The following are the most important findings from the NESC Report for this study:

- Individuals should be prepared for work at second-level and possess basic competencies in literacy, numeracy, science and information technology.

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[24] National Economic and Social Council (NESC), "Education and Training Policies for Economic and Social Development", Dublin, 1993., p.219.
[25] *Ibid.*, p.222.

- While attainment levels for Irish students are similar to those of other European countries, enrolment levels in technical and vocational programmes are low.
- The low social status accorded to technical professions acts as a barrier to the recruitment of high achieving students.
- It is not possible to replicate or transport national educational structures from one culture to another.
- Supervisor and management training needs to be improved.
- Flexibility and adaptability are key personal skills.
- A developed system of accreditation is necessary to develop linkages between the various strands of adult and continuing education.
- In-service training should be an institutionalised, accepted regular constituent part of teacher education.
- Employers have only a limited involvement in the education system.

Employer Comments on the Irish Training System

Irish Business and Employers Confederation (IBEC) is a body that was established to represent the interests of employers at national level. During 1994 IBEC published a report which included a number of recommendations on the Irish training system. The report was published shortly after the establishment of a new public body FORBAIRT, which came into being as part of a decision to split the former Industrial Development Authority into 3 bodies; FORBAIRT, FORFAS and IDA Ireland. FORBAIRT now holds responsibility for indigenous industrial development.

IBEC representing employers, propose the setting up of an agency that would control and monitor the employers role in providing training. Up to now, while there is an onus on employers to provide training for their employees, there is no statutory or voluntary organisation charged with the overseeing of this training; although the Industrial Training Committees (ITC's) of FAS do have certain responsibilities in this regard. Certain incentives are provided by FAS and they are charged with a statutory role in this area but the ITC's do not exercise absolute control over the standard of training carried out.

IBEC proposes that [26]:

"IBEC has proposed that employers' responsibility for the training of people in employment be recognised in a new body...This body would be a powerful agent for ensuring the coherence of initial and continuing training, and for increasing both the quantity and quality of training by companies needed to support business growth and competitiveness."

"Training for Industry should be business driven and reflect a clear articulation of industry's needs for skills development. However, national policy on training the employed in Ireland is driven primarily by State agencies....."

Comments on the Current Training System

IBEC has a number of criticisms to make of the newly structured FAS/Forbairt system:

-"The Fas Industry Division is not industry-led. Its structure reflects the tripartite arrangements which apply in FAS as a whole.

-Responsibility and "ownership" of training does not rest with the employers who are expected to act on it.

-The mechanisms for consultation with employers are inadequate and ineffective.

-Policy objectives are not being dictated by employer needs but are significantly influenced by the supply side.

-The promotion of training is not in employer hands.

-There is a "credibility gap" between FAS and its employer customers.

-There is insufficient potential for leadership, the development of best practice case studies and the creation of a learning organisation, dedicated to improving the quality and depth of training supply.

-There remains widespread disillusionment with the work of industry training committees which are regarded as "talking shops" by many employer participants."

In order to counter the faults of the current system IBEC go on to recommend[27]:

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[26] Irish Business and Employers Confederation, "The Training of People in Employment" Summary , IBEC, Dublin, April 1994.

[27] *Ibid.*,1994.

-"The establishment of a Policy and Promotions Unit, comprising a very small number of permanent staff drawn equally from FAS and the private sector.

-The Unit would operate independently under a board which would have a majority of employers nominated by IBEC, with appropriate representation from FAS and ICTU.

-The Board would report to the Minister for Enterprise and Employment and would be directly responsible for the funds currently devoted to research and policy making within FAS (£.. in 1993, appropriately adjusted to enable it to fulfil its wider remit).

-The unit would establish the priorities and lay down criteria for all State spending on training for the employed, including the broad designation of pilot initiatives, but would not be responsible for the actual allocation to particular projects or employers. In this way, it would indirectly influence spending in this area."

Role of IBEC

In order to hasten the establishment of an Industry-led training body IBEC itself will also [28]:

."consider the formation within the organisation of a dedicated and adequately resourced training unit to:

-Articulate industry training needs

-Act as a focus point for industry training activities in the various trade associations and industry training committees

-Formulate policy initiatives for the training of the employed and ensure strong representation of industry's concerns with Government and the agencies

-Ensure strong employer representation on FAS ITC's and other relevant groups

-Promote awareness of the value of training."

Other Comments

FAS also comes in for some criticism from an industrial perspective in the course of the Roche-Tansey report [29] :

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[28] Irish Business and Employers Confederation, "The Training of People in Employment" Summary , IBEC, Dublin, April, 1994.

"In overall terms, FAS does not meet the needs of industry for higher level skills (e.g. technician, supervisory and managerial) and experience which are vital in improving competitiveness. it has been pushed progressively away from meeting industry objectives towards meeting the needs of the unemployed."

In applying the notion of FAS as the national training provider certain problems arise. As will become evident during later chapters, FAS do not provide a lead in terms of Motor Industry CVT; in fact they supply only a minimal support role, mainly in financial terms. They do, however, play a major role in apprentice training. The comments of IBEC can, in the main, be applied to Motor Industry CVT. The comments of Roche and Tansey regarding higher level training skills are also relevant to FAS Motor Industry CVT provision. These comments and suggestions will be borne in mind in the empirical research and in the analysis of future training needs and structures.

On the other hand FAS face difficulties in the lack of commitment to training on the part of the Industry itself. This fact will emerge in later chapters analysing the training system of the Irish Motor Industry itself.

Research into Training in the Irish Motor Industry

The two pieces of published research mentioned earlier that relate directly to this study are: The FORCE report of 1994 and an AnCO report of 1983 detailing activity in the Irish Motor Industry. Both reports are comprehensive; both are important in the context of this study. The key findings of these reports are presented below.

FORCE Report

The FORCE Report will be analysed under the following headings:

- Definition of CVT

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[29] Frank Roche and Paul Tansey, "Industrial Training in Ireland", "A Time for Change : Industrial Policy for the 1990's", The Industrial Policy Review Group, Dept. of Industry and Commerce, Dublin, 1992: p. 114.

- Level of Training Activity
- Training Plans
- Cost of Training
- Future Training Provision
- National Training Plan

Definition of CVT

The definition of "Continual Vocational Training", as stated in the FORCE report is [30]:

> (Continual Vocational Training is) ...."A structured activity, financed wholly or partly by enterprises, directly or indirectly, in order that the persons employed might improve, acquire or maintain their skills, knowledge or qualifications from time to time in their working lives"

One difficulty arises with this particular definition; that CVT is .."financed wholly, or partly by enterprises..". In reality many persons that attend Public Sector CVT do so on their own time and at their own expense. This is particularly true of the employees of non-franchised dealers and unemployed persons that attend CVT to keep abreast of technological developments.

A working definition for the purposes of this study might read:

"CVT is a structured activity so organised that persons, currently or previously, engaged in an industry might improve, acquire or maintain their skills, knowledge or qualifications from time to time in their working lives."

Level of Training Activity

In discussing the balance between technical and non-technical training the report notes that [31] :

> "The motor distributors run many courses for their franchised dealers and employees. Because of the necessity to guarantee vehicle purchasers an adequate after sales service much

[30] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.5.

[31] *Ibid.*, p.22.

> of the training relates to sales/technical matters involving repair and servicing.... The amount of training arranged by distributors on behalf of their dealers in the areas of sales and general management is rather limited"

It is important to note the report's comment suggesting that the amount of sales and management training was rather limited. The findings of this report were based on a number of case studies undertaken in conjunction with a variety of outlets, both franchised and non-franchised. The level of activity in sales and marketing training will be discussed at a later point.

Other comments[32] have also been made regarding the general lack of training in the Motor Industry. The actual extent of sales and management training provision and uptake is important in the context of an overall analysis of the Motor Industry and, as a result, will be dealt with in greater detail in a later chapter.

The report goes on to discuss its findings when comparing the training programmes of franchised outlets with those of non-franchised outlets[33]:

> "Dealers who have a vehicle franchise are more likely to be involved with their employees than dealers without a franchise, or repair garages, tyre shops and other retail outlets. However, the training provided for franchised dealers is likely to concentrate on technical aspects with less impact on business management and development skills."

Having suggested a link between franchised outlets or dealers and a higher level of involvement with training, the report also suggests a link with the overall outlet operation [34]:

> "The organisation of work at distributor level is very professional. The franchise dealers benefit from this expertise as training in administration and organisation filters down to these outlets. The non-franchise dealers depend on public centres to supply the skills needed for work organisation."..."The relationship between franchise dealers and the distributors

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[32] Aidan Moloney et al, "The Retail Motor Trade 1983 - 1990" - A study of Markets, technology, employment and training: AnCO The Industrial Training Authority, Dublin 4, 1983: p.100.

[33] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.30.

[34] *Ibid.*, p.31.

(which is approx. 50% of the dealers) is very good... "The advantage (in customer relations) generally lies with the franchise dealers where help is provided in the organising of skills at distributor level."

Given the above, it may be stated that franchised dealers are likely to have better organisational structures than non-franchised dealers and to possess an advantage in terms of customer relations skills. The fact that non-franchised dealers depend on public centres to supply skills needed for work organisation, can lead to problems if the provision of suitable skills training in these areas is in any way inadequate, or inappropriate. The survey of public sector trainers will examine training provision in this area.

In setting out the criteria for examining the training systems of the EC Member States, FORCE sought information under six headings. The more relevant headings, and the reports conclusions under each [35], follow:

Training Plans at Workshop Level

"In general there are plans for CVT in most main franchise dealerships which are regulated by the main distributor. The organisation of training as well as the selection of personnel to attend is usually left to the manager of the dealership. Sometimes the same employee is selected to attend a number of distributor courses and because of this some employees only receive limited opportunity to attend any courses."

There are both advantages and disadvantages to this method of selecting employees for training. The major disadvantage lies in the non-participation of some employees in CVT. The major advantage lies in the specialisation of certain well trained individuals with extra skills that the dealer can then call on when a problem arises. Selection procedures are important and must be addressed. The suggestion that dealership training plans exist is one that the authors personal experience would suggest to be

[35] Dominick Tuitte, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.31.

slightly misleading. The fact that a plan might exist is possible; the likelihood is, however, that it is not being pursued.

Interlinkage of Training Plans and Demand

> "The plans are initially developed at the manufacturing base (outside Ireland) and are adjusted by the distributor to suit the specific needs of this country...."

Manufacturer subsidiaries are more likely to fit this profile than privately owned distributors. Feedback from distributors on this topic will be discussed in a later chapter.

Cost of Training

On more general analysis of Industry training activities the Report analyses the cost of training, but does not actually quantify those costs. At individual outlet level [36]:

> "The cost of training can be considerable for a small dealership. Wages and travelling expenses have to be paid to the individual ..... The loss of profit from labour can be quite expensive and this limits the number of training days per individual each year....

This comment also suggests that the loss of profit to the employer, as a result of the employees' attendance at a training course, limits the number of training days received by employees. This problem can be particularly acute for outlets that are service agents for more than one manufacturer as manufacturers usually insist on the participation of every outlet in their training programmes. A franchised outlet from a provincial town could expect to lose approximately £200 in workshop revenue; plus a day's wages of £50 and expenses of, typically, £40. A total of £290 per day per employee. This total would increase a little if an overnight stay were involved.

At distributor/manufacturer level investment in training is greater but, again, no actual cost is calculated in the Report [37]:

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[36] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.31.

The cost to the distributor is also considerable as he must employ full-time trainers and develop a training school. Each of the distributors provide a budget to ensure that adequate standards are maintained especially when new vehicles are introduced onto the market."

A cost not mentioned in this analysis is that of trainer in-service provision.

Interestingly, the report suggests that distributors do not actually quantify the cost of providing training for their dealer networks [38]:

"Normally the total costs of training are not evaluated by all companies but they have detailed records of courses attended and the cost of such courses and their relevance to the company..."

The benefits to the distributor in providing training are, the Report suggests, [39]:

"... seen as providing a better quality of work leading to customer retention which in theory is a financial benefit to the company."

Future Training Provision

The Report goes on to look at factors likely to impact on future training provision in the Industry. A growth in the number of employees would be an important element here, but [40]:

"Employment in the automobile sector will remain static or increase slightly with the introduction of compulsory vehicle testing..."

In discussing future needs and training developments, the FORCE Report [41] concludes:

"Training needs will have to correspond to the overall development of vehicle technology and design. The quality of in-house training is recognised already by the distributor and plans are in place to raise the standards which are going to be required. The need for public centres to co-operate with distributors will increase so as to develop sales and parts courses to meet

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[37] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.31.
[38] *Ibid*, p.32.
[39] *Ibid.*, p.32.
[40] *Ibid.*, p.36.
[41] *Ibid.*, p.36.

their needs and provide national qualifications for their staff. Non-Franchise dealers will have to invest more time than before in CVT training, so as to maintain their standards."

In-house training is important in the area of in-dealer assessment, and it will be discussed in a later chapter in the context of the revised apprenticeship system.

The Report also mentions the need for co-operation between public centres and distributors in sales and parts training; and the need for improved CVT for non-franchised dealers.

Training Activity In the Sector[42]

"The number of training days by day per employee is small after apprenticeships, unless special courses are arranged by the centres. The number attending public centres is quite high where courses are available, which is only in a small number of cities and is on the employees own time."

These aspects of CVT are important to the overall study and merit further investigation. The survey of public sector trainers will offer more information and insight in that section of the study.

In discussing the type of CVT offered the Report concludes[43]

"The predominant mode of training for technical and parts courses is in the training centre of the distributor. This averages two days per year per employee."

National Training Plan

Probably the most significant finding, for the purposes of this study, from the FORCE Report was that regarding a national training plan for the Industry. The Report suggests [44]

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[42] Dominick Tuite, "Employment Work and Training in the Irish Automobile Repair and Distribution Sector"- Sectoral Study , FORCE Report, Dublin Institute of Technology, Bolton St., Dublin. Feb 1994, p.35.

[43] *Ibid.*, p.35.

[44] *Ibid.*, p.36.

"The quality of technical training is to a very high standard. A national recognised training plan is needed in parts, sales and general management training, which the industry should introduce to its members. This training can then be standardised by various means of monitoring to ensure its quality. At present only a few manufacturers have any formal training plans in the areas mentioned."

This suggestion of the need for a national plan for training which should be introduced by the Industry itself, is the "Raison d'être" for this study. The suggestion regarding the existence, or otherwise, of training plans among distributors is one which will be pursued with the distributors themselves in a later chapter.

Summary of FORCE Report Findings

The following are the most important points raised in the Report in terms of this study:

- Much of the training activity in the distributors relates to technical matters.
- Training activity in sales and general management is limited.
- Franchised dealers are more likely to be involved with training than non-franchised dealers. They are also likely to possess an advantage in terms of customer relations skills.
- The selection of trainees is usually at the discretion of the manager of the dealership which can result in unbalanced participation rates in training among employees.
- The cost of training provision is considerable both for the dealership, and the distributor.
- There is a need for distributors to co-operate with the public centres to develop sales and parts courses and to provide national qualifications for staff.
- Non-franchised dealers will have to invest more time than before in CVT.
- The number of CVT days is small after apprenticeship.
- A national training plan is needed in parts, sales and general management training which the Industry should introduce to its members.

The Retail Motor Trade Report, AnCO.

In 1983 AnCO - the Industrial Training Authority - issued a report outlining the operation of the Retail Motor Industry. While some 11 years have elapsed since its publication, many of its recommendations have not been acted upon.

The following predictions were made at that time by the authors [45] :

> "Retail garages will remain small in size with each department operating under greater financial control than in the past... Franchise holders and non-franchised garages will tend to operate increasingly in separate segments of the market, the former concentrating more on the sale and servicing of new vehicles with the latter placing more emphasis on selling and repairing used vehicles... Technological change will have a radical effect on workshop activity and the skills required by craftsmen over the period... The increase in electronic devices and sealed components in cars will necessitate the increasing use of diagnostic equipment to find faults."

The above predictions were essentially correct, particularly in terms of the technological change forecast.

Recommendations of the Report

In making recommendations for training in the Industry the Report made a number of suggestions [46] :

> 1." There is a need for a more systematic and proactive approach to training for craftsmen to ensure updating of technical knowledge and skills".
>
> 2." The need to keep instructors skills updated is a continuing requirement if the skills of future apprentices are to be up-dated. "
>
> 3." Three training needs have been identified as arising from the increased use of computers in the industry. They are: - computer appreciation courses for a wide range of staff - detailed software courses primarily aimed at financial controllers, accountants and administrators - retraining of clerical staff in computer operating skills."
>
> 4. "The necessity of training in customer awareness has been identified as a training need for virtually every occupation employed in the garage trade....

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[45] Aidan Moloney et al, "The Retail Motor Trade 1983 - 1990" - A study of Markets, technology, employment and training: AnCO The Industrial Training Authority, Dublin 4, 1983: p.13.
[46] *Ibid.*, p.15.

5. "In an industry with a large number of small outlets training in small business management is imperative...The primary training need is for financial management enabling garages to operate efficiently in the present harsh economic climate."

A number of these points merit further discussion. Firstly, the idea of a proactive training approach for craftsmen. While there have been improvements in the training strategy adopted for craftsmen, in many cases this still cannot be described as proactive.

In-Service Provision

The issue of in-service training for apprentice instructors is raised here and expanded upon at a later point in the Report [47]:

"Continue basic training of apprentices, taught by instructors whose skills are as up to date and relevant as possible."

As this is an AnCO generated report it must be assumed that the instructors referred to are from that organisation. The issue of trainer in-service is one of the topics dealt with in the public sector training survey.

Market Share and Levels of Training Activity

The authors go on to make some very important observations the first of which will be developed at a later point [48] :

"One could suggest that the level of training provided by manufacturers was related to the market share which they have in the Irish situation. Market leaders were seen to be providing a very comprehensive training programme whereas those further down the scale had less rigorous training policies..

One comparison that can be made, however, is that between levels of investment in training for staff, and company success. A study [49] of the top 100 UK firms revealed:

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[47] Aidan Moloney et al, "The Retail Motor Trade 1983 - 1990" - A study of Markets, technology, employment and training: AnCO The Industrial Training Authority, Dublin 4, 1983: p.111.
[48] *Ibid.*, p.99.
[49] Coopers and Lybrand Ltd., Human Resource Development Survey, Nov. 1992.

"Companies with above average investment in training and development of their staff were the same companies who had above average performance in profitability and overseas market share."

This would suggest a strong link between investment in training and company performance. The possibilities are that training is an investment that pays off with success in the marketplace, or that successful companies can afford to invest in training provision. The latter is quite possibly the case for the Irish Motor Industry.

Training Activity in the Industry[50]

"Overall training provided by the manufacturers/distributors for their dealer network was considerable. The emphasis was primarily on keeping the skills of the mechanics employed in their garages up to date and to a high standard. In addition, sales and parts training had an important role in the eyes of most companies. However, management and computer training seemed lower down the list of priorities".

As discussed in the context of the FORCE Report little has changed in terms of management training. While sales and parts training have an important role in the perception of the Industry the actual extent of non-technical training activity is not stated. This information will be sought from the distributors and discussed in a later chapter.

Non-Franchised Outlet Training Needs

"The increasing need to use diagnostic equipment combined with a knowledge of electronics and autoelectrics skills rather than mechanical skills.. It will become increasingly difficult for mechanics who do not have the facility of attending manufacturers courses to keep their skills relevant and continually updated."

"The garages to be most affected by this are to be the smaller garages who have a workshop but do not have a franchise".

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[50] Aidan Moloney et al, "The Retail Motor Trade 1983 - 1990" - A study of Markets, technology, employment and training: AnCO The Industrial Training Authority, Dublin 4, 1983: p.100.

The absence of CVT for non-franchised outlets is obviously important if their survival is to be assured. In reality, the distributors are not likely to undertake the provision of CVT to such personnel. In this instance the public sector would appear the best option. The opinions of the public sector trainers were sought on the area of CVT and will be discussed in the relevant chapter.

Findings from AnCO Report

- There is a need for a more systematic and proactive approach to training craftsmen.
- The need to keep instructors' skills updated is a continuing requirement.
- There are training needs arising from the increased use of computers.
- There exists a need for training in customer awareness for virtually every occupation in the Industry.
- Training in small business management is imperative.

Comment on Findings

Interestingly the summary of points that are important to this study do not display any signs of ageing, despite the fact that they were published in 1983. It will become apparent in later chapters that little has changed. The second finding, reiterated above, deals with computer training. While this situation has improved, the number and use of computers in outlets has also increased dramatically. Given that almost every outlet in the country now employs a computer for some purpose it may be more appropriate to introduce computer training as part of an induction programme rather than as a training intervention.

Many distributors undertake a considerable amount of training in the area of customer relations. This type of training is likely to increase in importance in the coming years. The suggestion regarding increased training in management skills, particularly in small business expertise, would essentially concur with that of the FORCE Report, previously discussed.

Key Findings from Past Research

- The standard of the Irish education system is on a par with other European systems.
- Education should include preparation for work of the individual.
- Vocational training programmes present an opportunity that could be harnessed to provide a better standard of entrant for the Industry.
- There is a lack of formal certification and assessment in vocational preparation courses.
- There is an upward trend in the level of educational attainment of the apprentice population.
- High achieving students tend to aspire to a university education rather than a vocational training programme.
- There is a lack of gender balance in apprenticeship uptake that needs to be addressed in a pro-active way.
- Capacity to respond to change is an ever growing need in employees; as are the characteristics of flexibility and adaptability.
- Human Capital is an important investment for employers.
- There is a need to nurture a life-long learning capacity.
- While NESC suggests that there is a skills gap between Ireland and its competitor countries in industry generally, no evidence of this in the specific case of the Motor Industry has been found; in fact the FORCE Report would suggest that a high level of training activity is evident.
- Improvements in in-service provision are necessary.
- Employers should be more involved in course materials, assessment procedures and accreditation of trainees.
- A system of accreditation is necessary to develop linkages between the various education and training strands to encourage continuing education for all.
- IBEC suggests that training for industry should be the responsibility of an industry-led body with more power than that allowed to FAS.
- Activity in sales and management training is limited in the Motor Industry.
- Franchised outlets avail of more training than non-franchised outlets.
- Non-franchised outlets are dependent on public centres for their training provision; this provision is inadequate in rural areas.
- The cost of training can be a problem for smaller outlets.
- There is a need for more co-operation between the distributors and the public centres.
- CVT participation rates, after apprenticeship, are low.

- A nationally recognised training plan is needed in non-technical training, few distributors have formal training plans in this area.
- The FORCE Report identifies a need for a more pro-active approach to technical training.
- Given the massive increase in computer related activity in the Industry, computer training provision will have to be improved.
- Training provision by distributors is linked to market share.

Key Conclusions from Past Research

- While the education system serves Industry well in terms of the standard of attainment of its students, there is still a shortfall in terms of the individual's preparation for the world of work. This must be addressed.
- Vocational Preparation courses lack formal certification procedures but they provide the possibility for improving the standard of recruit to the Motor Industry.
- Lower social status for technical occupations and gender imbalances in recruitment levels are identified as necessitating improvement.
- Improvements in in-service provision are identified as important both for teachers and for instructors.
- Improved participation by employers in the education system is recommended. IBEC go further, and propose the establishment of an industry-led training body.
- A difference exists between franchised and non-franchised dealers in terms of the level of training activity undertaken and the level of expertise that exists in customer relations. This difference is undesirable as it disadvantages non-franchised dealers and their staff.

Implications for Current Research

There are issues arising from the findings of section A of the review that require further research and / or deliberation:

- While Kellaghan established an upward trend in the educational attainment levels of entrants to apprenticeships generally, it is not specifically stated that this upward trend exists for apprentices in the Motor Industry. Such a trend would be important to the outcome of this study and merits investigation.
- The possibility of an increased role for Motor Industry employers in the education and apprentice system should be further examined.

- While the level of sales and management training is described as limited further examination of this area would be prudent given the importance of these occupations to the Industry generally.
- CVT rates are low, yet the bulk of distributor training is in technical CVT. The area of CVT requires more detailed analysis for this study.
- Training provision has been linked to the market share of the distributor concerned. Further examination of this situation must be undertaken given the large number of smaller Irish distributors that exist.
- The suggestion that few distributors have formal training requires further investigation.

4.4 SECTION B : EXAMINATION OF RELATED THEORY OF TRAINING & DEVELOPMENT

Introduction

The following section attempts to lay the foundation for later analysis of the training system that currently exists in the Irish Motor Industry and the type of systems required to meet the needs of the future by;

- Defining the terms 'training', 'learning' and 'education'
- Explaining the different philosophies that underpin learning
- Suggesting some methods of evaluating training and learning outcomes
- Describing personal qualities desirable in employees
- Explaining the terms 'model' and 'strategy'.

Defining Training, Learning and Education

During the course of this study a number of terms and phrases will be used in describing the operation of the training system that exists within, and for, the Irish Motor Industry. In order to clarify the study's theoretical position these terms and phrases will be explained.

During the course of a typical motor trade apprenticeship, an apprentice will spend time at both a FAS Training Centre and a Department of Education funded college. While attending the Training Centre the apprentice will, at times, be "trained" and at other times "educated". At other times the apprentice will be encouraged to learn. During the course of a working life in the Motor Industry most employees will be required to attend a training course or to learn some new task or system. Kubr and Prokopenko[51] explain learning as follows:

> "A manager has learned something when either or both of the following descriptions apply - he knows something he did not know earlier, and can show it; he is able to do something he was not able to do before."

To distinguish between learning and training is important. Attendance at a class, seminar or training course does not necessarily mean that learning will occur[52]:

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[51] Kubr, M. and Prokopenko, J. Diagnosing Management Training and Development Needs - Concepts and Techniques; International Labour Office, Geneva, 1989, p.39.
[52] *Ibid*, p. 36.

"You can train without learning - you missed the point or weren't sufficiently interested. You can learn without training - you learn things all the time."

To explain the difference between the training received by an apprentice and the education received by an apprentice, Margolis and Bell[53] would suggest that:

"Training focuses on equipping recipients with the competence needed to do their present jobs... Education prepares the person for a future - but known - position... Development focuses on helping the person change as the organisation changes."

The difference between education and training is especially important in the context of apprenticeships in the Motor Industry with the advent of the Modular Curriculum which has been introduced recently. Efforts to combine the training received by an apprentice via the FAS training system, with the education that is provided for apprentices through the colleges, could possibly be hindered by the philosophical differences that exist between these two strands.

Training Effectiveness

As outlined in the previous section, a considerable number of people receive some form of training each year in the Motor Trade. If the comprehensiveness, or otherwise, of this training is to be assessed, certain criteria, against which the training system can be tested, must firstly be established. In order to assess the effectiveness of training Margolis and Bell[54] would consider that

"Training works best when it:

- is the right response for the identified need.
- zeroes in on the right area with optimum focus.
- is based on proper consideration of time, need, available resources and organisational culture.
- is delivered by a person who embodies the desired perspective and portrays the required competence and confidence.
- incorporates some type of follow-up to the training aimed at ensuring support for new learner growth."

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53 Margolis, F.H. and Bell, C.R. Understanding Training: Perspectives and Practices, University Assoc. Inc.; San Diego, California, 1989, p.2.
54 *Ibid.*, p.2.

It will be possible to test current training provision against this list in later discussions regarding the Irish Motor Industry and its training function. However, in isolation training interventions may not provide the improvements hoped for at the planning stage. It is often necessary to look at non-training interventions such as the organisation itself.

Organisational Development

Change aimed at improvement at an organisational level is usually described as 'Organisational Development'. Very often, in the Motor Industry, organisations are small[55] and overlooked as the possible cause of a problem. As a result organisational development, per se, can be ignored. An explanation of the meaning of organisational development given by Margolis and Bell[56] suggests that:

> "Organisational Development is a label applied to a host of planned corrective actions other than training" ...and is "usually implemented to aid the organisation in becoming more responsive to its environment"

In implementing an organisational development programme, Margolis and Bell[57] identify three areas that can require improvement:

- Human to Technology
- Human to Organisation
- Human to Human

The Human to Technology area is one particularly relevant to the Motor Industry given the rate of technological change occurring. In workshop, and many other dealership situations, difficulties can arise when older staff are required to use computerised test equipment; many are reluctant to do so.

Human to Organisation involves the all important reward for staff. Not only fiscal remuneration but also administrative structures, social prestige within an organisation, communication channels, etc.

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[55] Domininck Tuitte, " Employment, Work and Training in the Irish Automobile Repair and Distribution Sector", FORCE Report, DIT, Dublin, 1994: p.13.

[56] Margolis, F.H. and Bell, C.R. Understanding Training: Perspectives and Practices, University Assoc. Inc., San Diego, California, 1989, p.3.

[57] *Ibid.*, p.15.

Human to Human interventions usually require considerable interpersonal skills that are not always present in small business.

Another non-training intervention identified by Margolis and Bell[58] is that of motivation. They make the comment that:

> "Most professionals are motivated to work and motivated to learn".

The difficulty with this type of motivation is that it is essentially self-inspired, requiring a high self-worth component. It is unlikely that persons of low self-esteem will be motivated in this way and therefore they are unlikely to be self-motivated in learning matters. Some other way will have to be found to motivate the non-professionals of the Motor Industry.

Theory of Training Methods

In discussing the various training methods employed in training employees in the Irish Motor Industry it is necessary to identify the educational philosophies that underpin them. The training undertaken often consists of either:

Theoretical and practical technical training, or basic computer and keyboarding skills, or stores procedures, or sales methods and techniques.

Although training is usually offered in the Industry in the above areas, people learn in a number of different ways. The three different philosophical learning models identified by Margolis and Bell[59] are:

1. Behaviourism (Behaviour modification)
2. Adult Learning (Discovery Learning)
3. Social Learning (Behaviour modelling)

The best known exponent of behaviourism was the Russian scientist Pavlov. Behaviourists believe that the most effective way to change behaviour (the desired outcome of all training) is through reward and support, and occasionally through punishment. Many computer-based training programmes are designed on these

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[58] Margolis, F.H. and Bell, C.R. Understanding Training: Perspectives and Practices, University Assoc. Inc., San Diego, California, 1989., p.10.

[59] *Ibid.*, p.67.

principles. No training system within the Irish Motor Industry employs truly behaviourist methods in training employees.

Adult Learning is a more common approach to teaching such things as telephone skills and selling techniques where role play and workplace simulations are encouraged. Many interpersonal skills improver courses are conducted in this way.

Much technical training is carried out, at both apprentice and post-apprentice levels, by employing a Behaviour Modelling approach. Margolis and Bell[60] suggest that this model consists of two steps:

1. "Acquiring a mental image of some action and its consequences.
2. Performing or trying out the action. "

Technical training usually consists of (1) a demonstration and explanation by the trainer and (2) a practice session involving feedback with the trainees; and thus it can be described by this model.

To use only one of the three models to describe a particular educational system, however, is somewhat over-simplistic. In the case of public sector training carried out for apprentices in the colleges, no single model can be used to describe the educational process; some activities would include aspects of all three models for their successful completion. Many would focus on two, namely; Discovery Learning and Behaviour Modelling. Margolis and Bell[61] suggest philosophical backgrounds for the various occupational training methods as follows:

- *administrative: behaviourism and adult learning*
- *professional-technical: adult-learning*
- *mechanical-technical: behaviourism*
- *interpersonal: adult and social learning"*

Note that interpersonal skills training and administrative skills training can require a mix of two philosophies for their description.

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[60] Margolis, F.H. and Bell, C.R., Understanding Training: Perspectives and Practices, University Assoc. Inc., San Diego, California, p.69.
[61] *Ibid.*, p.10.

Evaluating Training Outcomes / Training Effectiveness

Having established a philosophical basis for training approaches the idea of assessing the outcomes of training programmes must be investigated. Wallace[62] proffers some methods for evaluating the effectiveness of management development programmes. It is possible to evaluate other training programmes in the same way. One suggestion is to use the Kirkpatrick Effectiveness Framework which comprises four levels and is therefore hierarchical in approach:

1. Reaction/Response
2. Learning
3. Application of new behaviour
4. Results

Reaction/ response is simply what the participants thought of the training course or class in terms of materials, instructor, facilities and so on.

Learning is more difficult to measure than reaction. Written or practical tests and examining the work of the participants might be employed.

Behaviour/application could be checked at the workplace by testing work output in terms of quality and/or quantity and general job performance.

Results is the more global outcome from the application of the previous level. Did the organisation benefit or improve in some tangible way?

The CIRO Framework

The CIRO framework is another way of measuring educational outcomes but is non-hierarchical and can be described as being broader. It consists of four categories[63]:

Context evaluation

Input evaluation

Reaction evaluation

Outcome evaluation

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[62] John B. Wallace, Developing Better Managers - Creating change through effective training, Kogan Page, London 1991, p.137.
[63] *Ibid.*, p.139.

Context evaluation ensures comprehensiveness by setting objectives that encompass; the problem to be solved, change in work necessary and the new skills or knowledge required of the employee.

Input evaluation involves deciding on the optimum method of achieving the goals (set out as the context for the training course) by deciding where and when the training should be held, who should attend and so on.

Reaction evaluation involves collecting participants' opinions about the programme.

Outcome evaluation is the collection and use of information about results in order to analyse the success, or worth, of that training.

Both models are useful in measuring the outcomes of training programmes. Very often Irish motor distributor training does not properly evaluate beyond level 2 of the Kirkpatrick hierarchy simply due to the logistical difficulties that would be encountered in trying to assess learning outcomes at dealership level, which is where the application and results are to be seen. On the other hand, the CIRO framework is more suited to the use of a training organisation that trains people for work at a remote location to the training base.

Personal Qualities

While it is possible to evaluate learning outcomes as they are often tangible and measureable, employers often attempt to describe the personality traits they desire in employees. Such traits can defy precise description.

Flexibility is one such trait which is required in the majority of occupations. Particularly it is more required for persons working in the trade of Motor Mechanic in a smaller outlet, comprising 6 - 10 employees. In such an outlet there is no possibility for specialisation or strict role demarcation. All employees are expected to do what is asked of them. An experienced Motor Mechanic will be a real asset, or a real liability, dependent not only on ability but also on attitude. There are qualities required of key personnel in any business that defy precise definition or description. One organisation

has coined a phrase that describes such abilities, terming them "Overarching Capabilities"; and explaining them as[64]:

> "The outlook, understanding and ways of working which promote people's effective contributions and facilitate organisational change in appropriate directions."

The list of attributes that constitute these capabilities include[65]: common sense, problem solving ability, work methods, thinking through the consequences of a particular action, a set of values and a good outlook, desire for getting it right first time and for continuous improvement, using personal knowledge and experience constructively, ability to play pro-active roles and to take responsibility effectively.

Such capabilities in individuals are usually not expected at the lower occupational levels but are usually the attributes of employees that are of management status or, of those being groomed for management. Certain occupations that are non-management may require these capabilities though and as the document suggests[66]:

> "Different occupations call for different overarching capabilities"

There is also some difficulty with the training and education system in this regard as[67] :

> "Traditionally vocational education and training have not been designed either to develop or assess these overarching capabilities which are needed in the occupation"

In addition to overarching capabilities the ideal employee will also possess Occupational Capabilities which are described as[68]:

> "The ability to integrate and use the occupation's technical knowledge, skills and overarching capabilities in response to, and anticipation of, changes in the work situation."

Both sets of personal capabilities merit particular mention in discussing possible future training in the Motor Industry as there is considerable disquiet among trainers in the Industry regarding the type of individual being recruited for apprenticeships. This disquiet will be discussed in a later chapter outlining the results of the survey of public

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[64] The Prospect Centre, Growing an Innovative Workforce -Forward Looking Education and Training for Forward-looking Business, The Prospect Centre, Kingston-upon-Thames, Nov 1991, p.7.
[65] *Ibid.*, p.35.
[66] *Ibid.*,p.37.
[67] *Ibid.*, p.38.
[68] *Ibid.*, p.7.

sector training instructors. Some further discussion on personal qualities will follow in the section outlining the socialisation aspects of training programmes.

Model and Strategy Building

In formulating a model of training and development for the Irish Motor Industry, the precise meaning of model must be understood. The model will, of necessity, also encompass a strategy that allows for the practical implementation of that model. The exact type of strategy must also be understood.

A definition of model[69] reads:

> ".. a plan, design, something to be copied, completely suitable for imitation, exemplary.."

and strategy[70] is

> "the art of conducting a campaign and manoeuvring an army".

In the business world it is often necessary to implement a strategy. Such a strategy cannot realistically be described as militaristic. In understanding the rationale of a business strategy, then a slightly less formal definition would be more appropriate. Quinn[71] proposes that

> "A strategy is the pattern or plan that integrates an organisation's major goals, policies and action sequences into a cohesive whole. A well formulated strategy helps marshal and allocate an organisation's resources into a unique and viable posture based upon its relative internal competencies and shortcomings, anticipated changes in the environment and contingent moves by intelligent opponents."

This description was formulated by Quinn having made a study of 10 multi-billion dollar companies in the United States that were undergoing important strategic change. Quinn[72] makes the following observations:

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[69] Sidney Landau et al, Chambers English Dictionary, W. & R. Chambers Ltd. and Cambridge University Press, Edinburgh and Cambridge, 1988, p. 919.
[70] *Ibid.*, p.1452.
[71] James Brian Quinn, "Formulating Strategy One Step At a Time", Journal of Business Strategy, Vol.1 No.3. Winter 1981, p.44.
[72] *Ibid.* p.64.

"..formal strategic planning in sample companies was one of many important building blocks in a continuously evolving structure of analytical and political events that combined to determine overall strategy ...The full strategy was rarely written down in one place. The processes used to arrive at the total strategy were typically fragmented, evolutionary and largely intuitive...the overall corporate strategy tended to evolve as internal decisions and external events flowed together to create a new consensus for action among members of the top management team. The rationale behind this kind of incremental strategy was so powerful that it - rather than the formal system planning approach so often espoused - seemed to provide an improved normative model for strategic decision making." (this is) best described as "Incrementalism" or a "building block strategy"

This approach to strategic planning and implementation implies a looser type of planning process that is not rigid; it allows for change as, and when, it occurs. The Irish Motor Industry, at distributor and manufacturer level, is very susceptible to external influences such as Governmental taxation policy changes, currency fluctuations, interest rate increases and so on that can have serious repercussions on new car sales. Any strategic planning method for the Industry must allow for such eventualities and the general cyclical nature of the Industry.

Conclusions from Section B

The following conclusions arise from the preceding section.

- Given the definitions of training and education offered earlier, it would appear that apprentices are 'trained' while attending FAS Centres and 'educated' while attending colleges. It is possible that difficulties can arise with the implementation of the new modular curriculum due to this difference in approach.

- Some issues currently assessed as necessitating training would be better addressed by employing Organisational Development interventions, in Human to Organisation, Human to Technology and Human to Human areas. The

Industry may need to examine the need for O.D. intervention as a supplement to its training programmes.

- Comprehensive evaluation of training outcomes in the Industry can be achieved by applying the CIRO framework. This framework comprehensively assesses the effectiveness of the training intervention by assessing: Contextual appropriateness, the level of optimisation of the Inputs required, the Reactions of the participants and the Outcomes in terms of results.

Implications for this Research

There are issues arising from the findings of section B of the review that require further research and / or deliberation:

- Training effectiveness will be assessed using the Margolis and Bell definition; i.e. Training works best when it is the correct response, focuses on the right area, is based on appropriate practical basis, is delivered by a competent person embodying the desired perspective, and incorporates some follow-up for the learner.

- The extent of Organisational developmental as a practice in the Motor Industry must be established. The Margolis and Bell model can be used as a measuring device for this purpose.

- The term 'Overarching Capabilities' is one that will be used to describe personal characteristics that are desirable in an employee but difficult to explain.

- The overall outcome of this study must incorporate both a model for training and development for the Industry and a strategy to assist in its implementation.

- The strategy can employ an "incremental" building block approach which will allow for change and re-thinking as it progresses.

4.4 SECTION C - SOCIALISATION FUNCTION OF TRAINING SYSTEMS

Introduction

A number of themes have arisen during the preceding pages; one of which was levels of remuneration and reward. While these items are important there are also a number of socialisation functions served by current occupational roles and hierarchical structures. Enlightened employers realise that the role of their training department is not strictly one of producing specialist workers, it also has the function of the effective socialisation of workers; "slotting-in" the worker into their appropriate niche in society, as it were.

Examples of the Socialisation Function of Training Systems

Novak and Rost who are employed at the Mercedes-Benz Gaggenau factory, which employs approx. 10,000 employees and is one of twelve Mercedes-Benz factories; have some interesting comments to make on the role of the employer in this socialisation process. They remind us that [73] :

> "Vocational training does not have the function of only producing good specialist workers or staff, it also provides opportunities and a role in society... While the social responsibilities of companies towards society and young people were often emphasised in earlier times, more attention is nowadays paid to economic and technological factors as a basis for decisions. Skills are now regarded as one of the most decisive production factors."

They proceed to discuss the investment made in their training programme[74]:

> "The average annual training cost for a male or female trainee at Mercedes-Benz AG in Gaggenau is DM 40,000. These investments in human assets must be seen as equal in status to investments in fixed assets."

The idea of investment in human assets is not one that is often associated with a service industry such as the Motor Industry; there is no reason why that association should not be made. It is interesting to note the cost of training provision at approx.

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[73] Hermann Novak and Herbert Rost, "Industrial Training - The Employers Role in the German Training System", PETRA Conference,"Vocational Education and Training in Germany", Dublin Castle, 30th September, 1992: 1.

[74] *Ibid.*, p.1.

£15,000 per trainee per annum! Such a trainee would be a participant in the much acclaimed German dual-training system. A similar figure for CVT is not offered, however. In the Irish situation, the State pays almost all of the training costs involved with the apprentice system. In Germany, the State pays only a portion of the cost.

Role of the Employer

As a provider of skilled employees Novak and Rost see the role of the public sector training system somewhat differently than would be the Irish experience [75] :

> On no account can companies assume that third parties will provide personnel with outstanding qualifications for them. It is their most basic task to develop professionally skilled employees. The state is only able to create the conditions which make this possible."

They stress here the role of the company as the primary provider of training with the State playing only a secondary role.

The success or failure of the training effort depends on the personal experience of the trainee. This experience can be positive, or negative, and will be reflected in the trainees attitude to their training programme. One variable is identified as crucial by Novak and Rost [76] :

> All vocational training stands or falls by the enthusiasm and effort of the instructors in different training locations."

In employing training instructors and personnel their personal and professional abilities greatly affect the entire training process. This idea is reiterated by Margolis and Bell when they suggest[77] that training works best when it:

> "... is delivered by a person who embodies the desired perspective and portrays the required competence and confidence.."

A problem that exists with the German System identified by Novak and Rost[78] is stated thus :

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[75] Hermann Novak and Herbert Rost, "Industrial Training - The Employers Role in the German Training System", PETRA Conference,"Vocational Education and Training in Germany", Dublin Castle, 30th September, 1992: 2

[76] *Ibid.*, p.3.

[77] Margolis, F.H. and Bell, C.R., Understanding Training: Perspectives and Practices, University Assoc. Inc., San Diego, California, 1989, p.2.

"A certain amount of dissatisfaction exists regarding the ability of teaching institutions to absorb change. Schools and curricula are too static, while the world of work is subject to dynamic processes".

Novak and Rost make the following points [79] in summary of their position:

1. Companies must develop the skills of their employees themselves.
2. Well-trained and continuously trained personnel constitute a foundation upon which companies can react flexibly to new market requirements.
3. Products and production processes are changing more and more rapidly, making the simulation of reality in external schools increasingly difficult, causing these to fall behind developments and making the transfer, or use, of the learned subject-matter almost impossible. Experience is of particular value in the learning process.
4. Private industry is mainly responsible for vocational training. Society and the state have the function of stimulating and encouraging the activities of companies in the vocational training sector.

It would appear that Novak and Rost see the role of the employer as primary in the training of personnel, the State's role is only secondary and mainly one of providing support to the employer; removing learning from the workplace and placing it in the classroom is not appropriate. The Roche-Tansey report also recommends that employers should be responsible for their own training with a restricted state input [80] :

" ... restrict subsidised state training to the sphere of general training. Firms should themselves, provide the training specific to their own operational needs."

Given the low level of training activity in Irish industry, as identified by Roche and Tansey, the process of increasing the involvement of employers must be carefully managed and organised.

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[78] Hermann Novak and Herbert Rost, "Industrial Training - The Employers Role in the German Training System", PETRA Conference,"Vocational Education and Training in Germany", Dublin Castle, 30th September, 1992 p. 3.

[79] *Ibid.*, p. 4.

[80] Frank Roche and Paul Tansey, "Industrial Training in Ireland", "A Time for Change : Industrial Policy for the 1990's", The Industrial Policy Review Group, Dept. of Industry and Commerce, Dublin, 1992: p. 40.

The Occupational Role of Motor Vehicle Technician

At the International Organisation of Motor Traders and Retailers (IOMTR) National Congress of 1993, held in Washington DC; the Vocational Training Committee was addressed by two speakers on the same theme; namely the social status of the Motor Vehicle Technician.

The Chairman of this committee in introducing the two speakers, M. Debargue and Herr Stoy, explained that each was unaware of the others chosen topic; yet they both chose to speak on the same theme. This, he explained, underlined the relevance and importance of the topic. The points raised are particularly important in the deliberations of this study.

M. Debargue began by defining[81] the type of motor technician to which he will refer again:

> "There is an increasing divergence in this population of workshop technicians between operators with few qualifications who carry out basic tasks, and experts whose competence is constantly being cast into doubt by accelerated technological evolution... The future of our companies is largely dependent on them and that's why we should consider improving their social position... technicians in this category carry out almost one third of our workshop activity."

This divergence to which M. Debargue refers is one to which the referred in the introductory section of this study. The role of motor technician is one which is increasingly being called for and one which may be introduced, in a formal way, into the Irish Motor Industry in the coming years. In explaining the role of technician M. Debargue suggests that in addition to technical competence the technician should possess[82] :

> - The ability to listen, and to create "empathy" by putting himself in the other persons place, and thus see the problem from his client's point of view.

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[81] Mr. Michel Debargue, " The Social Status of the Motor Vehicle Technician and the Recruitment of Young People to the Industry". IOMTR Congress, 2 June 1993: p.1.
[82] *Ibid.*, p.2.

- An aptitude for teamwork: the ability to work with mechanics and bodywork repairers as well as salesmen and parts people.

- Constant curiosity: a taste for resolving complex problems and the ability to see each one as a new challenge.

- A sense of responsibility such that he can work without supervision, right from making the initial diagnosis to carrying out the final check on his high quality work.

The Organisation of Work

In line with the thinking of Herbert and Rost, regarding the role of the employer, they may have a primary role to play here. If a company is to nurture this type of employee then, Debargue argues[83], that within the company any

> "constraining procedures and rigid hierarchies" must be abolished.: "A flexible and practical organisation is needed to produce responsible workers, apt at organising themselves and co-operating with each other to find the ideal solution promptly, thus alleviating the need for hierarchy. This would certainly mean the end of cut and dried divisions and rivalry between various services. These are "cancers" which eat away at efficiency."

A number of issues arise here, the most important of which is the level of co-operation which a group of employees would need to exhibit in order to participate in such an organisation.

The more controversial issue of role demarcation is addressed, in a specifically Irish context, by Roche and Tansey[84] who suggest that:

> "Traditional job boundaries between operatives and technicians, between technicians and craftworkers, between technicians and management are being eroded..."

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[83] Mr. Michel Debargue, " The Social Status of the Motor Vehicle Technician and the Recruitment of Young People to the Industry". IOMTR Congress, 2 June 1993, p.2.

[84] Frank Roche and Paul Tansey, "Industrial Training in Ireland", "A Time for Change : Industrial Policy for the 1990's", The Industrial Policy Review Group, Dept. of Industry and Commerce, Dublin, 1992: p. 81.

Improving the Social Status of the Motor Technician

In the broader community, M. Debargue argues, that motor technicians must be encouraged to take a more active role in the community as a means of improving their social status. The person must appear successful. Little can be done by the company in this regard but improvements[85] can be made within the company..

> "We are largely responsible for his social position within the company. This involves:
>
> Acknowledgement of longevity.
>
> Performance-related salary.
>
> Encouraging employees to gain further qualifications.
>
> Researching into possible visible indications of position..
>
> Awarding those in positions equivalent to supervisory positions this status.

The Irish Motor Industry has not addressed these particular suggestions as yet. No formal role of "technician" exists within the Industry as yet. Introducing a new grade of technician to the Industry may be met by resistance from employers because of the possible extra payroll costs involved. Increasing wage levels for technicians would add to workshop overhead costs and could reduce profitability.

In examining ways of funding wage increases for technicians M. Debargue suggests a number of ways [86] of tackling this problem:

> (1) By providing the technician with the best equipment available so that he can achieve maximum productivity.
>
> (2) By ensuring that groundwork and reassembly, which require a lower level of expertise, are carried out by operators on a lower wage scale.
>
> (3) By stating the cost of the technician and that of the operators separately on the invoice.
>
> (4) By giving the technician a significant interest in the turnover he generates

In returning to the issue of social position M. Debargue links skill levels[87] to the attainment of a new social position for technicians:

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[85] Mr. Michel Debargue, " The Social Status of the Motor Vehicle Technician and the Recruitment of Young People to the Industry". IOMTR Congress, 2 June 1993: p.3.
[86] *Ibid.*, p.3.
[87] *Ibid.*, p. 4.

..The most important aspect of a technician's social position is undoubtedly his recognised level of skill. The opportunity to "make progress" certainly plays a determining role in the technician's social position, because the reward acknowledges his efforts and gives him the courage to succeed.

Reinforcing Social Position by using Visible Indications.

Debargue suggests the possibility for reinforcing a higher attained social position by using tangible changes such as[88] :

"...Title is important. In France....., the word technician is rarely used... Work clothes.... must be distinctive, particularly in colour... The various working zones should have the same distinguishing criteria... Mentioning the technician's name on the client's invoice...., having business cards printed with the technician's qualifications and number of years experience. This card should be attached to the invoice ..In French industry, technicians are no longer classed as unskilled workers, but as supervisory staff. This is not yet the case in most garages".

These suggestions of M. Debargue are low-cost and are ways of highlighting the separate role and particular abilities of the technician. If the role of technician exists as a separate entity in France then it is possible that a similar occupational role could be introduced into the Irish Motor Industry in the future.

Recruitment

In order to attract the right type of recruit to the Industry the following must be asked of a candidate (him)[89] :

-How can we interest him in vehicle repairs when he is most often tempted by a post with a vehicle manufacturer, or in a large company with an impressive fleet of vehicles?

-How can we measure his degree of motivation?

-How can we recruit him at the right level, neither too high nor too low.

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[88] Mr. Michel Debargue, " The Social Status of the Motor Vehicle Technician and the Recruitment of Young People to the Industry". IOMTR Congress, 2 June 1993, p. 4.

[89] *Ibid.*, p.4.

-What supplementary (off / on the job) training scheme will be necessary to reinforce his qualification?

-What promotion ladder shall we let him see to motivate him?

-How can we minimise the risk of him leaving at the end of or during his supplementary training, when he has cost more than he has yielded?

There are difficulties in all these areas in the Irish Motor Industry also.

M. Debargue continues by suggesting three reasons for the above difficulties [90] :

(1) The motor trade has not yet improved its public image to the extent that it naturally attracts well-qualified young people.

(2) There is too little communication between our (Motor Industry) companies and schools which educate young people to this (adequate) level.

(3) Our employer organisation has not yet published any guide to help companies wishing to recruit young motor technicians, and advise them how to do this successfully."

Debargue continues by suggesting one method, successfully employed in France, of improving the Industry's public image during recruitment campaigns. That is by using the carefully nurtured corporate identities of the manufacturers in recruitment advertisements [91] :

".. if a vehicle manufacturer and his network carry out the same process (of advertising for recruits), the firm's image is substituted for the faltering image of the trade, with significantly more success...."

Apprenticeship Places and Up-take

In the Irish Motor Industry advertisements for apprenticeships are rare; as indeed are offers of apprenticeship places generally. One newspaper article [92] suggested that it is in fact much easier to obtain a place on a University or Regional Technical College Course than it is to obtain an apprenticeship, for a variety of reasons.

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[90] Mr. Michel Debargue, " The Social Status of the Motor Vehicle Technician and the Recruitment of Young People to the Industry". IOMTR Congress, 2 June 1993., p. 5.

[91] *Ibid.*, p.5.

[92] Christina Murphy, "Apprenticeships scarcer than university places" The Points Race, *Irish Times*, 25th July 1992, p.2.

Another commentator who addressed the theme of recruiting the correct type of person for the Motor Industry was Mr. Walter Stoy in a paper delivered at the International Organisation of Motor Traders Annual Congress, 1993. Stoy notes the decline in numbers participating in the dual training system in Germany as follows [93] :

> "In 1987,.. close to 1.8 million apprentices were taking part in the (German) dual training system at that time. (In 1993).. there are only 1.5 million young people i.e. a reduction of 300,000, who are following apprenticeship training. There is a further downward trend."

In examining the pattern of this trend Stoy looks at the number attending state university or technical college in Germany. This number [94] :

> ".. has increased to about 1.6 million in total. In other words, in Germany, the rising generation is more academically than vocationally inclined."

Such a trend would be in keeping with the academic orientation in the Netherlands as reported by Kellaghan[95] .

Stoy goes on to expound on the implications of such an emphasis on academic education [96] :

> "I believe, that in the western industrial nations,... the temptation of a constantly over-estimated theoretical education, causes them to head for academic examinations, hence degrees, which are of no practical value in society. On the other hand, highly skilled workers and craftsmen, who are willing to invest both in their work, namely the talents of their head and their hands, are desperately being sought.

Such comments underline the views of Debargue as outlined previously. Stoy continues by suggesting that suitable technical personnel can only be recruited if [97] :

> "..we .. allow more substantial rewards, ... with money as well as with status."

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[93] Walter Stoy, "The Motor Vehicle Technician: A New Career Stage in the Training for the Retail Motor Industry in the Federal republic of Germany" IOMTR Congress, Washington D.C., 2 June 1993. p.1.

[94] *Ibid.*, p.1.

[95] Dr. Tom Kellaghan, "Education and Training Policies for Economic and Social Development", National Economic and Social Council (NESC), Dublin, 1993, p. 127.

[96] Walter Stoy, "The Motor Vehicle Technician: A New Career Stage in the Training for the Retail Motor Industry in the Federal Republic of Germany" IOMTR Congress, Washington D.C., 2 June 1993. p.1.

[97] *Ibid.*, p. 2.

New Occupational Role

Stoy asserts that basic realisation has led the German system to introduce a new occupational role; that of "Servicetechniker". The pre-requisite for becoming a Servicetechniker, or motor vehicle service technician, is that a candidate must be a particularly talented qualified craftsman, having completed a training programme as either a mechanic, or auto-electrician. The company owner, or the workshop manager, encourages particularly capable craftsmen or apprentices to follow the career path of Servicetechniker. Further training for Servicetechnikers is carried out [98] :

> "in all Service Training Centres of the car manufacturers and importers. ..The list ...when added up ...would cover a market share of more than 98%.... The central organisation for the German Retail Motor Industry, the ZDK, has deliberately included the Service Training Centres in the concept, as the institutes which are initially responsible for the communication of technical know-how ... of the most modern cars at any given time"...

The Service Training Centres mentioned are private sector centres and cater for those technicians that are employed by franchised dealers. In the case of those technicians employed by non-franchised outlets the German authorities have invested heavily in the provision of a number of specially designated centres.

> " We have raised approx. 35 out of 100 vocational training centres to a particularly high level as far as the technical and technological aspects of their training programmes are concerned."

Special curricula have also been adopted to broaden the training of technicians. Emphasis is placed on service communication skills and practical diagnostic tests are included at the end of the programme. Such tests ensure the practical application of the knowledge gained during the course of the training programme. Specialisations such as motorcycle engineering or utility vehicle engineering are also possible.

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[98] Walter Stoy, "The Motor Vehicle Technician: A New Career Stage in the Training for the Retail Motor Industry in the Federal republic of Germany" IOMTR Congress, Washington D.C., 2 June 1993. p. 2.

Certification is provided via a tri-partite arrangement between the German manufacturers or importers association, the ZDK, and the training centre providing the training. Accreditation for courses attended at such centres on a modular basis is also possible for those experienced personnel that wish to achieve the status of 'Servicetechniker'.

On the subject of improved remuneration all parties involved in the system agree that a technician should be paid more than a co-worker without the added qualification [99] :

> ... On a scale of one to eight, the service technician will be probably be at a level of 5 to 6, which means 1 to 2 steps higher than a craftsman with similar professional experience..."

In order that the employer might benefit from the employment of the more highly paid worker Stoy[100] would suggest that the technician should be assigned those tasks that were previously reserved for experienced and capable craftworkers (motor mechanics):

> Including .."activities requiring extensive specialist knowledge in the field of hydraulics / pneumatics, ABS, ASR, automatic transmission, bodywork electronics, communications electronics... They can also be put into action as team members with special diagnostic skills who can lead groups, assist course instructors, taking an active part in the training of apprentices and ease the workload on the receptionist and foreman at peak times. In short: the bearers of knowledge in the retail motor industry."

In closing his paper Stoy makes important philosophical comments [101] :

> "..on the basis of solid basic training, the service technician in the future will be sooner in a position to make use of and put into practice home study programs, computer based training etc. .. (in other words) : Learning becomes easier and more effective in the course of time, once a person is equipped with the proper fundamentals."

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[99] Walter Stoy, "The Motor Vehicle Technician: A New Career Stage in the Training for the Retail Motor Industry in the Federal republic of Germany" IOMTR Congress, Washington D.C., 2 June 1993. p.3.
[100] *Ibid.*, p.3.
[101] *Ibid.*, p.4.

The subject of a sound basic training or education is a very important building block for successful CVT. In comparing the German system with the Irish training system the Roche-Tansey report concludes [102] :

> ".. the amount of training and the type of training received in Irish industry is far off the pace when compared with Germany, which is generally acknowledged as the best.... While Irish craftsmen are well trained... it is in the area of skilled operatives, technicians and supervisors that the real gap is apparent..."

Both papers outlining the role of technician are included to inform the reader of developments in other, perhaps more progressive, European countries.

Findings from Section C

- The German dual-system relies heavily on the employer for provision of training, with the state playing a lesser role.
- Vocational training plays an important role in the socialisation of workers.
- Training success is dependent on the abilities and attitude of the instructor.
- Resistance to change is identified as a problem for the public sector training system in Germany.
- There is an increasing divergence in the abilities of workshop technical staff.
- Traditional job boundaries are being eroded and flexible and practical organisations are needed to produce respnsible workers.
- The role of technician has been established in the French motor industry where considerable effort is being made to upgrade the social status of this role.

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[102] Frank Roche and Paul Tansey, "Industrial Training in Ireland", "A Time for Change : Industrial Policy for the 1990's", The Industrial Policy Review Group, Dept. of Industry and Commerce, Dublin, 1992: p.132.

- The lack of glamour or prestige at the lower occupational levels of the Industry makes it difficult to attract and recruit higher calibre individuals.

- It is difficult for second-level students to secure apprenticeship places.

- There is an increasing trend toward third-level participation among the second-level students of Germany and the Netherlands making it increasingly difficult to attract students to take up training and apprenticeship options.

- The German Motor Industry training programme exhibits high levels of co-operation between manufacturers, the public sector, and employers.

- German training structures encourage high degrees of specialisations by workers with pay structures and qualification / career paths that reflect individual attainment.

- The type of training received by Irish technicians, supervisors and skilled operatives is lacking when compared with German practice.

Implications for Irish Situation

- In line with the German experience, companies may have to shoulder more responsibility for the provision for their own training needs. Investment in human assets must be acknowledged. For smaller outlets, which constitute the bigger portion of the Irish Industry, this will present enormous challenge.

- Vocational training stands, or falls, by the enthusiasm and effort of the instructors. Within the public sector there is the possibility for the failure of the training system due to instructor attitude. While in the public sector a lack of formal pedagogical qualification is also an issue.

- There is need for the establishment of the role of technician, with improved social status and remuneration. Personal abilities will feature highly in the selection process for this type of person.

- Traditional job boundaries are being eroded away, co-operation is now very important. This situation has implications for the methods used to train people. Multi-skill training may be required in the future.

- In the experience of the German system there is likely to be resistance to change from educational and training institutions. Such resistance could be detrimental to any new initiatives.

Implications for this Research

There are issues arising from the findings of Section C of the review that will be examined further in this research:

- It will be necessary to examine the need for the introduction of the role of technician to the Irish market, as it already exists in Germany and France.

- While difficulties are experienced by second-level students in securing apprenticeships generally in Ireland, it is important to establish the extent of this problem with specific reference to the Motor Industry.

- The lack of formal training programmes for supervisory staff has been identified as a problem in Irish Industry generally, but not specifically for the Motor Industry. Further analysis of this topic must be undertaken.

- Some measure of the attitudes of instuctors and lecturers must be gleaned from the responses of the public sector trainers to the survey questionnaire. Resistance to change by the public sector is also an important factor into which some insight may be gained from said responses.

The public sector training personnel that constituted the survey cohort group were uniquely positioned to provide information for all of the issues identified. Chapter 8 contains the information that this group provided on those issues.

CHAPTER 5

TRAINING PRACTICES IN OTHER COUNTRIES

In order to evaluate properly the Irish public sector training similar training programmes in some of our European partner countries will be examined. While the German system is considered by many commentators as close to the ideal there are still features of the other systems that are worthy of consideration in an Irish context.

In considering training programmes it is also worthwhile examining the second-level systems that provide education in the period just prior to recruitment of young people into the Motor Industry. Second-level education generally supplies the background education for apprenticeships and training and can influence the subsequent standard of attainment of individuals.

BELGIUM

Second-Level Education / Initial Training

Curricular options at second level allow for an early introduction to vocational education. These options can be described as follows:

- A General secondary education, denoted ASO, which is usually intended as a preparation for university education
- Technical secondary education, denoted TSO, which combines general education and more technical training....
- Art education, denoted KSO, which combines general education with a leaning towards the arts
- Vocational secondary education , denoted BSO, which provides specific vocational training...

School attendance is obligatory until the age of 18 and school students who leave school at 16 are obliged to carry on part-time education until the age of 18 usually in the form of TSO or BSO courses. Students who leave full-time education at 16 can continue TSO, or more commonly BSO, courses on a part-time basis. Apprenticeship schemes are an optional way of completing the compulsory portion of the students' education, the *minimum* age for apprentices being 16.

FOREM and VDAB are the two bodies charged with providing advanced training; one for the French speaking population, the other for the Flemish speaking population. Both are

administered by joint management committees under the control of executive councils. Both also operate vocational training centres (totalling approximately 400) run in co-operation with industry, and general education centres for both secondary and higher education.

Continuing Vocational Training

In addition to these centres FOREM and VDAB are also involved with in-house company training initiatives. The involvement ranges from extending official recognition to in-house training courses to paying out subsidies to company schemes for employees and creating joint training opportunities with industry[1]..

> .."Training for supervisers and for those selected for internal promotion to higher managerial positions is conducted in approved training centres, either private or one of those run by the regional authorities. The public centres also offer management and business training to craftsmen and the self-employed who run small enterprises. A distinction is drawn between business management and skills training, with 128 hours per year required for each.".

According to the **IOMTR** Survey of 1992[2] there were 270 Public Sector Professional Training Establishments in the Belgian Retail Motor Industry. This corresponds to 100% of all Motor Industry dedicated training establishments.

DENMARK

Second-Level Education

Attendance at lower secondary school is compulsory up to the age of 16 years. At this stage three options are open to students :

- year courses leading to the Upper Secondary School Leaving Examination.
- year courses leading to the Higher Preparatory Examination.
- year courses leading to the Higher Commercial Examination or the to the Higher Technical Examination.

In 1977 basic vocational training and apprenticeship were brought together under the Basic Vocational Education and Training Act. In order to begin a training progamme, or an apprenticship, trainees can either begin employment with a company or start a twenty-week

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[1] Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.19.

[2] IOMTR , "International Survey of Vocational Training in the Retail Motor Industry", Kosterijland, Netherlands, Update 1992.

introductory period at a commercial or technical school. In either case there follows a twenty week period of schooling. Subsequently, training alternates between practical work and classroom instruction, taking between three and four years.

> "By combining school and practical work, basic vocational education and training aim both to prepare the trainee to take up employment immediately and to provide the basis of further training in the trade and/or participation in continued further education. Great emphasis is therefore laid on relating theory to actual work experience and on flexibility - the ability to adopt to new technology and working practices is highly valued."[3]

Continuing Vocational Training

In the area of CVT the Danish Government encourages vocationally orientated training by grant aiding in-service training and further education. Such activities are generally planned and implemented at local level and run at local public education establishments. Priority is usually given to company initiatives.

Management training is restricted with little public input, depending almost entirely on in-company training. Managerial staff are generally of graduate status with little progression occuring from the rank of supervisor to the rank of manager.

5.3 FRANCE

Second-Level Education

Secondary Education involves a broad general education up to the lower age limit for school leavers of 16 years. After this general education two options are usually followed either attendance at a general secondary school or at a technical secondary school. At the end of this time students will usually possess either a leaving certificate or a technical leaving certificate.

Apprenticeships have recently been rejuvenated after a period of relative inactivity during which time they were unpopular. Their duration lasts between one and three years, consisting of employment experience and a theoretical training. In the past three years the French system has been overhauled to follow the German "dual system".

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[3] Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.23.

Continuing Vocational Training

Industrial collective agreements have recently been used to reflect the higher profile afforded to training nationally. Industrial agreement commonly include a clause obliging companies to spend 2 or 3 per cent of the wage bill on training. This commitment is considerably higher than the statutory minimum of 1.4 per cent; the average is thought to be around 3.1 per cent."[4]..

Training Plans

> "Under the Labour Code (articles L.932-6) the employer must draw up a training plan each year in consultation with the works committee or, in establishments with under fifty employees, with staff representatives. The plan should contain details of existing training schemes within the company and schemes proposed for the coming year. ..According to a report on training in France ...training plans were seen as a useful means of dialogue by companies but regarded by training organisations as rarely matching the expectations raised and often very basic"[5]

The notion of compulsory training plans is not often discussed in the Irish situation but has merit. The FORCE Report noted the absence of any training plans outside the franchised outlet networks in the Irish Motor Industry.

Continuing Vocational Training is available to all employees by law, with the aim of adapting skills to technological change and maintaining or improving on existing skills. CVT plans are incorporated into training plans and are included in the statutory minimum level of expenditure on training that all companies must comply with.

The IOMTR Survey[6] apportions training establishents as follows:

57%, or 285, training establishments are in the hands of the Public Sector; 43% or 215 establishments are in the hands of the Private Sector.

5.4 GERMANY

> "The outstanding feature of education and training in Germany is the "dual system" of initial vocational training, with its implied comittment to broad-based skills for all and investment in people across the range of academic ability. The dual system is seen as the foundation of a high-skill economy and as an important element in social integration."

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[4] Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993, p.42.

[5] *Ibid.*, p.46.

[6] IOMTR , "International Survey of Vocational Training in the Retail Motor Industry", Kosterijland, Netherlands, Update 1992.

Such a description[7] of the German system is somewhat typical, and it is generally regarded as a model for training systems, particularly by those commentators attempting to analyse Germany's industrial performance.

However, the dual system is deeply rooted in a strong tradition of guilds and local self-regulation as well as in a network of tri-partite institutions. Such a system is not easily replicated in other cultures or societies.

The training system is underpinned by strong financial support from the public purse, both in terms of grants for employers and loans for trainees.

Second-Level Education

In common with Belgium, Ireland and other European countries a number of types of second-level school exist:

- The *Gymnasium* which caters for the more academically gifted and those who aspire to a University education.
- The *Realschule* caters for those students of average ability that will complete a leaving certificate and who will probably follow on with a vocational training course.
- The *Hauptschule* which takes lower ability pupils and offers preparatory courses prior to entering vocational training.

Training

The provision of training places and contracts, which form the core of the dual system, is entirely the responsibility of the employers. There is no obligation on the employers to provide training places and no formal right of the individual to avail of vocational training. There is often, however, an excess of training places over demand, except in the former East Germany.

Strict criteria are laid down for those firms wishing to be accredited as training firms. However, accreditation offers a number of advantages to an employer as follows:

- Access to a home-grown pool of skilled workers not only trained in specific skills but also socialised according to the company norms, giving a competitive advantage.

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[7] Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.61.

- Larger companies can train more workers than they need affording them the opportunity to choose the best of the group and releasing trained employees back into the workforce without the implication of poaching or wage competition.
- The generally high standard of training also imparts foundation skills which favour the later training of foremen and Meister craftsmen.

Berufsschulen, administered by their respective local authority, provide the theoretical training element within the dual system. Berufsfachschulen, or craft training schools, supplement or replace company training for people in the dual system and train young people for the qualifications awarded by the Chambers of Commerce, who are in turn responsible for the standards and qualifications of the dual system.

Where companies are small, or cannot offer a full range of experience to meet training requirments (on practical or safety grounds, or in sectors where technical change is especially fast), resort is often had to inter-company training centres which complement the theoretical activity of the vocational school with a broader range of directed on- the-job experience The centres are usually financed by employer associations, with supplementary funding from public authorities, and may serve a broad spectrum of training objectives (such as for managers) as well as initial vocational training." [8]

> "Although many English-language publications refer to "apprenticeships", the German term for apprentice (Lehrling) was in fact replaced by the term "trainee" (Auszubildende; Azubi for short) some years ago".

Continuing Vocational Training

Probably the greatest strength of the German training culture is the availability of a huge range of CVT courses. Further studies, beginning after initial training, often lead to the qualification of Meister, or similar, in occupational areas ranging from commerce to data processing to craftsperson. Schools catering for such further studies include trade schools, vocational further education colleges and vocational colleges.

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[8] Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.62.

Occupational roles such as foreperson or technician require additional training to that provided during initial training. Individuals with an initial vocational qualification and appropriate experience, are entitled to study for the qualification of "Meister". Such a title is recognised by all employers and is afforded a seperate role and higher status with appropriate remuneration and work conditions.

Managerial training and development[9]

> "Compared with the UK, top managers in German business, particularly in large companies, are more likely to be graduates of universities or polytechnics...Board members of large companies, especially in fields such as chemicals, are frequently educated to doctoral level, and a doctorate in engineering is a common route to senior management throughout manufacturing industry. Nearly two-thirds of top managers are educated to degree level compared with about half in the UK...Managerial development..is widespread, in particular for developing technical knowledge and skills as well as managerial capacity... Compared with other employees, managers enjoy a much greater intensity of post-entry training and development".

In 1992 7.5% or 1800 of all German [10]Retail Motor Industry training establishments were Public Sector controlled. The other 92.5% or 22,000 establishments were Private Sector controlled.

In Germany there were about 370 recognised occupations in the dual-training system in 1993; one interesting aspect of the training undertaken is that trainees do not specialise until the second or third year of training. This will lead to a broader and less specialised training.

In order to compensate for some of the disadvantages of the dual system the following measures have been implemented or planned for implementation[11]:

- Cross-curricular teaching involving project work in which trainees work from guidlines to do such things as plan, draw, calculate; and produce. The aims of the project-based learning include encouraging the trainees to see connections (this is especially important in highly specialised occupations) as well as to develop personal and social skills and professional knowledge and skills.

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9 Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.70.

10 IOMTR , "International Survey of Vocational Training in the Retail Motor Industry", Kosterijland, Netherlands, Update 1992.

11 Dr. Leo Heimerer, "The Dual System of Vocational Training", PETRA Conference, "Vocational Education and Training in Germany", Dublin Castle, 30th Sept. 1992.

- Increase in the number of lessons at the Berufsschule to a max. of 12 lessons (on two days) in order to allow more time for project-based learning and general education.
- Increase in general educational provision; learning of a foreign language (usually vocational)

Advantages of the Dual System

- Vocational training is highly specialised and occupational profiles are closely related to the needs and demands of firms.
- Trainees experience the reality of the workplace.....(they) acquire 'secondary' skills important for work like punctuality, reliabilty, precision and independence as well as social skills like the ability to work in a team, to fit into the firm and to be willing to help others. Creativity and willingness to take on responsibility are further skills which the system seeks to develop.

Disadvantages of the Dual System

- The co-ordination between school and firm, between theory and practice is more difficult than would be the case in full-time education.
- There is not much time left for general and optional subjects.
- The centralised final examinations do not take account of regional variations.
- The cost of vocational training for the state and firm is high. This is because the trainees are paid, the training is specialised and requires a low student-teacher ratio.

THE NETHERLANDS

Second-Level Education

Education starts at the age of 4 and continues until at least age 16 years. There is a legal obligation for all 16-17 year old school leavers to attend part-time vocational classes for one or two days per week for a further two years.

Vocational Secondary education consists of two levels:

- Junior secondary vocational training from the age of 12-16.
- Senior vocational training following on from above lasting three or four years. Alternatively, a shorter course, introduced in 1979, lasting two or three years can be undertaken.

Apprenticeships

In the Netherlands apprenticeships are governed by law which stipulates the obligations and rights of the employer and the apprentice. Under this law the theoretical component of the

apprenticeship is the responsibility of the schools, and the employer is responsible for practical training. Burgess describes this apprenticeship system[12]:

> Most apprenticeships consist of up to three levels. The first lasts for two or three years and includes the compulsory schooling element. This is provided by attendance at a recognised institution, where two-thirds of the time is spent on theoretical work-orientated training and one-third on more general education. This initial phase is completed by an examination for a nationally recognised initial vocational diploma as a craft worker. The second-level, lasting one or two years, extends the initial basic training and may lead on to a third level of further specialization, lasting one year, and offering the prospect of a move into management or supervision."

Continuing Vocational Training

Although the Dutch system of vocational education, principally the various MBO (technical qualifications) options, is broadly based and offers formal training to a large number of young people, it suffers from disadvantages which employers must offset through in-house provision. In the first place, people who complete standard vocational education are often aged at least 21 when they are ready to enter employment but still lack industrial experience or functional knowledge. However, the breadth of vocational education means that often only a short period of company training is needed to allow the employee to become productive[13].

> This breadth of employment also allows for subsequent mobility within the firm, often with no further training or at least with only short in-service courses. The company training effort appears to be substantial: according to a CEDEFOP study carried out in the mid-1980's, about one in four employees had some form of training over a one-year period. Whereas larger firms (500+ employees) tend to have in-house facilities smaller firms either share training or use external providers.

In 1992 all 60 Training Establishments in the Dutch Retail Motor Industry[14] were in the control of the Public Sector.

THE UNITED KINGDOM

The National Council for Vocational Qualifications (NCVQ) was established in 1986 to co-ordinate the training system of the United Kingdom. Prior to that time a large number of different organisations were responsible for training and education in the UK. As a result there

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12 Pete Burgess, "Training and Development", European Management Guides, Institute of Personnel Management, London, 1993: p.130.
13 *Ibid.*, p.122.
14 IOMTR , "International Survey of Vocational Training in the Retail Motor Industry", Kosterijland, Netherlands, Update 1992.

was a lack of consistency in standards and there was a problem with mutual recognition of awards between the various awarding organisations.

The NCVQ introduced the NVQ (National Vocational Qualification) system to attempt to overcome some of the practical difficulties and to standardise awards. NVQ's are awarded at 5 hierarchical levels, with a similar structure to the EU occupational levels previously explained. Level 1 is regarded as a basic vocational qualification, while level 5 is regarded as equivalent to a higher degree level.

The awarding of a NVQ is based on the candidate's attainment of a certain level of competence. This level of competence is assessed against a 'statement of competence' agreed by the NCVQ and a relevant professional body. When the individual is adjudged to have attained a number of modules or credits, based on these 'statements of competence', then the individual is awarded an appropriate NVQ.

One of the benefits of the system lies in the possibility for any relevant qualification to be considered as worthy of credit for attainment of competence. For instance, if a person has previously studied Customer Relations and wishes to change occupations, there is no requirement for that person to study the same module again; the NVQ credit can simply be transfered to the new occupation.

Also, all courses and awards can be included in the system; allowing for easy transfer from one programme of study to another.

Accreditation of Prior Learning (APL)

A major advantage of the NVQ system is the possibility for past work experience to be credited to the individual. Older, experienced staff can qualify for NVQ credit through APL's, without having to re-study material that is already familiar to them. Units of learning credit can be built upon, thus encouraging those who are long removed from the training system to begin training again, but at a level that is more appropriate for experienced staff.

Criticisms of the NVQ System

While in its theoretical structure the system has much merit, there is a considerable body of criticism against the NVQ system. The system is exhibiting many implementational problems

and there has been a noticeable decline in the number of apprenticeships since its introduction. There is also some disquiet over the number of private training providers that have NVQ accreditation approval. Many of these private providers have been accused of allowing an individual effectively to 'buy' a qualification.

The system has some way to go before it will have proved itself.

Summary of Training Systems

In order to clarify and summarise the important parts, for this study, of the training systems that exist in the various European countries, table 5.1 follows. A summary of initial training systems follows:

Table 5.1: Summary of Training Systems

	School Leaving Age	Training Plans	CVT	Public Motor Training Centres	Management Training	Legislative Framework Agreements (Training)
Belgium	18			100%	In approved centres 128 hrs per year req'd for	
Denmark	16		Encouraged and grant-aided		Restricted public provision, dependent on in-company	
France	16	Obligatory	Available to all by law	57%		1.4% of wages bill spent on training Formal agreements
Germany	16	Widely implemented	System's greatest strength	7.5%	Widespread	Formal agreements
Netherlands	16		Poor	100%		Formal Agreements
Ireland	15	Required by FAS but no follow-up check	No formal arrangement	100% *	No formal arrangement	None

* While there are a small number of private training centres, mainly at distributor premises, they do not provide training programmes with open attendance and are not part of any formalised national training system.

Summary of Initial Training

For all countries except the Netherlands, the initial training period is between 3 and 4 years and is provided at public centres, beginning at age 15 or 16 years. In many countries it is possible to transfer to vocational training while attending at second-level education. In the case of the Netherlands, the initial training period can be of more than 5 years duration.

INTERNATIONAL PRACTICE IN MOTOR INDUSTRY TRAINERS IN-SERVICE

Introduction

In Section A of the literature review, the issue of In-Service training arrangements for the instructors and lecturers of the Irish training system was raised by a number of commentators. In order to compare the Irish system with best international practice, it is necessary to establish the systems that exist in the public sector of other countries. The following section outlines the arrangements of some other countries. While the comments earlier were made about Irish industry generally, the arrangements outlined refer specifically to Motor Industry designated trainers.

In-Service Arrangements

When asked the question "***Are there systems for improving the quality of the teaching staff?***, respondents to the IOMTR survey update of Vocational Training in the Motor Industry 1992 gave the following replies[15]:

Austria	Advanced training related to the franchise (by Manufacturers / Importers).
	Advanced training provided by the Institute for Economic Development.
Belgium	Importers' training courses.
Switzerland	Training provided by the Importers.
Germany	Teachers at vocational training schools are provided with a training scheme which is established in cooperation with the automobile manufacturers.
	Trainers in the Retail Motor Industry business receive a subsequent training from manufacturers 10 days a year.
Spain	Generally, advanced training for teachers is given by private training centres.
France	There is a scheme jointly run by the Ministry of Education (Directorate of Vocational Training), the regional authorities, and the Motor Industry.
Great Britain	Manufacturers courses and higher teaching qualifications.
Luxembourg	Automotive Electronics, key qualifications, etc.

[15] IOMTR , "International Survey of Vocational Training in the Retail Motor Industry", Kosterijland, Netherlands, Update 1992.

New Zealand	Tutors in the Public Sector receive professional tutor training and attend manufacturer courses. Tutors in the Private Sector undertake training for trainer courses and attend technical training courses at parent company overseas.
Portugal	Advanced technological and pedagogical training courses.
Finland	The teaching staff are obliged to attend professional and pedagogical training 5 days/year. Furthermore, 10% of teachers have an opportunity to voluntarily participate in the work of automobile dealerships for a couple of months.

Note the formal co-operation between manufacturers or importers and the public sector training system. It has been established that current In-Service arrangements are ad-hoc, and that no similar high levels of formal co-operation occur in the Irish situation. Further examination of this important issue will be undertaken at a later point.

CONCLUSIONS

Without doubt the German system is the most structured and well planned system of all the European training systems. While this is admirable, it is unlikely to lend itself well to a cross-cultural transfer, such as that required to transfer to the Irish situation. The trade and chamber of commerce organisations that have existed for centuries and are an integral part of the German system, do not exist here. To establish such a network of organisations is not practical in the Irish situation.

One important difference between Germany and the other countries studied is in the area of the provision of public sector training facilities. The German system depends heavily on private sector training facilities, whereas in Belgium and the Netherlands the system consists entirely of public sector training centres. Part of the reason for this may be the difference in scale that exists between the various markets. As discussed in chapter one, the German car market is the biggest in Europe and many times larger than either Belgium or the Netherlands. The relative small size of the Irish market will limit the amount of investment available from the private sector in this regard, in fact it may lead to an additional investment requirement on the part of the public sector if the current level of CVT provision is to be improved on.

Although the Irish market already utilises a large number of public training centres for apprentice training, many of these centres do not provide CVT. A change in this situation may be necessary to bring Ireland more into line with both Belgium and the Netherlands.

Formal agreements exist in many countries regarding CVT; no such agreements exist in the Irish situation. Given the general lack of CVT in many sectors of the Industry it may be necessary to follow the lead of France where legislation requires both a minimum level of investment and the formulation of CVT plans for all employers.

It is interesting to note that very little CVT is carried out for management personnel in any of the countries studied. There are certain minimum educational entrance requirements in this regard, however, which the Irish market does not have. The notion of compulsory attainment of certain minimum qualifications is worth considering if management standards are to be improved. CVT arrangements should be formalised also.

The NVQ system of the United Kingdom is revolutionary in its attempt to co-ordinate the education and training systems. While it has many practical problems, due to the complex nature of both UK systems, many of its features are worthy of consideration in the specific context of the Irish Motor Industry. The notion of Acreditation of Prior Learning is particularly relevant to technical occupations and will be considered in more detail in the model proposed in the final chapter.

CHAPTER 6

PUBLIC SECTOR TRAINING AND THE IRISH MOTOR INDUSTRY

6.1 INTRODUCTION

This chapter will examine:

- Existing Public Sector Training Provision
- Public and Private Sector Training Policy

6.2 PUBLIC SECTOR TRAINING PROVISION

The involvement of the public sector in the training activities of the Irish motor industry is complex. In order to examine this involvement it is best to sub-divide these activities as follows:

Apprenticeship Training and Technical CVT

Management Training

Other Continuing Vocational Training

Apprenticeship Training and Technical CVT

The Irish Motor Industry have, traditionally, trained a large number of apprentices each year. The number of 1st year motor industry apprentices registered as of 31 December 1991 was 426 (FORCE Report, p.20, 1994). However, figures requested from FAS for 1993 indicate a drop to 239 (See communication from FAS in Appendix).

Responsibility for the education and training of these apprentices lies with two public bodies; FAS and the Department of Education. Traditionally, FAS were responsible for the registration of apprentices and the first year "off-the-job" phase of their training. During this year apprentices were trained for two separate examinations: The Junior Trade Certificate of the Department of Education and the FAS end of year examination.

Four days of the working week were spent at a FAS Training Centre and the other day at a Vocational College. The one day attendance at college was aimed at securing the

Junior Trades Certificate while, at the same time, gaining a general education; the time spent at FAS allowed for a more comprehensive, but job specific, training of the individual for their chosen trade.

During the remaining three years of the apprenticeship, apprentices continued to attend a vocational college and was required to undertake the Senior Trades Certificate Examination, during either their third or fourth year. Attendance at the vocational college was either on the basis of "Day Release" or "Block Release". "Day Release" is a term coined to explain the process whereby an employer "released" an apprentice to attend college one day per week during all three remaining years of the apprenticeship. "Block Release" usually entailed attending college for "blocks" of two eight-week periods.

The curriculum used in the colleges allowed for the teaching of a number of different subjects to the apprentices: Motor Vehicle Theory, Garage Practice, Science and Electricity, Mathematics and Craft Calculations, Mechanical Drawing, and Workshop Practice. Usually some general subject such as Communications was also included.

Standards Based Approach

During September 1994 a new standards based approach to training apprentices was introduced. Instead of the apprenticeship consisting of a particular time duration, the apprenticeship was now split into a number of modules and consisted of 7 phases; 4 on-the-job and 3 off-the job phases.

The first phase is to be spent at the employer's premises, instead of at FAS, allowing for the induction of the new employee into company work practices and norms. The second phase of 22 weeks is to be spent at the FAS Training Centre in full time training. Phases 3,5, and 7 are to be spent in training at the employers premises; while phases 4 and 6 will be spent at a FAS Training Centre, or at a Vocational College. If the apprentice is successful in completing all modules then they are to be awarded the National Craft Certificate.

One outcome of the new standards-based approach is that there will no longer be discrete subjects such as Maths and Mechanical Drawing. Instead, such subjects are to be taught using an 'integrated' approach; apprentices will learn a particular calculation method when the need arises, during their training, to use that calculation.

Intended benefits of the new system are; a normalisation of training standards, certification on a modular basis allowing for various levels of attainment and an overall streamlining of operations in the two strands of the system.

Educational Approaches

In the various analyses of the apprenticeship system, few references have been made to the rationale employed by the establishments that are involved in providing training for the individual. Very different approaches and forces are involved.

On beginning an apprenticeship in the past, the recruit usually started work at a FAS Training Centre. The training environment at such FAS centres has been very much 'Industrial' in its ethos. There existed a tenuous distinction between a 'trainee' and an 'apprentice' in these centres. The apprentice began work each day at 8.30 a.m. by 'clocking-in' and finished by 'clocking-out' at 4.30 p.m. having followed a pattern of instruction which was left very much to the discretion of the Instructor. The balance between time spent in the classroom and time spent in the workshop, varied accordingly.

The industrial ethos of the FAS centre was further reinforced by ensuring rigorous control of the individual's break-times and ensuring general compliance with factory-type industrial time procedures.

The recruitment of training instructors to the FAS organisation is the responsibility of FAS itself. The minimum qualifications required for appointment as a training instructor with FAS are; the possession of both Junior and Senior Trades Certificate Examinations and evidence of completion of a recognised apprenticeship period. In practice, these are minimum requirements and the instructors employed usually possess a number of additional technical qualifications.

As mentioned above all apprentices were required to attend classes at a vocational college. All of these colleges continue to be under the control of the Department of Education; through their funding arrangements and through the Department Inspectorate. Classes typically began at 9.00 am and continued through until 5 p.m. with a lunch break, and morning and afternoon breaks. During this time the apprentice was treated as a student with a time-table of classes operating, thereby receiving a number of time-units of tuition in different subject areas. In many respects, during this time the apprentice was educated rather than trained; many of the skills taught were of a general nature applying to many situations and not specifically to that of the occupational role of the apprentice. The apprentice, or student in this case, was not required to 'clock-in' and in many subtle ways was treated differently than during FAS training.

The appointment of teachers to these colleges was controlled by the local education authority and often the teachers of apprentices, for general subjects, were qualified in areas other than the motor trade. The stated minimum education requirements for teachers are the same as those for FAS instructors with one notable difference; the requirement by many local authorities that the applicant possess the Ceard Teastas Gaelige, a certificate in the ability to teach through the medium of Irish. Again, it is unlikely in practice that any of the teachers employed by a college would be appointed while possessing just the minimum requirements.

Differences and Strains within the system

As outlined above, there are very different approaches taken by the two establishments responsible for apprentice education. By referring to the explanation of Margolis and Bell [1];

> "Training focuses on equipping recipients with the competence to do their present jobs.. Education prepares the person for a future - but known - position".

[1] Margolis, F.H. and Bell, C.R., Understanding Training: Perspectives and Practices", University Assoc. Inc., San Diego, California,: p.2.

it can be said that; FAS "trained" apprentices while the colleges "educated" apprentices.

Further, it might be said that FAS 'industrially trained' first year apprentices. It is interesting to note that 97.8% of repair garages employ fewer than 10 people and 85.6% employ fewer than 5 people (Census of Services, 1988). Therefore, very few, if any, motor apprentices will subsequently work in a large establishment with a truly industrial regime. It can be argued that such an industrial atmosphere can stymie individualism, initiative and problem-solving; abilities that the new standards-based curriculum strives to engender in apprentices. Further, the majority of smaller garage workshops do not employ 'clocking-in' cards and job-demarcation does not really exist. The new standards-based system to apprentice training may alter the FAS approach to these aspects of its training.

This standards-based approach to apprentice training was primarily a Government initiated attempt to improve the apprenticeship system and to offer a more integrated form of training for the individual. Moves to implement change have been met with resistance from a number of sources resulting in slight dilution of the initial and intended impact. One example of this would be in the manner in which the Phase 4 and Phase 6 off-the-job training will be carried out.

Initial proposals suggested that FAS centres would provide Phase 4 and 6 training modules alongside the Colleges. The Department of Education has unofficially suggested that this was unlikely to happen and that the Colleges would continue to provide all post-first year apprentice training. This suggestion has now been borne out in practice as the Department has increased funding to the relevant Colleges in order to allow them to re-equip their workshops to teach the new syllabus to apprentices. On the other hand, FAS centres are not being re-equipped in a manner that would enable them to host Phase 4 and 6 off-the-job training courses.

Management Training

The Dublin Institute of Technology (DIT) offers a Diploma course in Motor Industry Management and is a Department of Education funded institution. This course has traditionally encouraged two types of entrant;

1. Students that have attained specific grades in the Leaving Certificate examination of the Department and who have usually just completed their second-level education.
2. Students that have not attained a Leaving Certificate but have attained an equivalent technical qualification in the trades areas and display the desired aptitude to succeed in such a management course.

Similar courses are planned for some regional venues, such as Limerick R.T.C. in the coming years. Demand for such courses has not been strong in some regional centres, according to the respondents to the survey of public sector trainers, included in a later chapter.

DIT also offers a distance-learning course in Spare Parts Management, in conjunction with a number of other parties, for personnel of the Motor Industry. This course was offered for the first time in 1993. FAS also offer Stores Procedures training at some of their centres around the country with a certificate offered to graduates of the programme.

Other Continuing Vocational Training

Non-technical CVT is not widely offered with a specific focus on the Motor Industry. In many Department of Education and FAS Centres, certain general programmes are offered as night-classes that are of interest to Motor Industry employees, but are not specifically geared to meet their requirements. DIT, as it is the largest public centre in the largest urban area, offers more Motor Industry CVT than any other centre and attracts a large number of participants for its part-time courses. However, the vast majority of its CVT courses are technical in nature; influenced, no doubt, by supply and demand factors.

6.3 IRISH MOTOR INDUSTRY PUBLIC SECTOR TRAINING POLICY

There are a number of bodies that are actively involved in providing training or development courses for the Industry. Some are providers of courses of a general nature, others are specific to the needs of the Industry itself. There are also some professional bodies that represent the interests of the members of the Industry and provide some training input for their members. The views of professional bodies will be outlined in the private sector summary that follows this chapter.

The following is a summary of the activities and policy of one of the largest public sector training providers :

THE DEPARTMENT OF EDUCATION.

Information supplied by the Department in reply to a written request from the author, reveals that 431 people attempted the Garage Practice component of the Senior Trade Examinations in the academic year 1991/2. Given that there is a failure rate element as part of this figure it can be estimated that approximately 400 people qualified as Motor Mechanics during that period. In the same written request, the policy of the Department was sought in relation to the future of Motor Vehicle Apprentice education; particularly in view of the introduction of a new modular curriculum, on a trial basis, in the Waterford area.

While data regarding examination candidate numbers was forthcoming; written policy information was not. A letter from the Department of Education, received in reply to a request for certain information, indicated that contact could be expected with the relevant Departmental Inspector "in the near future".

In fact, contact had been made by a member of the Department Inspectorate a number of days before receiving the written reply. The Inspector was willing to discuss the matter of apprentice education and intimated that he envisaged little or no change in the current format that apprentice education takes, whereby the apprentice spends a certain period of time in both the FAS Training Centres and a Regional Technical College. It would appear unlikely that FAS will have any more input into apprentice education than the first year portion that it currently provides. It could be detected that

some form of "power struggle" exists between the Department and FAS as they both attempt to assert their authority over apprentice education.

The Department is working with the various colleges to improve their facilities in order to cope with the physical demands imposed by the introduction of the new broader syllabus of the modular curriculum; it is hoped to secure some EU funding to this end. The Inspector also acknowledged that there were likely to be some difficulties with the in-dealer assessment aspect of the new curriculum and with the ending of day-release courses for apprentices. The Inspector preferred not to put his views in written form.

While this information is useful in attempting to understand the workings of the public sector training system, it is of no real benefit in attempting to predict future training systems. It would appear that no longer term strategy exists save to maintain the current level of control that the Department exerts over the public sector training system.

In contrast to the lack of formal policy statements from the Department regarding apprenticeship education, the Government is pressing ahead with change in the second-level system and has set out several position papers.

In recent years, the policies of the Government have begun to recognise formally and explicity state the role of the education system in preparing the individual for work and in encouraging more students to undertake vocationally oriented courses of study. The introduction of a Vocational Leaving Certificate programme in 1991 marked an important landmark in the quest to de-academicise the system. Participants in this programme undertake to study at least two 'practical' subjects and they also study a language. While only 5% of students were enrolled on this programme in 1992, it was envisaged that this figure would rise to at least 30% from 1995.

The Green Paper on Education underlined the need for[2]

> 'an improved vocational and technical orientation to education at the second level'

[2] Department of Education, Education for a Changing World - Green Paper on Education, Government Publications Office, Dublin, 1992: p.102.

While this move toward improving technical training provision has begun at second-level the benefits will take some time to show in the workplace. Such types of development and innovation are likely to benefit the Motor Industry in the longer term, but are unlikely to have any great impact in the shorter term.

FAS Training Policy

Policy information was requested by letter from FAS. In their reply FAS suggested reference to the FAS Annual Reports for this information. Unfortunately, these Reports contain very little policy information and no detailed information that relates specifically to Motor Industry training.

6.4 PRIVATE SECTOR TRAINING POLICY

There are two non-public bodies that are actively involved in the provision of training for the Irish Motor Industry; namely the Society of the Irish Motor Industry and the Irish Management Institute. A brief description of their activities follows.

SIMI

The Society of the Irish Motor Industry (SIMI) is the organisation set up to represent the interests of the Industry generally. Its members include all types of businesses associated with the Industry. Due to the relatively small size of the Irish market, SIMI represents every facet of the Industry. In other countries a variety of organisations would represent the various interest groups within the industry; such as Retail Outlets, Petrol Retailers, Distributors, Machining Specialists, etc. In Ireland the SIMI serves these diverse groupings by establishing sub-committees that work on their behalf. The SIMI is the most influential body working on behalf of the Industry and as such serves an important role in the overall operation of the Industry.

As a part of the service it provides to its members, SIMI runs management and sales training seminars at venues around the country, primarily on topics chosen in response

to the needs and/or demands of its members. The Society offer training courses on the basis of a one year plan which allow members to choose from a list of suggested dates and venues. The result is an ad-hoc array of one and two day training courses which are often under-subscribed.

SIMI also encourage technical staff to undertake further studies and, in the case of the Advanced Motor Vehicle Technology Certificate of the Department of Education, award candidates that have attained a pass in at least two subjects a Technicians Diploma. This Diploma does not, however, entitle the holder to any recognition or recompense from any other party. This situation epitomises a problem with academic attainment for staff in the Industry generally.

In Outline of Training Policy Autumn 1992, published by SIMI, the society makes the following important observation;

> "Apart from apprentice training and specialist short courses offered by Vehicle Distributors or the SIMI, there are practically no training opportunities for Motor Industry staff, particularly outside of the major cities. We have long felt that a system of supported distance learning would be the most appropriate method of training, particularly where the employment units are small and it is therefore very difficult for employers to release staff to attend longer duration courses. In the case of employees outside of the cities there is not even the possibility of night courses in any relevant subjects."

During the year 1994, the SIMI co-operated with DIT Bolton Street to provide a distance learning programme for parts staff. As yet, no feedback is available as to the success, or otherwise, of this project.

On November 24th 1992 a meeting was held of the training managers and instructors of the Irish motor distributors in Dublin under the auspices of the SIMI. This meeting was convened to discuss the introduction of a modular curriculum for the trade of Motor Vehicle Mechanic. At this meeting it was proposed...

> "that the Society (SIMI) should seek the establishment of a Motor Industry Training Council. It should be the role of this new body (possibly established under the auspices of FAS) to co-ordinate the supply of information from the Vehicle Manufacturers to the industry to ensure that relevant printed material, videos and other training aids were used to the best possible advantage in training motor apprentices. It should also be the function of this Council to ensure that the various trainers are kept up-to-date by attending appropriate courses on a

regular basis... The composition of the proposed Motor Industry Training Council should reflect the vital role of Vehicle Manufacturers in guiding and directing their main dealer outlets in their training requirements for the future."

The notion of the establishment of a Motor Industry Training Council is one which will be discussed in the final chapter.

The Irish Management Institute

The Irish Management Institute (IMI) is a voluntary body set up to improve management standards generally. The Institute provides management training both at its Dublin headquarters and at regional venues. Many larger organisations benefit from the expertise they offer as part of their training programmes but smaller organisations may find the cost factor prohibitive. The Society of the Irish Motor Industry also liases with the IMI to assist smaller outlets by assembling groups of participants in regional venues for management training. No formal links exist between the Motor Industry and the IMI, however.

Some of the larger companies within the Motor Industry have availed of management training in the past at their own cost and initiative.

Conclusions

- The Department of Education has developed a number of programmes that will ultimately benefit the Motor Industry training system, but these are at second-level. Some similar work is necessary for the apprenticeship system also.

- While SIMI award diplomas to certain personnel in the Motor Industry these diploma's are afforded no formal recognition within the Industry.

- SIMI's primary purpose has been to represent the interests of the Industry at National and International level. Training issues are essentially secondary to commercial issues at this level and are being under-represented.

- There is a lack of consultation and /or co-operation between the distributors and the SIMI in providing training and CVT.

- No regulatory function exists for the training activities of the Industry.

- It is possible for the Industry to utilise the expertise of the IMI to provide Industry-specific management courses if required.

- The cost of management training may be an inhibitory factor for smaller commercial enterprises, of which there are many in the Irish Motor Industry.

CHAPTER 7

IRISH MOTOR INDUSTRY PRIVATE SECTOR TRAINING PRACTICE

7.1 INTRODUCTION

The following chapter outlines two surveys that were undertaken as part of this research:

- Survey of past participants of training programmes
- Survey of the training activities of the major Irish motor distributors

7.2 TRAINING EFFECTIVENESS SURVEY

In order to analyse the effectiveness, or otherwise, of current training programmes and methods; it is important to consider the views of some of the participants in those programmes.

Feedback on training courses and programmes is often sought from trainees after they have completed some type of training. In the case of motor industry training in Ireland, none of this feedback has been published. Further, none of the public training bodies seek this type of information on an on-going basis.

A large proportion of training carried out in the Irish motor industry is technical in nature. Much of this type of training is of a standard format; the bigger part lecture and demonstration by the trainer; the lesser part of a practical, hands-on nature by the participant. Many of the technical courses presented can be described as being typical of this structure/type.

As training practitioners, trainers have at many times in the past sought the views of trainees at the end of training courses; on such things as: the general standard of the course; the balance and approach to teaching complicated electronic and engineering modules; the level of training facilities and equipment provided for the participants. Generally, seeking information that will assist in formulating future training plans.

This type of feedback is also important in determining and maintaining a high level of satisfaction for the participants involved.

As a general rule the results obtained are very positive; it is easy for the trainer to believe that the job is being well done. There are two possible reasons for getting this type of positive feedback: *A*. The courses **are,** in fact, well planned and presented with a high level of satisfaction for the trainees in terms of personal learning experience. **or** *B*. The participants are reluctant to express negative reactions to the course at risk of offending the sensibilities of the trainer; mainly due to the personal interaction required with the trainer on an on-going professional basis afterwards.

As both are possible, and in different ways likely, it is difficult to depend on the objectivity of this type of feedback as a means of assessing the standard of current distributor training programmes.

With this in mind, it was decided to seek the views of a group of 16 past participants of distributor-based technical training many months after the training course had been completed (Referred to as Group A from here on). This group had completed a two-day course on engine management systems in early February 1994. All 16 were employed at main dealer premises that were franchise holders for the distributor concerned. The survey was carried out during May / June 1994.

The advantage in seeking views so long after the event lies in the clarity of vision with hindsight. Often the lessons learned during technical training are forgotten quickly as the participants do not have the opportunity to practice the skills imparted. One year after the event, the participant can barely recall being on the course; never mind the details of the particular system that seemed so clear and important at the time.

In seeking the views of such a group, little insight can be gained unless the feedback received is compared with some other, similar, feedback. For comparison, a group that attended a similar course at a Regional Technical College (RTC) was asked the same questions. The time elapsed since completion of the course was broadly similar to Group A. Group B was comprised of 11 participants who attended a three-day fuel injection course given at the RTC.

One important difference between the two groups chosen was the lack of personal contact after the course between the trainer and the Group B participants. In the case of the RTC, the trainer has no real opportunity for personal contact after the course; also the survey was received from a person that was not personally known to any member of Group B.

Questionnaire Design

The two groups surveyed are constituted entirely of motor mechanics. Some employed by large outlets, others are self-employed or work for small outlets. In almost all cases the participants elect to attend this type of training. In the case of Group B the participants answered an advertisement in a newspaper and paid for the privilege of attending the course. Group A, on the other hand, were afforded the opportunity to attend by their employers and all associated costs were paid by that employer.

Comments from the public sector trainers surveyed for the study indicate that the standard of literacy among motor mechanics and technicians varies greatly; from those personnel that are virtually illiterate, to those that posess a very high level of literacy. It would be important, therefore, that the quality of the information sought by the questionnaire should not depend heavily on the individuals ability to compose an answer.

In setting out to seek comment on the training courses chosen, the most important information sought related to attitude; to the particular course, and to training generally.

Applying the Likert Scale in the manner proposed by Oppenheim [1] allows the use of an attitude measuring device which is easy to analyse afterward and is a reliable research device in itself.

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[1] Oppenheim, A.N., "Questionnaire Design and Attitude Measurement" Gower Publishing, Hampshire, 1972: p.133.

The survey itself is not intended as crucial to the overall outcome of the study. The survey was piloted to two people that were of a similar attitude and ability to the cohort. The outcome of this survey is really only to be used as an aid to discussions in the final chapters of the study.

Explanation of presentation of results

The actual questionnaire sent out and the results obtained follow on the next page

The results are coded as follows:

A lower case letter 'a' or 'b' and the % of respondents that offered this answer, is included on the continuum / scale of 1 to 5 to indicate the results. The lower case letter indicates which group of respondents the individual answer belonged to.

For example:

	strongly agree 5	agree 4	uncertain 3	disagree 2	strongly disagree 1
The course was enjoyable	73% a 33% b	27% a 67% b			

In reply to the statement "The course was enjoyable", 8 respondents from group A and 2 respondents from group B strongly agreed with the statement rating it as '5'. Converted to a percentage for clarity; 73% of group A rated this statement as '5' and 33% of group B rated it '5'. While, 3 respondents from group A and 4 respondents from group B simply agreed, or rated this statement as '4'.

The presentation of the results also shows the exact questionnaire with text received by the respondents from the author, hence the inclusion of the text at the top of the page.

Technical Training Survey

At some time during the past year you attended a training course in order to better understand Fuel Injection Systems.

Please check the box (✓), opposite the statement made, that best describes your feelings toward that training course now:

	strongly agree 5	agree 4	uncertain 3	disagree 2	strongly disagree 1
The course was enjoyable	73% a 33% b	27% a 67% b			
The course was not really very useful for everyday problems on the car	12.5% b	9% a 12.5% b	37.5% b	55% a 25% b	36% a 12.5% b
It's good to meet other mechanics and to discuss the problems that they encounter.	64% a 75% b	36% a 25% b			
It's pointless having these courses				18% a 25% b	82% a 75% b
Mechanics need much more training	45% a 62.5% b	45% a 37.5% b	10% a		
Too much time is spent on theory		37.5% b	27% a	55% a 50% b	18% a 12.%% b
The problem with these courses is that there are no practical problems to work on.	25% b	18% a	9% a	46% a 50% b	27% a 25% b
The trainer is good and knows how to put the information across	82% a 50% b	18% a 50% b			
These courses are only good if you have the right equipment and our garage won't buy it	9% a 12.5% b	27% a 12.5% b	9% a	37% a 37.5% b	18% a 37.5% b
More basic courses might help us as some of the courses are too advanced.	9% a 25% b	18% a 25% b	55% a	9% a 12.5% b	9% a 37.5% b
I would like to see more courses, like this one, run at night time, nearer to my home, so that I could keep up to date.	9% a 50% b	19% a 50% b	36% a	36% a	
The money spent on this type of training is well spent.	64% a 50% b	36% a 37.5% b	12.5% b		

Analysis of Results

"The Course was enjoyable"

Group A Average **4.73** **Group B** Average **4.5** Ideal Score: 5

All participants gave a score of 4 or 5 which suggests that the groups were positively disposed to the training courses themselves.

"The course was not very useful for everyday problems on the car"

Group A Average **1.82** **Group B** Average **2.87** Ideal Score: 1

Here the groups were divided; Group B were mainly uncertain, possibly due to the more theoretical approach of the particular course. Group A disagreed with the statement, suggesting that the particular course was more product specific and therefore more practical for them.

"It's good to meet other mechanics and to discuss the problems that they encounter."

Group A Average **4.64** **Group B** Average **4.75** Ideal Score: 5

Both groups feel that the "brainstorming" and experience sharing possible through meeting other personnel is very worthwhile.

"It's pointless having these courses"

Group A Average **1.21** **Group B** Average **1.25** Ideal Score: 1

"Mechanics need much more training."

Group A Average **4.36** **Group B** Average **4.625** Ideal Score: 5

Again, both groups appear to agree; this time about the necessity for similar technological training and increased quantity of same.

"Too much time is spent on theory"

Group A Average **1.55** **Group B** Average **2.625** Ideal Score: 1

One of the aspects of technical training that causes individual dissatisfaction. There is a divergence of opinion here. Group A appears more satisfied than Group B. The thrust of training courses should provide a balance between theory and practice that leaves the participants satisfied. Facilities in WRTC, as with item 2 above, may be a problem here.

"The problem with these courses is that there are no practical problems to work on."

Group A Average **2.5** **Group B** Average **2.2** Ideal Score: 1

Interestingly, only 2 people from Group A and 2 people from Group B agreed with the statement. This would suggest that the average score is misleading, probably due to the over-simplistic nature of the calculations employed. The participants generally tended to feel that the courses are worthwhile regardless of the absence of practical problems.

"The trainer is good and knows how to put the information across"

Group A Average **4.82** **Group B** Average **4.5** Ideal Score: 5

This particular piece of information suggests satisfaction with the individual trainers but is not really of any value, save suggesting that the trainers involved possess reasonable interpersonal skills.

"These courses are only good if you have the right equipment and our garage won't buy it."

Group A Average **2.82** **Group B** Average **2.875** Ideal Score: 1

In an ideal world garages would equip their staff with all the tools and equipment necessary to carry out all tasks in an optimum manner. The scoring for Group A is right across the spectrum suggesting that individual garages are of all standards in this regard. Group B tended to see the need for similar training regardless of equipment levels.

The distributor training provided for Group A is, by its nature, more product specific and may well call for more expensive and dedicated equipment.

"More basic courses might help us as some of the courses are too advanced"

Group A Average **3.1** **Group B** Average **2.87** Ideal Score: none

No ideal score as this question is appropriate to training levels and training needs. it would appear that the participants are of all attitude levels to this suggestion. There is no cause for concern and no changes are really necessary in this regard.

"I would like to see more courses, like this one, run at night time, nearer to my home, so that I could keep up to date"

Group A Average **3.36** **Group B** Average **4.5** Ideal Score: none

The ideal attitude here depends on the individual. From a distributor training perspective, Group A's result is heartening as no training need is evident here. On the other hand, what were the geographical locations of individual respondents? Group A was heavily influenced by the number of Dublin respondents. The Group B score suggests the need for more technical training in the regions, as all respondents were from non-franchised employers outside Dublin.

"The money spent on this type of training is well spent"

Group A Average **4.67** **Group B** Average **4.5** Ideal Score: 5

Both survey groups agreed that the money spent on similar technical training is well spent, in terms of pure value-for-money.

Findings from the survey

- Participants in such training generally enjoy the experience and enjoy meeting their colleagues to share information.

- The respondents believe that the courses are worthwhile in terms of personal development and skills updating.

- The cognitive level of the courses was satisfactory for the participants but might suggest some need for basic courses in technical areas also.

- The individual trainers' performances were satisfactory.

Conclusions

- In the case of non-franchised garages it would appear to be desirable to run technical courses on a regional basis and on an on-going basis.
- The individual garage does not have to possess a range of test equipment before its staff can benefit from technical training.
- In the view of the respondents, such courses are economically worthwhile.
- Given the reaction to the amount of theory taught, it is possible that the RTC course may have lacked some practical input.
- It can be said that the participants generally enjoyed their training experiences and have no real complaint about the type of training received.

7.3 FINDINGS FROM SURVEY OF IRISH MOTOR DISTRIBUTOR TRAINING PRACTICE

Introduction / Purpose of Survey

The purpose of this survey was to ascertain the training practices employed by the Irish motor distributors. While a number of references were made to this sector in the FORCE Report certain types of information, that were important for this study, were omitted.

The Role of the Motor Distributor in Training Provision

The Roche-Tansey Report[2] on Industrial Training in Ireland highlights the shortage of training generally in Irish industry. If a similar report were carried out on the Irish motor industry it is likely that the conclusions reached would be substantially different. The driving force behind training in the motor industry is technological change. It must be said that technological change in the motor industry occurs at a much greater pace than in many other industries; a notable exception to this being the computer industry. The cutting edge of this technological change is toward the engineering of the vehicle itself and the motor industry staff most affected by technological change are the technical or service personnel.

In a market, such as the Irish market, where; **1.** there are a large number of service workshops that are not affiliated to a particular franchise and **2.** there is a lack of public sector involvement in post-apprenticeship or Continuing Vocational Training; the staff most likely to receive training in new technical developments are franchised dealer workshop staff.

This training will be provided by the distributor itself. An AnCO report suggested[3] that the quality and amount of that training will be linked to the market share of the distributor concerned...

> "One could suggest that the level of training provided by manufacturers was related to the market share which they have in the Irish situation. Market leaders were seen to be providing

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[2] Frank Roche and Paul Tansey, "Industrial Training in Ireland", Industrial Policy Review Group, Dublin, 1992.:

[3] Aidan Maloney et al., "The Retail Motor Trade", AnCO , Dublin, 1983: p.99.

a very comprehensive training programme whereas those further down the scale had less rigorous training policies...".

As there is no published data on the extent of this type of distributor training it was necessary to contact some of the Irish distributors in order to ascertain the current training status and to investigate some factors not discussed in this report and which the author deemed important to the outcomes of the study. These factors include the amount and cost of training activity in the industry and the issue of the dominance of technical training, both now and in the future.

Details of Survey

The following distributors were contacted during 1994; **Opel, Ford, Nissan, Toyota, Peugeot, Renault, Fiat, Mitsubishi** and Motor Distributors Ltd. which handles **Volkswagen-Audi, Mercedes-Benz** and **Mazda**. Together these marques totalled 81.4% of new car registrations as of November 1994[4] and included the 10 best selling marques during that period (note: Mercedes-Benz were at 15th position).

The questions asked (see Appendix A) were set out in a letter addressed to a person within each company employed at a senior management level and who would have the power to respond on behalf of that company. The response rate was poor, only one distributor responded immediately. Two follow-up letters and, in some cases, telephone calls were necessary to encourage responses.

One distributor was unable to answer due to "*..the current limitation on headcount..*" with "*.. members of the after sales group thinly stretched, and as a result the time available would not do the exercise justice*".

Survey Findings

The information received follows in case study format. In the interests of confidentiality distributors will be referred to by a letter :

[4] Society of the Irish Motor Industry data, December 1994.

Distributor A

Man Training Days

Distributor A provided 260 man training days of technical training and 100 man-training days of non-technical training during 1993

Net Cost of Providing Training

Costs of training provision were not offered

Training Personnel and Affiliations

This distributor was the only respondent to employ a training manager as well as a technical trainer. This person was not affiliated to any particular department but was responsible for the overall training function of the distributor

External Assistance

Distributor A did not receive any assistance from any external agency . No opinion on state support for training was offered

State Support for Training

A did not actually answer this question

Company Policy on Training

A answered that " *The company policy is determined by need. In this respect we have formulated policies on dealer training needs in areas such as customer service, team building and skills training in various departments* (Service, Sales, Parts). *Team building is the only area that we have customised programmes for individual dealerships*

Future Changes in Training Provision

A were "..starting out in addressing training from a wider perspective, we are in the process of addressing change..

Future Training Needs and Training Policy

A did not directly address this issue.

Distributor B

Man Training Days

Distributor B provided 61 man training days of technical training and 101 man-training days of non-technical training during 1993

Net Cost of Providing Training

Cost of providing training was estimated at £28,846.

Training Personnel and Affiliations

The training function of distributor B is affiliated to the Service department due to the 'Necessity for training dealer service personnel'. No change is envisaged in this situation. No external assistance availed of.

State Support for Training

No public sector support obtained by distributor B. They do use specialists where required with assistance from their manufacturer and from a 'University'. Distributor B noted that the motor industry would be included in the FAS Training Support Scheme for 1994 for the first time. Limitations due to insufficient funds were identified as a problem with this development.

Company Policy on Training

Company policy is formulated by 'assessing the skills and training needs of individuals' of the organisation.

Future Training Needs and Training Policy

Distributor B suggested that '..our training will tend towards an increasing level of external courses, conferences, seminars and workshops. we must continue to improve the image of our company and give a first class service in all aspects of our facilities to the public.' 'Training will have to keep pace with technological advances for all personnel dealing directly with the public will have to be trained in Customer Relations'.

Distributor C

Man Training Days

Distributor C provided 111 man training days of technical training and 40 man-training days of non-technical training during 1993

Net Cost of Providing Training

£35,000 - 45,000 offered as approximate cost of providing training.

Training Personnel and Affiliations

Training Instructor affiliated to Service department. 'Must keep abreast of technology. In future more emphasis likely to on such things as Human relations, Organisation, Litigation and general business management.' (Departmental affiliations not likely to change given tone of answer - author)

External Assistance

Distributor C did not receive any assistance from any external agency

State Support for Training

C did not receive any state support for their training programme. In view of the large number of people employed in the motor trade '..we are very disappointed with the level of support we receive..' Further '..While we accept that FAS support the training of apprentices etc. in a satisfactory manner... their brief is too confined and should be broadened to cope more with everyday matters'.

Company Policy on Training

C's policy was "..to provide five days training per technician per year... the subjects are agreed internally in discussions between the various technical and customer relations departments".

Future Changes in Training Provision

Distributor C stated "..Technical training to be the king-pin of our training programme; however, as a result of litigation tendencies and other factors, greater attention must in future be given to these areas

Future Training Needs and Training Policy

'Training in the future', said Distributor C, 'must be more broadly based incorporating all the various departments who have contact with the customers with particular attention being given to matters such as product knowledge, customer handling, organising proper documentation at point of sale, more professional handling of litigation matters, better business and financial management.'

Distributor D

Man Training Days

Distributor D provided 815 man training days of technical training and 400 man-training days of non-technical training during 1993.

Net Cost of Providing Training

Estimated at £142,250.

Training Personnel and Affiliations

3 Training Instructors are employed by distributor D that work within discreet business units within the company. All are affiliated to respective Service Departments.. 'due to predominance of technical training. Focus of training may change toward customer relations and personal skills training in the future. Affiliations are unlikely to change in the short term.'

External Assistance

Distributor D did not receive any assistance from any external agency .

State Support for Training

Distributor D suggested that '..the state should contribute in some tangible way to the provision of (motor industry) training. Particularly when so many public sector trainers attend .. training sessions at our company's expense and without any contribution being sought from the public bodies concerned.'

Company Policy on Training

'Policy is primarily dictated by developments from the manufacturers and the needs of the dealer organisation.'

Future Changes in Training Provision

'The future focus of training is likely to tend toward further improving customer relations and interpersonal skills. There is also a growing demand for product knowledge, sales skills and marketing training for the sales force. Further, it will be necessary to provide computer training.. for future recruits to the Industry.'

Future Training Needs and Training Policy

'Our company has no formalised training plan for the dealer networks in the longer term. We are very much in touch with our respective manufacturers and we will be adapting our systems to keep pace with the various demand that are placed on us on an on-going basis.'

Other Distributors

While no written replies were received from: *G, H, I* or *J*; some unofficial background was available.

Distributor G

G in common with many of the other distributors employ a full-time training instructor. This instructor is attached to the Service Department and is primarily devoted to providing technical training. A certain amount of sales training was also provided. Training programmes were primarily re-active and usually started at the factory headquarters. *G* was a wholly owned subsidiary of the *G* Group.

Distributor H

Unlike many of the other distributors, *H* had undertaken a comprehensive review of after-sales activities and had embarked on a major training programme to improve the customer focus of its dealer organisation. *H* was a wholly owned subsidiary of *H* worldwide and many of its training programmes evolve from that source. Again, a large portion of training activity took place in the area of technical upgrading. A dedicated technical training instructor was employed.

Distributor I

This distributor employs one full-time technical training instructor. It appeared that *I* operated their training function in much the same manner as the majority of the Irish distributors.

Distributor J

J was an Irish company and employed one full-time technical training instructor. The training function received considerable support from its European partner and has assisted one of the public centres by providing training equipment on several occasions in the past. *J*'s training policy was much in line with Irish distributor practice.

Conclusions from Replies

- Looking at the number of MTD's provided, it can be said that activity in training in the Irish Motor Industry is high. It can also be said to be linked, in some way pro-rata, with the market share of the individual distributor.
- Average cost of providing training based on information given equates to £135 per day's training provided.
- Distributor A is the only Irish distributor to directly employ a non-technical trainer. This person is also the only trainer that is not directly affiliated to a distributor service department.
- There is discontentment with the level of FAS assistance available, particularly financial.
- Training policy is primarily dictated by the needs of the dealer organisation with some input from the manufacturers, mainly in terms of technical developments introduced by them.
- No distributor has an explicit and stated training plan that encompasses personal and individual development or education.
- The FORCE Report[5] intimates that "a nationally recognised plan is needed in parts, sales and general management training, which the Industry should introduce to its members... At present only a few manufacturers have any formal training plans in the areas mentioned." Re-active training plans are in place; Pro-active training plans are not.
- In implementing a programme of organisational development Margolis and Bell[6] identified three areas for improvement as follows: "Human to Technology, Human to Organisation and Human to Human": The Motor Industry training function primarily focuses on just one: Human to Technology. The author concludes, therefore, that organisational development is effectively being ignored.

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[5] Dominick Tuite, "Employment, Work and Training in the Irish Automobile Repair and Distribution Sector", FORCE Report, DIT., Dublin, 1994: p.36.

[6] Margolis, F.H. and Bell, C.R., Understanding Training: Perspectives and Practices", University Assoc. Inc., San diego, California, 1989: p.15.

CHAPTER 8

PUBLIC SECTOR TRAINER SURVEY ANALYSIS

8.1 BACKGROUND

In an earlier chapter, an outline of public sector involvement in Motor Industry training was offered. It is clear from that chapter that two distinct strands exist. The two primary providers of public sector training for the Irish Motor Industry are; The Department of Education and FAS. FAS is the Department of Labour funded, State training organisation. Both organisations combine to provide apprentice education and, in certain instances, post-apprenticeship education. The training and education received by apprentices, as previously explained, is somewhat complex in nature.

A survey of the trainers that work in both systems was instigated to find out their views on the shortcomings and strengths of the present training system "from the inside" as it were, and their views on the future of training for the Irish Motor Industry. The views of this group are important because of the type of impartiality that they can offer in their answers. As they are employed by the public sector they are not actually a part of the Industry, but they are acutely aware of events and happenings in the Industry. All respondents are past employees of the Motor Industry and many participate in distributor training programmes as part of their occupational CVT. They also share a common training cohort with the Industry; as such, they are very well positioned and qualified to comment on the Industry training system.

New Modular Apprentice Training Programme

The survey itself was conducted, during 1993, at a time of change for this group as the modular curriculum for apprentice motor mechanics was introduced, on a pilot basis, in the FAS Training Centre, Waterford. This pilot programme was introduced in order to streamline the training of motor vehicle apprentices. The outcome of this programme would help shape the future of apprentice training across a wide range of occupations.

The pilot programme itself was comprised of two strands; a new modular curriculum and a standards based approach rather than strictly time-served. Another important

change was that of recruitment procedures; employers would now recruit directly, while FAS would no longer recruit "non-sponsored" apprentices. The first phase of the apprenticeship would now be undertaken at the premises of the employer.

Age Profile of Cohort

During the late 1970's and early 1980's AnCO, as FAS was then known, recruited a large number of Training Instructors to train apprentices in their Training Centres. The necessity to recruit these Instructors was as a result of the introduction of compulsory registration by employers, of all apprentices with AnCO and the introduction of compulsory First Year Off-The-Job training courses for apprentices. The resulting surge in the number of Instructors employed, over a relatively short period of time, means that the age profile of the FAS group is considerably younger than that of the RTC group.

While the recruitment of apprentices was officially the responsibility of the Industry, many apprentices have been recruited by FAS itself in the past. For political and logistical reasons, FAS recruited apprentices directly. They then attempted to place the apprentices with employers on completion of their first year off-the-job training course. This arrangement was not satisfactory and has been discontinued with the introduction of the modular curriculum and standards-based approach.

Examination and Certification System

During the 1930s the Department of Education introduced an examination system for apprentices. At that time apprentices were given the option of attending night classes at the local technical school, or college, in order to attain these examinations. A two-tier system evolved, comprised of Junior and Senior Levels. These examinations were then known as the Junior and Senior Trade Certificate Examinations. Classes were run at the various technical colleges to enable apprentices to study for attainment of these Certificates. There were both theoretical and practical components to the examinations, as well as optional general subject examinations open to candidates. For those interested in further study, Intermediate and Advanced Technological

Certificates were awarded by the Department of Education to those candidates that passed the appropriate written examinations. FAS held end of term examinations for first year off-the-job apprentices and awarded a diploma to those that were successful. Until the introduction of the Modular type of curriculum there was no real inter linkage between the two strands of an apprentices training; there was considerable overlap, however. Apprentices followed the Department curricula while attending college and a FAS curriculum during the Off-The-Job course.

The introduction of a single system provided considerable political challenge for its implementors as the two systems were, in a sense, competing for control of apprentice training.

Divergence within the Public Sector

In analysing the information obtained from the informants of the survey the divergence between the two systems must be taken into consideration. At this point in time (1994) FAS training instructors have mainly trained first year apprentices and FAS training centres are equipped accordingly. College lecturers are involved with all levels of apprentice and often provide courses for those qualified personnel that wish to study at an advanced level.

Due to the differences between the two systems, as outlined, the answers have been broken into two groupings; FAS and RTC. While FAS answers are exactly that, RTC answers can be attributed to RTC, DIT, VEC and Community College respondents; in fact all Department of Education funded institutional employees.

Survey Questionnaire

A copy of the survey questionnaire and the results is included as a part of the appendices. The main headings of the questionnaire were as follows:

- Scale of Education and Training
- Educational Attainment
- Influence of Employers on Recruitment
- Curriculum Policy

- Liaison Arrangements with External Bodies
- Training provision and Demand
- Resources and Funding
- In-Service Training
- Future and Current Skill Requirements
- Changes to the Training System

The findings and results are presented in the following sections.

FINDINGS FROM THE SURVEY

Scale of Education and Training in the Irish Motor Industry

Information supplied by FAS shows that 1,918 Motor Industry apprentices were registered as at Dec. 31st 1993. Totals from the survey indicate a coverage of approximately 1,500 of these apprentices. This figure is particularly comprehensive given that a proportion of apprentices registered with FAS would not attend college at any time; further, as apprentices often attend college on a Block Release basis it is possible for three different groups of similarly designated apprentices to attend college in any academic year. In addition to this group some 700 qualified craftspersons attend part-time or evening courses at the various institutions.

It can be stated, therefore, that more than two-thirds of attendees at public-sector training are at apprentice level. The amount of time, staff and resources devoted to this group would be at a pro-rata higher level; due, primarily, to the teaching hours required by apprentices to complete their training at public centres when compared with the post-apprenticeship group.

Cost of Training Provision

Questions aimed at estimating the cost of providing public sector training elicited answers that varied widely (for instance, £400 per student/year and £12 per student/year were both offered as amounts for the non-capital expenditure component of student funding) and as such cannot be used.

Educational Attainment

Two items were asked of the respondents; had all apprentices attained the statutory minimum educational requirements?; if not, then the respondent was requested to estimate the percentage of apprentices that had not attained the minimum requirement.

A majority of 54% suggest that not all apprentices have attained the basic educational grades proposed by FAS.

Estimates as to the percentage that had not attained the required grades varied from 7% of the apprentice intake, to as high as 60%.

It is likely that both situations existed, depending on the location of the training centre. It was evident from the data that there is a considerable divergence in the educational standards of the apprentice intake. A large number of apprentices have attained Leaving Certificate level in some areas of the country, while in other areas apprentices are scarcely literate. Interestingly, one informant suggests that approximately 1.5% of the apprentice cohort at that particular establishment cannot read or write.

There is general consensus that such a situation should not be allowed to exist. Entrance exams and screening of applicants are options mentioned. It is also suggested that this situation will lead to problems at a later date in the training of the apprentice.

Suitability of the standard set was next questioned. 65% of the informants believe that the current basic educational standard required of apprentices is, in fact, too low. 21% believe that it is adequate. A compromise alternative standard is difficult to extract from the opinions offered, but 5 Grade C's at Junior Cert. level with the inclusion of Maths, Science, English and a practical subject might be appropriate.

Influence of Garage Owners on Choice of Apprentice

A huge majority, 91%, suggest that the garage owner has an influence on the standard of apprentices employed. Two comments appeared most frequently; 1. Garage owners usually hire apprentices because of "who" they are rather than "what" they are. 2. Employers often ignore educational attainment when hiring apprentices.

There is consensus that employers should pick the correct type of person, with proven ability and aptitude, and with the assistance of some external independent agency with skills in manpower selection such as FAS.

Curriculum

Satisfaction with curricula currently used was expressed by 52% informants, with 48% suggesting dissatisfaction. It is difficult to draw any conclusions here. It would appear that the informants are anxious to work with the new modular curriculum before commenting.

Modular Curriculum

Type and Duration of Off-the-job training

Some reservations were expressed about the brevity of the initial off-the-job phase and with the availability of resources to implement the curriculum. It is believed that the end of the Day Release system is likely to meet with some opposition from employers. Comment was also passed on the narrow scope of the curriculum itself with little thought being given to the broader notion of career advancement.

Standards Based Approach

Generally accepted as a good idea. Question raised regarding certification and the establishment of an independent exam system.

Assessment Methods

Problems identified here focus on the amount of teaching time that will, of necessity, be absorbed in assessment; particularly with repeat attempts by unsuccessful students. Again, the issue of extern examiners and independent exams arose. There were a number of informants that opted for retention of final exams and, indeed for retention of Junior and Senior Trade Exams.

One important issue not raised by the informants, but discussed with the author during informal contacts, is that of assessment at garage level during phases 3,5 and 7. No system has been proposed for assessing the trainee in the workplace. No staff at garage level have been trained as assessors as yet; despite the introduction of the Modular Curriculum for all Motor Apprentices during the Autumn of 1994.

Curriculum

The informants were generally happy with the new curriculum; reservations were expressed about its breadth and the prospect that this type of curriculum will not produce any technicians.

Selection of Apprentices

Again, overall favourable reaction to this aspect of the new system. The importance of external advice for employers when choosing apprentices is emphasised by many. One important note was raised regarding the logistical difficulty of uneven numbers of

apprentices being recruited by employers annually. This would lead to problems for the public centres in providing training.

General Comments

> "Pilot is simply a method of introducing a new system gradually. Interested parties will not be given a copy of any reports on the matter. Selected sections of appropriate topics will be used to make a case for retention of the new system... facilities to study and practice in modern systems with appropriate tests and recognised qualifications for those that add to their trade."
>
> "On completion of their apprenticeship further study to enhance their knowledge and qualifications should be possible."
>
> "System will produce fitters with no extra technological eye."

Curriculum Design

56% of the informants indicated that there was no mechanism for involving staff in curriculum design in their organisation; 44% said there was a mechanism. In fact there is no formal structure for involving individual lecturers in Department of Education curriculum design. Nominations are made by the Department itself for lecturers to sit on curriculum committees. There is no democratic method involved. In FAS the Curriculum Development Unit seconds Instructors to work on curriculum projects but, again, there is no real democracy involved. Both arrangements are loose and informal. Suggestions for changing current arrangements include choosing younger participants, giving all staff a say, rotating participants in order to broaden input and establishing a national unit comprised of Department of Education and FAS representatives.

Lecturer / Instructor Autonomy

A majority of 63% indicated that the curriculum does not allow for autonomy on the part of the Instructor in the content taught. In the old exam-based system no real autonomy was possible as exams dominated the course content.

Allowing Instructors to attend manufacturers courses would encourage the inclusion of the latest technologies while allowing more contact time would allow Instructors to

include topics of interest that might not otherwise be included,were among suggestions made.

One individual makes the comment that in 20 years of working as a lecturer, no public body has ever asked him for an opinion on any aspect of the curriculum.

Liaison with External Agents

In reality only a few centres actually liaise with any external agency regarding curriculum or courses generally. The DIT Bolton Street, as the largest public centre, has developed several courses which are accredited by an external body and works with the SIMI on a distance learning programme for Parts Personnel. 64% informants suggested that their centre has no external liaison, while 36% said that there was contact with external agencies.

Non-Technical Training Provision

Only four centres provide non-technical training courses that cater for the Motor Industry. DIT provide a Management Diploma Course for the Motor Industry which provides a very broad range of subjects for its' participants. Similarly, the Parts Distance Learning Programme provides for a diverse range of subjects. FAS Galway and Cork and RTC Limerick also provide a certain amount of non-technical training for Motor Industry personnel.

This would suggest that a large geographical portion of the country has no provision in this regard. Take-up levels for the Distance Learning programme are, as the programme is still in its infancy, as yet very small.

Training Demand at Local Level

The indications are that there is insufficient demand in regional centres for increased training activity. It is the experience of many centres that proposals for new courses have been shelved due to lack of enrolments. There is a certain amount of demand from non-franchise technical personnel for technical upgrading courses.

Resources and Policy

There is agreement among RTC personnel that capital funding is inadequate with suggestions of increases ranging between 25% and 400% being necessary to improve

equipment and facilities. Surprisingly, FAS informants were equally divided between those that felt capital funding was adequate and those that felt that funding was inadequate. One FAS Instructor suggested that a 6,000% increase in capital funding would be necessary. FAS personnel felt that non-capital funding was adequate whereas RTC personnel were divided here. DIT is in the process of seeking £3m in funding in order to upgrade its facilities to cater for the new curriculum.

Without exception, suggestions where such increased funding should be spent centred on new equipment; particularly for newer technology training equipment. It would appear that this area has been neglected due to cutbacks in public expenditure in recent years.

In-Service Training

A majority of informants believe that their organisation's in-service training programme is inadequate for their professional needs. One informant suggested that there is no in-service programme in the Department of Education controlled colleges. Others commented that they would like to see much more in-service available to them. Problems such as finding the right type of course were highlighted also. Practical barriers to attending in-service included; Expenses, availability of class cover, payment for part-time staff, geographical distance for those in the more remote regions. The single most common problem was that of class cover; it is not possible for the RTC's to pay a substitute teacher when a staff member is attending an in-service course. The cost of providing in-service training for 28 FAS instructors during 1993 amounted to £7,200 - or an average of £257.14 each. This figure would suggest that a very low level of activity is taking place in this area.

The survey's proposal that an agency be set up, to co-ordinate places available on manufacturers courses with demand from public sector trainers, was met with an overwhelmingly positive response. 22 informants backed the establishment of such an agency, with nobody against the idea; 21 agreed that such an agency would be likely to reduce some of the barriers that prevent participation in in-service training, 1

disagreed; 21 informants would support a lobby to have such an agency established, 1 would not.

Skills in the Motor Industry

In the question of whether there are skill shortages in the Motor Industry at present, 17 informants felt that there were, as against 5 who believed that there were not. Such skill shortages were identified, primarily, as being in the electronics and diagnostics areas, with capable technicians being in short supply. Given remuneration levels as low as they are in the Industry, some informants believe that improvements here will lead to a higher retention rate for more capable staff.

When asked about the skill requirements of staff in the future, under the classification of occupation the following was suggested:

Apprentices: Diagnostic skills, electronic skills and the ability to use sophisticated test equipment were also a high priority.

Sales Personnel: This group would benefit from more technical knowledge, better interpersonal skills, improved computer skills and marketing skills.

Parts Personnel: Computer skills were the most obvious pre-requisite for Parts persons of the future with a suggestion of the need for more formal training for parts staff in stores procedures and inventory control generally.

Management and Administration: There was a suggestion that this group would benefit from being required to undertake a business studies course prior to their employment. Improved interpersonal skills and good communication skills which, it was suggested, were lacking in Irish industry.

General: An interesting suggestion from one informant was that adaptability to change in all aspects of work was important. Another individual commented that there should be more emphasis on interpersonal skills across the Industry.

Changes in the Training / Education System for the Future.

Apprentices: Better selection procedures, greater motivation and encouragement for individuals, more emphasis on electronics than mechanics.

Technical Personnel: Support for a range of night classes and general courses run by the manufacturers, two-tier system of specialists and a lower skill occupation, improved remuneration and reward for those that put in an extra effort, in-service courses to develop specialist skills, possibility of opening up main dealer training to non-dealer staff.

Sales Personnel: Better training and in-service courses to develop specialist skills.

Parts Personnel: Better training and more computer skills training.

Management: More interest in the training of their staff.

CONCLUSIONS

- Two-thirds of all attendees at public-sector training are apprentices. Apprentices number some 2,000 of the total 14,000 employed in the retail motor industry[1]. Therefore, approx. 1,000 persons, mainly technical personnel that are post-apprenticeship, employed in the retail motor trade attend CVT at a public sector, or less than 10% of the total.
- Basic educational attainment of apprentices is regarded by many respondents as inadequate. A higher standard of attainment will be required for technical staff of the future.
- The selection of apprentices by employers is regarded as requiring much attention, with procedures required to assist employers to recruit the correct calibre of individual.
- Some difficulties are envisaged with the assessment and certification procedures of the modular approach to apprentice training. External independent verification procedures are called for.
- Concern is expressed about the narrow breadth of the curriculum, with suggestions being made to broaden the curriculum.
- No formal procedures exist to involve staff in curriculum design. Many respondents express dissatisfaction with this situation.
- Very little liaison takes place between FAS, the Department of Education and the Industry regarding training and education; the exception being the meetings of FAS Motor Industry sub-committees. This situation should be improved and a multiplicity of formal links adopted.

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[1] Society of the Irish Motor Industry, 1995 Budget Submission of the Society of the Irish Motor Industry, Dublin, p.2, 1994.

- Funding for the purchase of training equipment and modern test equipment must be improved. Facilities in some public centres need to be upgraded.
- In-service arrangements require major review and must reflect the needs of trainers in dealing with complex ever-evolving technological change.
- The vast majority of respondents believe that a central co-ordinating agency for in-service would help to reduce the barriers that limit their participation in in-service activities.
- There are skill shortages in the Irish Motor Industry in the area of electrical and electronic fault-diagnosis and repair.
- Many respondents believe that a new grade of technical person, a motor vehicle technician, should be formally introduced.
- It is generally believed that more non-technical training is required by all grades of personnel but specific suggestions for improvements are a little vague.

In discussing the various opinions offered there is one gap in the subject matter which the informants did not attempt to address in a comprehensive manner; that of non-technical training.

The questions were aimed at eliciting as much comment as possible in the area in which the informants are most conversant, i.e. apprentice education. Many of the higher ranking personnel in the Irish Motor Industry have, at one time or another, worked as apprentices. Therefore, those that train apprentices can exert a formative influence on the Industry in the longer term. If such a group does its job well then the Industry benefits in more ways than those explicitly stated and intended. There is, of course, the opposite effect when the job is badly done.

However, in the area of non-technical training and occupations, no real suggestions for improvement were offered. The group failed to address the area of non-technical training provision in any useful way. If this group offer no suggestions it is possible that no problems exist in non-technical training provision; it also possible that the group did not answer due to a lack of contact and involvement with the non-technical professions.

CHAPTER 9

OCCUPATIONAL PROFILES AND IDENTIFICATION OF TRAINING NEEDS

9.1 BACKGROUND

In order to plan a comprehensive training programme for any purpose it is first of all necessary to examine the necessity for its existence. In proposing a training system for the Irish Motor Industry it would be prudent to examine the various occupational roles of the Industry and to compare training provision with the skills requirements of those roles.

The analysis of skills and occupational roles is undertaken in the following format:

- Rationale
- Occupational Divisions
- Application of Model to Occupational Roles

9.2 RATIONALE

In attempting to analyse the occupational roles and break them down into their constituent skills some theoretical framework must be employed. The author chose the FAS model. This model was first applied to analysing the role of Motor Mechanic for the purpose of implementing the modular curriculum. This was the first time that a modular approach was employed while designing an apprenticeship curriculum in the Irish training system.

The obvious benefit in using this model stems from the advantages to be gained in direct cross-comparisons between occupational roles and the transfer of insights gained during the implementation of the FAS model. The profiles developed for this study could be transferred directly into the new modular system and, thus, are practical applications of the model, not theoretical applications. Appendix D contains the rationale of the FAS model.

9.3 OCCUPATIONAL DIVISIONS

The Irish Motor Industry is comprised mainly of small outlets, as outlined previously. Within a typical outlet the organisation of work is normally divided in the following way:

- Spare Parts Sales
- Vehicle Sales
- Vehicle Service and Preparation
- Management structure
- Administrative staff

Spare Parts Sales

While it can be argued that Spare Parts sales are a part of the Service sector of an outlet, a potential exists for profit to be made on the sale of spare parts. This profit must be closely monitored for ensure optimum performance. In practice, any outlet that possesses a vehicle franchise sets up a separate spare parts unit to serve the customers, and the outlets, needs. The role of Spare Parts Person is one that has evolved over the years into an important and lucrative one for the outlet. There are also many independent outlets that exist solely to supply spare parts. Such outlets are generally known as "auto-factors" and usually supply generic spare parts, not affiliated to any of the vehicle manufacturers.

Vehicle Sales

Vehicle Sales are, for many outlets, at the core of their operation. Staff in the Sales area use the other departments to prepare vehicles for sale and to provide support for the customer in the event of a problem, or for routine maintenance. The role of Sales Person has developed over the years; from a situation where the customer came to purchase from the outlet nearest to them and had few options in choosing a model, to a situation where there is strong competition among outlets and a huge range of model options for the customer. This means that the skills required by a Sales Person are diverse and complex. Some outlets specialise in selling used vehicles while others specialise in selling new vehicles of all makes. The skills requirements of the sales staff

of such outlets do not vary dramatically from the skills required by the sales staff of franchised dealers.

The various sales operations usually have a requirement for clerical support in terms of maintaining records and accounts that would be undertaken by a central administration office in the outlet. In larger outlets a Sales Manager can be employed but in smaller outlets the Owner, or Director, will normally assume this role.

Vehicle Service and Preparation

The Service Department is one that is essentially established to provide a technical back-up for customers. It encompasses a number of occupational roles, including the traditional roles of mechanic and panel beater. Usually the vehicle cleaning function is in the care of this department.

Increasingly, due to higher customer expectations, a person is employed as a Service Advisor to liaise with customers that require some repair or maintenance for their vehicle. Due to the customer contact required this is a role that is becoming increasingly difficult as customer expectations continue to increase.

The role of motor mechanic is also continuing to change, primarily due to advances in technology, but also due to heightened customer expectations. This, in the author's opinion, will lead to the necessity for the recognition of a new role, that of Technician, by the Irish Industry. This role is already well established in other countries such as Germany and France, and has been encouraged by many manufacturers who require specialised staff to be trained in high-tech areas. Volkswagen and Toyota are two examples of Irish distributors that have established a lead in this area.

A Service department will also have a clerical skill requirement, usually supplied by the central administration staff.

Management

The role of Manager is one that is crucial to the Industry and one that has certain training requirements. The difficulty in the Irish Industry is that many outlet owners are also the outlet managers and sales managers, the reason being simply the economies of scale of the smaller outlets. It is not realistic or viable to employ a manager for an

outlet that employs 6 people. This difficulty is compounded by the calibre of individual that manages such an outlet. Invariably, the person concerned was/is a successful sales persons, so successful that they build up a business that requires the hiring of staff. As the business grows the demands on the owner grow and grow but the excellent sales person is quite often not an excellent manager and problems take root.

In larger outlets, managers are often employed to run the various departments. The control they have and the ability they require depends largely on the size, location and type of outlet in which they are employed. The managerial skills required by both types of manager are similar; and so, for the purposes of this study, the abilities required by a manager in the Industry are contained in a single occupational profile.

The management function also has a clerical requirement and this is usually met by a central administration unit.

Administrative Staff

The Motor Industry does not impose any more skill requirements on administrative and clerical staff than are imposed in any other industry, or enterprise. In a small outlet administration work is usually the responsibility of one person, often a family member of the owner. In larger outlets a number of people are employed in administrative, receptionist and telephonist roles. The skills required by this group of staff depend entirely on the work assigned to them by their managers. As there is no real role of clerical worker in the Motor Trade no occupational profile has been developed for this role. Training requirements for this group will be outlined without a specific skills analysis.

9.4 APPLICATION OF MODEL TO SELECTED OCCUPATIONAL ROLES

The occupation roles to be analysed for their skills requirements are as follows:

- Stores Person
- Sales Person
- Service Advisor
- Retail Outlet Manager
- Motor Mechanic
- Motor Vehicle Technician

Explanation of model

The model chosen is one adopted by FAS in their design of the modular curriculum for apprentice training. The intention in choosing this particular model is to allow for the easy practical integration of the recommendations and analysis contained in this report into the Irish Motor Industry Training system. Given that the model has already been used for the updating of one profession in the Industry, it should be possible to use the same model to update similarly the other professions.

The rationale employed by FAS is explained hereafter and contained in the appendix marked "Correspondence" of this report.

Any occupational role can be described in terms of the personal skills required to be competent in that role. In other words, to be described as a "Car Salesperson", an individual has to possess a certain range of personal skills.

The skills themselves are sub-divided by FAS into four types:

- Core Skills
- Specialist Skills
- Common Skills
- Personal Skills

As FAS is primarily concerned with trades persons in setting out this model, the author has had to re-interpret the explanations to encompass occupations that are not "trades", in the traditional sense of the term. For the purpose of analysing all the occupations mentioned earlier, the following explanations will apply:

Core Skills

Are the range of skills and knowledge which are required by all similar grade personnel of this occupational group.

Mastery of these skills would be required before any progression to a higher occupational level would be possible.

Specialist Skills

Are those skills which are identified by a particular industry, or occupation, and are applied in specialist sectors within that industry, or occupation. Mastery of these skills allows workers to specialise in particular industries as key personnel.

Common Skills

Common Skills are those that are required by the occupational role, and can be either Core or Specialist Skills; but which are also common to other occupational roles within an industry or group of occupational roles.

Personal Skills

Personal skills are those skills that apply to all occupational roles and incorporate practical abilities required of employees. Mastery of personal skills enables workers to enrich their relationships with their colleagues and are essential for progression to higher levels of responsibility, promotion and job satisfaction.

Application of the FAS Model

The following sections examine the skill requirements for the various occupations of the Industry and apply the FAS modular approach to analysing those skills.

By analysing individual roles in this way it is then possible to assess current training provision, in terms of the skill requirements for each occupation; and thereby to identify the strengths and weaknesses of the training system..

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: Buying and selling of spare parts and accessories to and from the public and other members of the Motor Trade.

A successful Stores Person will possess the following competencies:

Core Skills	Specialist Skills/Knowledge within Profession	Common Skills/Knowledge For Motor Professions	Personal Skills Required
Spare Parts and Accessories The ability to sell to the private customer. The ability to sell to firms and fleet buyers. The ability to sell to the motor trade. The ability to sell to the Public Sector. The ability to buy from the trade. **Services** The ability to sell the services of the outlet. The ability to sell extras and accessories to the customer.	**Parts Sourcing** The ability to interpret manufacturers descriptions to source parts using a variety of information sources and media e.g. microfiche reader and parts catalogue. The ability to initiate and utilise traceable procedures for ordering/sourcing parts. **Pricing** Using all available data and variables to calculate selling prices for spare parts. Implement discounting procedures for wholesale and retail sales. **Inventory** The ability to maintain adaquate stocks to satisfy selling requirements. The ability to maintain adaquate financial controls to maximise profit **Product** The ability to apply variations in specification details and other technical variables when identifying part numbers. **Legislative** The ability carry out his/her functions as governed by legislation pertaining to sale and operation of motor vehicles incl. the Sale of Goods and Supply of Services Act and general consumer legislation. **Payment Methods** The ability to employ point of sale documentation and credit card and cheque payment procedures. The ability to implement the credit control procedures of the particular outlet. **Tendering** The ability to supply quotations and tenders to Public Bodies and other enterprises.	**Accounting** Using knowledge of and the implementation of appropriate procedures to ensure that all costs are accounted for and moneys paid as appropriate for individual sales. **Requirement Sourcing** The ability to identify and assess sources that will satisfy customer requests for particular products or services with appropriate details of fitment and prices. **Competition** The ability to compare, contrast and analyse various aspects of competitor product, facilities and impending changes in order to deal with challenges presented. **Financial Matters** The ability to advise commercial customers on the most appropriate method of purchase based on the system of Interest Rates, Capital Costs, VAT, Corporation Tax, Tax Write-Offsetc. **Computer Applications** Use On-Line terminals for checking parts availabilty, ordering and other manufacturer concerns. Use CD-ROM for current info. on parts identification. Use database software for Customer Contact Programmes, follow-up and general sales records.	Communications Customer Relations Adaptability Ability to work as a team member. Ability to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering. Computer Literacy. Dress Sense. Selling Technique. Negotiation Technique. Numeracy.

OCCUPATIONAL ROLE OF SPARE PARTS PERSON

Training Provision

In recent years, FAS have developed and introduced a training course in this area and it is now a designated craft. It will be subject to revision and upgrade to reflect a modular approach in common with other apprenticeships, such as that of Motor Mechanic.

DIT Bolton St., in conjunction with the SIMI and the British IRTE, have established a distance learning programme for spare parts personnel. A diploma is awarded to those candidates that successfully complete the programme. Such a distance learning programme is particularly welcome for this group as it is constituted of a relatively small group that is geographically diverse. Courses at regional venues such as Waterford and Limerick have been under subscribed due to this problem. Participation rates for this new programme are not available as yet.

Parts staff from franchised outlets are trained at distributor premises but usually by personnel that are not qualified trainers. The training undertaken is generally of a very specific and technical nature. There is no formal training required by parts staff before they are employed at an outlet. No qualification or registration is required before taking on the role of Spare Parts Person.

Future Training Needs

Having analysed the role on the previous page it would appear that conventional training serves this occupational role well. Two areas of difficulty exist: Two training systems exist almost independently and no formal qualification is required to establish oneself in the role of Spare Parts Person.

The Public Sector Trainer survey has highlighted the need for improved computer skills and customer relations skills for these staff.

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: Buying and selling of new and used vehicles to and from the public and other members of the Motor Trade.

A successful Sales Person will possess the following competencies:

Core Skills	Specialist Skills/Knowledge within Profession	Common Skills/Knowledge For Motor Professions	Personal Skills Required
New Vehicles The ability to sell to private customers. The ability to sell to firms and fleet buyers. The ability to sell to the motor trade. The ability to sell to the Public Sector. The ability to lease to the private customer. The ability to lease to firms and fleet buyers. The ability to lease to rental firms. **Second-Hand Vehicles** The ability to sell to the private customer. The ability to sell to firms. The ability to sell to the motor trade. The ability to lease to the public. **Trade-In** The ability to buy from the customer The ability to buy from the trade **Services** The ability to sell the services of the dealer. The ability to sell extras and accessories to the customer.	**Mechanical** The ability to determine the condition of a vehicle based on a test drive and visual inspection of the vehicles. Assess the cost of necessary repairs before re-sale will be possible. **Pricing** Using all available data and variables to value the vehicle being purchased / traded-in. Apply discounting procedures for manufacturers, fleets and dealers. **Product** Be conversant in the specification details, variables and implications thereof, on price of new or second-hand vehicle. **Legislative** The ability to implement work practices that demonstrate a practical knowledge of legislation pertaining to the sale and operation of motor vehicles; the legal title of motor vehicles and the declaration of third party interests. **Finance** The ability to offer prospective purchasers various financing options and arrange credit agreements. The ability to analyse and discuss business and private leasing variations and the benefits to the customer. **Tendering** An understanding of Public Body and other corporate tendering systems and their operation. **Accessories** The ability to enhance the customers perception of a product by adding after-market fitments to the product range.	**Accounting** The ability to implement appropriate procedures to ensure that all costs are accounted for and moneys paid as appropriate for individual sales. **Requirement Sourcing** The ability to source products and services that will satisfy customer requirments with appropriate details of fitment and prices. **Competition** The ability to compare, contrast and analyse various aspects of competitor product, facilities and impending changes in order to meet the challenges presented. **Financial Matters** The ability to advise commercial customers on the most appropriate method of purchase based on the system of Interest Rates, Capital Costs, VAT, Corporation Tax, Tax Write-Offsetc. **Computer Applications** Use On-Line terminals for checking model availabilty, ordering and other manufacturer concerns. Use Minitel and other IT sources, for current info. on finance matters. Use database software for Customer Contact Programmes, follow-up and general sales records.	Communications Customer Relations Adaptability Ability to work as a team member. Ability to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering. Computer Literacy. Dress Sense. Selling Technique. Negotiation Technique. Numeracy.

OCCUPATIONAL ROLE OF THE MOTOR VEHICLE SALES PERSON

This occupation is not included as a designated craft by FAS and no formal training is undertaken specifically for this role by FAS. A certain amount of training activity is undertaken by the distributors for the sales staff of their franchised dealers; the focus of this training is usually toward improving product knowledge. To a lesser extent training is also given in basic sales techniques.

SIMI offers a number of training seminars to sales persons on a regional basis. These are generally well attended and prove a demand for structured training throughout the Industry in this area. Indeed, some outlets encourage their sales staff to attend expensive seminars given by American and English sales "gurus", the main benefit of which is motivational. The longer term benefit of such seminars is difficult to quantify.

The Irish Management Institute hosts training courses for the benefit of sales and marketing personnel on a demand basis, occasionally initiating demand by working with a training provider or an institution to promote a particular seminar. *Business and Finance* magazine also arrange training seminars on various topics, generally ones that are in-vogue at the time and always for commercial gain.

No qualification or registration is required to establish oneself as a Motor Vehicle Sales Person.

Future Training Needs

Personal abilities feature highly in the profile described and an attempt must be made to formalise training with the purpose of the enhancing of personal skills for sales persons. A knowledge of appropriate legislation that is not handed down from an ill-informed source would also be desirable. Training in financial matters, and the taxation system, relevant to the role is necessary given the complexities of financing the purchase of vehicles and the number of options available to the potential customer.

Improved computer training due to the increasing use of Information Technology and computers generally.

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: Providing a customer contact and liaison serice for the Service Dept. of a retail outlet.

A successful Service Advisor will possess the following competencies:

Core Skills	Specialist Skills/Knowledge within Profession	Common Skills/Knowledge For Motor Professions	Personal Skills Required
Servicing The ability to sell to the private customer. The ability to sell to firms and fleet buyers. The ability to sell to the Public Sector. **Work Scheduling** The ability to assign the workload, with optimum efficiency, to the workshop staff. **Records** The ability to establish and maintain a customer database that will allow for correct invoicing and recording of all repairs and maintenance carried out .	**Out-Sourcing** The ability to source specialist services and tools and equipment at an optimum premium as and when required. **Pricing** The ability to calculate charges that reflect all costs incurred by the dealer in carrying out a particular service. **Product** The ability to decide a repair procedure given specification details, model variations and manufacturers modifications when discussing problems with customers. **Parts Dept. Liaison** The ability to initiate and utilise traceable procedures for ensuring that parts stock meets Service Dept. requirments. **Legislative** Possess appropriate knowledge of legislation pertaining to sale and operation of motor vehicles. The ability to carry out his/her duties within the remit of the Sale of Goods and Supply of Services Act, and general consumer legislation as it applies to the Motor Industry in particular. **Technical Knowledge** Ability to analyse and interpret customer complaints so as to assist the technician in correctly identifying faults. Ensure quality control procedures are adhered to and adopt the role of the customer in checking on work carried out. **Warranty** The ability to apply the rules, limitations and stipulations as they apply to manufacturers and other warranties. Implement procedures to ensure payment is received for all work carried out under a warranty. **Accessories** The ability to improve the customers perception of the product by informing him/her of the range of products and accessories available to them.	**Accounting** Knowledge of and implementation of appropriate procedures to ensure that all costs are accounted for and moneys paid as appropriate for individual sales.. **Requirement Sourcing** Knowledge of sources that will satisfy customer requests for particular products or services with appropriate details of fitment and prices. **Competition** Ability to compare, contrast and analyse various aspects of competitor product, facilities and impending changes in order to deal with challenges presented. **Financial Matters** The ability to advise commercial customers on the most appropriate method of purchase based on the system of Interest Rates, Capital Costs, VAT, Corporation Tax, Tax Write-Offs etc. **Computer Applications** Use On-Line terminals for checking technical information / updates and other manufacturer concerns. Use database software for updating customer records, Customer Contact Programmes, follow-up and general accounting records. **Payment Methods** Use point-of-sale documentation, credit card and cheque methods to obtain and record payment for the outlet for work done. Implement credit control procedures and policy as they apply to the particular outlet.	Communications High level skills in customer relations Adaptability Ability to work as a team member. Ability to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering. Computer Literacy. Dress Sense. Selling Technique. Finely tuned skills in negotiation technique. Numeracy.

OCCUPATIONAL ROLE OF THE SERVICE ADVISOR

The role of Service Advisor is important in the Industry but largely confined to the employment of larger outlets. This is simply for cost reasons. While the numbers employed in this role in the Industry are relatively small it is the author's belief that they will increase in line with increased customer expectations for personal service.

At this time this role is not a FAS designated craft and it is unlikely to be included as an apprenticeship or training programme in its own right. Very often this role is filled by a former motor mechanic with an aptitude for interfacing with customers.

Training provision is essentially restricted to an on-the-job induction approach. A certain restricted amount of training is also given by the distributors to this group.

No formal training is required before undertaking this role and no registration is required.

Future Training Needs

Many of the skill requirements outlined in the occupational profile can be obtained by the current method of training, i.e. on-the-job induction training. Future training provision will have to address two needs: Constant technical updating and constantly improving interpersonal skills.

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: Operation of a retail outlet or; operation of a department, or division, within a retail outlet.

A successful manager will possess the following competencies:

Core Skills	Specialist Skills/Knowledge within Profession	Common Skills/Knowledge For Motor Professions	Personal Skills Required
New Vehicles The ability to sell to the private customer. The ability to sell to firms and fleet buyers. The ability to sell to the trade. The ability to sell to the Public Sector. The ability to lease to the private customer. The ability to lease to firms and fleet buyers. The ability to lease to vehicle rental firms. **Second-Hand Vehicles** The ability to sell to the private customer. The ability to sell to firms. The ability to sell to the trade. The ability to lease to the public. **Trade-In** The ability to buy from the customer The ability to buy from the motor trade **Services** The ability to sell the services of the outlet. **Human Resource Management** The ability to deal effectively with HR issues as they arise. Time management capability. The ability to motivate staff and employ team-building techniques. The ability to maintain a skilled workforce competent in their various roles. The ability to carry out a job skills analysis. The ability to manage the personnel requirements of a retail outlet. The ability to choose and train staff.	**Technical** The ability to make informed decisions, based on the possession of sufficient technical knowledge, in every aspect of the outlet operation in the control of that manager. **Product** The ability to make decisions based on a comprehensive knowledge of the product sold and competitor products and services. **Legislative / Administrative** The ability to carry out the managerial function given the possession of : A detailed knowledge of legislation pertaining to sale and operation of motor vehicles. A detailed knowledge of general employment and working environment legislation. Knowledge of insurance under-writing, liability limitation control and risk management. **Finance** The ability to analyse compare and contrast financing options available to fund purchasing of vehicles and equipment. The ability to arrange credit agreements with other trading companies and institutions. The ability to structure accounting arrangements that ensure viable and competitive trading for the outlet. **Product** The ability to liaise effectively with product suppliers to ensure optimum benefit for the outlet. The ability to plan and implement an effective sales and marketing campaign. **Inventory** The ability to implement effective stock control procedures and financial controls to minimise fraud and maximise profit potential.	**Public Relations** The ability to develop the image of the outlet for maximum benefit and exposure. **Accounting** The ability to implement appropriate procedures to ensure that all costs are accounted for and moneys paid as appropriate for individual sales. **Requirement Sourcing** The ability to identify and assess sources that will satisfy customer requests and outlet requirements for particular products or services. **Competition** The ability to compare, contrast and analyse various aspects of competitor product, facilities and impending changes in order to deal with challenges presented. **Financial Matters** The ability to use a knowledge of Interest Rates, Capital Costs, VAT, Corporation Tax and Tax Write-Off 's in order to maximise outlet economic benefits. The ability to operate PAYE, Social Insurance and employment levies and payments schemes. The ability to operate the Vehicle Registration Tax (VRT) system in an optimum manner. **Computer Applications** Use On-Line terminals for checking model availabilty, ordering and other manufacturer concerns. Use Minitel for current info. on finance matters. Use database software for Customer Contact Programmes, follow-up, general sales, personnel and accounting records.	Communications Customer Relations Adaptability Ability to work as a team member. Ability to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering. Computer Literacy. Dress Sense. Selling Technique. Negotiation Technique. Numeracy. Delegation of responsibility. Stress management.

OCCUPATIONAL ROLE OF RETAIL OUTLET MANAGER

A diploma course in Motor Industry Management is provided by the Dublin Institute of Technology (DIT) Bolton Street. While the main student intake for this group is directly from second-level, a small number of students progress from the Industry itself, usually possessing a technical background.

No specific training is provided by FAS for the role of manager within the Motor Industry but some general management training courses are offered. The occupational role of manager cannot be described as a craft in the traditional sense of the term.

A number of retail outlets have availed of the services of the Irish Management Institute in the provision of training courses for their staff; an example of one group of outlets that availed of this service is the Motor Services Group of outlets based in the Dublin area. The IMI can provide a tailored training service catering for the specific management training requirements of a company or group of companies. The SIMI hold management training seminars once or twice per year and IBEC also host occasional management seminars.

Both the NESC and FORCE Reports have underlined the need for further training for managers and supervisory staff. However, no formal arrangement for training exists and no registration is required for those that undertake the role of manager.

Future Training Needs

Improved Human Resource Management skills will be paramount; and a comprehensive understanding of insurance, taxation and legislative issues will be required which can only be gained with a considerable training input. Sales, public relations and marketing skills will also need to be improved. Customer relations and improved interpersonal skills are likely to feature highly for staff training, managers will have to show a lead in these areas.

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: The servicing, maintenance, repair and installation of the mechanical and electrical equipment of passenger and light vehicles

At the end of the apprenticeship the Tradesperson will be able to demonstrate competence in the following:

All Core Skills	Some Specialist Skills within Trade	All Common Skills For Motor Trades	All Personal Skills Required
Servicing Carry out a manufacturers service schedule Complete a vehicle report form **Engine/Fuel** Carry out compression tests Remove/Overhaul cylinder heads Dismantle carburettors, replace parts, reassemble and adjust. Remove/Replace exhaust components. Check exhaust emissions for compliance with CO, HC and NOx specifications. **Transmission** Remove/Refit Gearboxes Diagnose faults in clutch, remove/replace components. Remove/Replace driveshaft joints and bearings. **Ignition** Diagnose/rectify faults in ignition systems (breaker and electronic types). **Suspension** Remove/replace suspension components. **Wheels** Balance wheels/repair punctures **Bodywork** Remove/Replace body components e.g. door locks,windows and regulators. **Lights** Remove/Replace components and focus headlights	**Diesel Fuel System** Remove/test and refit/replace injectors. Remove/replace diesel components. Check exhaust emissions with smoke meter and diagnose faults. **Brakes** Diagnose/Rectify faults in ABS brakes. **Engine** Carry out engine overhaul. Diagnose/Rectify faults in engine management systems. **Petrol Fuel System** Diagnose/Rectify faults in carburettor fuel systems. Diagnose/Rectify faults in electronic fuel injection systems. Test for correct operation of catalytic convertors. **Transmission** Diagnose faults in and overhaul; gearboxes. Diagnose faults in and overhaul differential units. Remove/Refit Automatic transmissions. **Electrical** Diagnose/Rectify faults in electrical circuits using wiring diagrams and multimeter. Remove/Refit car radios. Install basic electrical equipment. **Bodywork** Fit tow hitches.	**Metalwork** Basic bench fitting. Gas welding; brazing. **Brakes** Diagnose faults in hydraulic brakes system and remove/replace components. **Steering** Check and adjust steering geometry. remove/replace steering components (Manual and Power type steering). **Engine** Remove/dismantle/reassemble and refit and engine. Diagnose faults in cooling system and remove/replace components. **Electrical** Diagnose/Rectify faults in starting and charging systems and remove/replace components. **Bodywork** Locate/rectify noises and water leaks from bodywork.	Communications Customer Relations Adaptability Ability to work as a team member. Abilty to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering.

OCCUPATIONAL ROLE OF MOTOR MECHANIC

The role of Motor Mechanic can be split into two phases; apprenticeship and post-apprenticeship. As a designated craft the role of apprentice motor mechanic is included in the remit of the FAS apprentice training system. Apprentices are well provided for by the training system; disproportionately so, the author believes. The introduction of a new modular curriculum means that it is not possible to pass judgement on overall apprentice training provision until the system has had time to produce its first apprentices. The occupational profile for the role of motor mechanic is that used by FAS in designing the modular curriculum and was used as the model for examining the skills required of the other occupational roles.

Training provision for qualified motor mechanics, i.e. CVT; is provided by the distributors for employees of franchised outlets and provided by the colleges for others. As a result CVT provision is ad-hoc for this group with those in remote areas having to travel considerable distance to avail of part-time classes. The FORCE Report identifies CVT for non-franchise outlet employees as inadequate. FAS provide very little CVT.

A voluntary system of qualification exists for motor mechanics based on the attainment of the Junior and Senior Trade Certificates. Employers generally require the prospective employee to possess these qualifications before entering into an employment contract. It is however, possible for a non-qualified person to work as a motor mechanic.

Future Training Needs

The FAS occupational profile for the role of motor mechanic is essentially a comprehensive analysis of that role. Apprentice training will reflect this profile and should be adequate, with regular updating. CVT provision is poor and will have to be structured and organised in order that qualified staff are regularly updated. Personal skills are likely to require further training intervention in the light of increased customer expectations. A detailed suggestion in the area of CVT will be included in the final chapter.

Trade Family: Motor Trade **Industry Served:** The Retail Motor Industry

Profile of Trade: The servicing, maintenance, repair, and installation of the mechanical and electrical equipment of passenger and light vehicles

The technician will be able to demonstrate competence in the following:

Additional Core Skills	Additional Specialist Skills within Trade	All Common Skills For Motor Trades	All Personal Skills Required
Servicing Carry out a manufacturers service schedule and complete all relevant documentation. Carry out a Safety Inspection on a vehicle and report on same. **Engine/Fuel** Carry out compression tests on rotary and other non Otto Cycle engines. Inspect cylinder heads for imperfections and misalignments. Overhaul carburettors. Check exhaust emissions for compliance with CO, HC and NOx legislation. **Transmission** Overhaul Transaxles. Overhaul Transmission Components. **Ignition** Diagnose intermittent faults in ignition systems. **Suspension** Overhaul suspension components. **Wheels** Inspect and report on tyre condition and evidence of any misalignment. **Bodywork** Inspect for corrosion, paint condition and any misalignment evident. Locate and rectify sources of Noise, Vibration and Harshness (NVH). Locate and rectify sources of water intrusion. **Lights** Focus projector and other types of non-prismatic headlight to legal standard.	**Diesel Fuel System** Diagnose and rectify faults in the electronically controlled injection system.. Check exhaust emissions with smoke meter and four gas technology and diagnose faults. **Brakes** Use oscilloscope and other dynamic test equipment to diagnose and rectify faults in ABS brakes. **Engine** Use Engine Analyser and Hand Held Testers to diagnose and rectify faults in engine management systems. Diagnose and rectify faults in Traction Control Systems. **Transmission** Diagnose faults in and overhaul automatic transaxles, incl. those that employ electronic control systems. Diagnose faults in and overhaul Limited Slip differential units and Transfer Boxes. **Electrical** Diagnose and rectify faults in Air-Bag and other safety related systems. Install and commission Radio Telephones, 2 Way Radio and Sonic Alarm Systems. Install commission and fault-find CD and other Audio Equipment. Diagnose and repair engine management system faults. **Air Conditioning and Ventilation** Diagnose, rectify faults and re-commission conventional air-conditioning systems. Diagnose and rectify faults in Automatic Air Conditioning and Climate Control Systems. Diagnose and rectify faults in Digitally controlled Ventilation Systems. Diagnose and rectify faults in Solar Powered Ventilation Systems	**Metalwork** Manual Metal Arc Welding. Basic Sheet Metalwork. Soldering. Use of Adhesives and sealants. **Brakes** Diagnose faults in hydraulic brakes system and remove/replace components. **Steering** Check and adjust steering geometry using Infra-Red and Laser type geometry measuring machines of both the Wheel Run-Out Compensation Type (WROC) and non-WROC types. **Engine** Diagnose and rectify faults in Turbo, Super and Pressure Wave Chargers Systems. Diagnose and rectify faults in Cruise Control Systems. **Electrical** Possess comprehensive knowledge of Analogue and Digital processing principles. Diagnose/Rectify faults in high output charging systems and repair components. Fit Trailer Sockets for lighting and ancillaries use. Diagnose and rectify faults in electrically operated items such as central locking, electric windows etc. **Administration** Estimating of job costs. Overhead cost control Housekeeping of literature and tools **Computer Skills** Use of Data Base for Customer Records Use of on-line terminal for accessing service info.	Communications Customer Relations Adaptability Ability to work as a team member. Ability to work independently. Initiative. Problem Solving. Planning/Organisation. Information Gathering. Concern for Environmental Issues. Computer Literacy. Inquisitiveness. Self-Motivation. Report Writing. Knowledge Transfer Capability.

OCCUPATIONAL ROLE OF TECHNICIAN

As yet there is no formal occupational role established with this title at Industry level. Training provision is essentially restricted to distributor training centres at this level. While the technical colleges provide technical CVT that is of a level similar to that studied by designated technicians, the staff benefiting from CVT are not usually accorded the title or improved status of technician. Certain distributors have instigated training programmes that set out to train key technical personnel to this higher level of ability. On completing the training programme they are awarded a diploma or certificate to acknowledge their achievement. However, at Industry level this award has no real merit. FAS offer no training at this level.

Future Training Needs

The future training needs for this role are numerous and will require detailed explanation. This explanation is given in the final chapter.

OTHER OCCUPATIONAL ROLES

In addition to the roles mentioned, there are personnel employed as painters and panel-beaters by the Industry. The technologies utilised by these professions are advancing in line with developments in the rest of the Industry. Bodyshops however, usually operate independently of retail outlets, without a franchise agreement and can be a little removed from the mainstream industry. Training is confined in this sector of the Industry with only one paint supplier having a dedicated training facility. The author was unable to locate a bodyshop equipment supplier with a training facility and DIT is the only public centre to offer even limited CVT in this area.

The bodyshop has not been included in the specific skills analysis and it would be suggested that parallels be drawn between the roles of motor mechanic and painter/panel beater in deciding a training plan for the future.

Conclusion

Significant skills gaps emerge in every occupation analysed. The current training system will require considerable amendment in order to fill those skills gaps. The chapter that follows will attempt to draw together the findings of the study and propose a system of training and development that reflects the important findings of the research and fills the skills gaps that have emerged in the preceding analysis.

CHAPTER 10

CONCLUSIONS AND RECOMMENDATIONS

10.1 Training Needs

The study findings indicate that significant changes in training provision are required in the following areas:

Non- Technical

- Customer Care and Interpersonal Skills
- Legal Issues and Consumer Rights
- Computer Skills
- Business Training for Managers and Owners of smaller outlets
- Sales and Management Skills
- Supervisory and Technician specific training procedures

Technical

- Low participation rates of non-franchised outlets in CVT
- Low CVT rates
- In-Service Training for Public Sector Trainers
- Poor provision of CVT at regional centres
- Bias toward provision of technical training in training activities of distributors
- Introduction of modular curriculum for apprentices
- Skill shortages in the area of electronics and engine management system diagnostics

General

- Direct link to market share in training activity levels of distributors
- Lack of regulation of the training activities of the Industry
- Absence of a pro-active approach in planning training interventions
- The relative absence of Organisational Development Programmes in the Industry
- Absence of a nationally recognised plan for non-technical training introduced by the Industry itself

10.2 Other Findings

The study findings indicate that there are also changes required in the overall operation of the training system in the following areas:

National Level

- Certification of Awards and Accreditation Procedures

- Reverse trend toward academic education for many second-level students and away from vocational education
- Improve Vocational Preparation Programmes to reflect Industry demands
- Improve gender balance in recruitment intake
- Improve the preparation of second-level students for world of work
- Increase participation by employers in the education system.
- Increase levels of co-operation between the manufacturers, industry bodies, public sector and employers in training matters
- Introduce attainment of pedagogical qualifications for trainers
- Need to develop explicit socialisation policies for the various occupational roles
- Improve funding mechanisms and support from public sector to employers

Industry Level

- Need to evaluate existing occupational roles and establish new roles where appropriate
- Higher standard of Educational Attainment for entrants
- Improve social status of certain Industry occupations
- Increase volume and availability of apprenticeship and training places
- Affiliate distributor trainers to overall organisation rather than to specific departments.

The model that follows attempts to address as many of the issues raised by the findings as is practical.

10.3 Factors that influenced the development of the Model

In proposing a model of training and development for the Irish Motor Industry a number of key factors underpin and influence that model:

These can be identified as follows:

- Customer Care Awareness
- Environmental Issues
- Personal Computers
- Inter-Distributor Co-operation
- VPTP's and second-level system
- Incentives to encourage industry

1. Customer Care Awareness

As discussed in chapter 1, a number of demands are being made of personnel in the Industry. Some of these demands can be met by a national training system, others cannot. In the case of the increased trend towards customer care and customer satisfaction, much of the impetus for change will have to come from training and development undertaken by the distributors themselves. It is difficult to address such things as customer service ratings on a national basis, as each outlet will have its own strengths and weaknesses. In this case supplementary action will have to be taken by individual distributors or manufacturers.

2. Environmental Issues

Environmental legislation provides significant challenge for Industry personnel. In other European countries, such as the UK and Germany, national legislation covers many additional areas of an environmental nature that do not merit specific legislation in our country. In many environmental legislative areas Ireland simply implements EU directives and controls. The result of this is that the Department of the Environment is not always readily able to advise on the precise implications and details of environmental legislation, except to refer detailed queries to the offices of the EU Commission. There is a need for more co-operation between the Department of the Environment and the Motor Industry in the area of environmental issues, with the Department providing more information in advance of legislative developments than is currently the case. Environmental issues need to be explicitly and actively included in any new training initiatives in the Industry.

3. Personal Computers

The huge growth in the use of Personal Computers and peripheral equipment is set to continue. With such equipment specialised training is usually necessary in addition to basic computer training. The Industry will never be in a position to keep pace with specialist computer training and so must ensure that computer manufacturers and suppliers offer appropriate training intervention, in line with upgrading of the computer systems of the Industry. The power of PC's as learning aids will have to be harnessed

by the Industry and used for CBT (Computer Based Training), Distance Learning programmes and other applications that come on-stream in the coming years.

4. Inter-Distributor Co-operation

Co-operative projects between manufacturers continue to grow in complexity and number. Co-operation between Irish distributors does not. There is the possibility for great improvement in the type of training given to dealer networks if more sharing of information, ideas and particularly facilities were undertaken. Given the relatively small size of the Irish market, a number of shared training facilities could be jointly funded between distributors. This would reduce costs and improve the lot of the smaller distributors that find it difficult to fund separate training facilities. There would be the added advantage of a cross-pollination of ideas and training methods and even the possibility to share the cost of dedicated training staff. The only real difficulties with such a possibility is that there may be conflicts of interest, trade secret betrayal and loyalty problems; none of which are insurmountable, given the type and level of co-operation that exists among the manufacturers.

5. VTPT's and Second-Level System

The Vocational Training and Preparation Programme (VPTP) of the second-level education system allows an opportunity for improved liaison with the Motor Industry. Kellaghan has suggested that education should include a preparation for work, which is already offered by the VPTP. The difficulty with VPTP's is that they attract small numbers of participants and mainly low-achievers. Some additional effort should be made to encourage more students to participate in VPTP's and to attract high-achievers also. The scarcity of apprenticeships could also be addressed as part of a review of VPTP's, as they could be used as a preparation for apprenticeship. More apprenticeship places would also help to reduce the scramble for third-level places that occurs each year.

Difficulties with certification, identified by Kellaghan and the NESC, have already been tackled by the newly established National Education and Training Certification Board. This central body will oversee all awarding procedures in the future.

Personal abilities, such as 'Overarching Capabilities', the capacity to respond to change, flexibility and adaptability, have been identified as desirable qualities in 'good' employees. Such qualities are difficult to engender in older people. It is possible that the second-level system may have something to contribute here also. A sound educational foundation will improve the impact of later occupation-specific training.

Gender Balance

Kellaghan also suggested that there was a lack of gender balance in apprenticeship uptake. Reluctance to take-up particular apprenticeships by either gender is partly due to a stereo-typing of occupations. The second-level system, through its career-guidance programmes and subject options, may be able to help redress the imbalance.

6. Incentives to Encourage Industrial Training

Distributors have suggested that financial support for training is inadequate from FAS. It is impractical to expect that FAS will be able to increase grant-aid to the Industry in the short-term. In the case of training provision there are two pre-requisites for improving financial investment: Improved tax-relief for investors in training and a legislative obligation for employers to spend a minimum amount of time and money on employee training.

Preferential tax-relief rates could be applied to those businesses investing in premises and hardware for training purposes. It could possibly be introduced in a manner similar to that existing for 'Designated Area' investment at the present time.

While the NESC Report acknowledges the importance of 'Human Capital', the Government does not encourage the nurturing of this capital with its' current revenue and taxation system. It will be necessary for the Government to encourage actively the nurturing of 'Human Capital' through policy and financial initiatives.

10.4 Recommendations

The following recommendations are made in order to improve the effectiveness of the training and development function of the Irish Motor Industry:

National Level

- Introduce a mandatory small-business training programme for new owner/managers.
- Establish a co-ordinating agency for the training activities of the Industry which would also formalise links between the various strands of the training system.
- A training plan should be formulated by every company of more than 5 employees at every level of the Industry.
- Improve the social status and gender balance of all occupations in the Industry and amend recruitment procedures accordingly.
- Rationalise certification and accreditation procedures.
- Improve Industry-Education system links in order to improve the preparation for work of second-level students.
- Introduce preferential tax-relief arrangements to encourage investment in training, organisational and personal development.

Industry Level

- Review current occupational roles.
- Improve participation rates for non-technical training.
- Improve CVT rates for all occupations.
- Introduce formalised, explicit training programmes for all personnel and all levels of the Industry.
- Introduce Organisational Development initiatives where appropriate.
- Increase use of PC's for individual learning and training.
- Increase awareness of environmental issues and concerns.

Distributor Level

- Affiliate training personnel to overall organisation and not to a specific department, or function.
- Introduce formal pedagogical qualification requirement for trainers.
- Improve and formalise inter-distributor links and co-operation.
- Establish shared training facilities and programmes for distributors.

MODEL OF TRAINING AND DEVELOPMENT FOR THE IRISH MOTOR INDUSTRY

10.5 BACKGROUND

Having identified the key findings of the research as outlined in the previous section, three findings emerge that are regarded as crucial in arriving at the model proposed. These are:

- The absence of a nationally recognised plan in sales, management and non-technical training for the Industry
- The lack of regulation of the training activities of the Industry
- The lack of co-operation between the parties of the training system

The model that follows operates on the premise that these three issues are central to the problems that exist within the current training system, and that any improvement must begin by addressing these problems.

The explanation of the model is divided into the following sections:

- The Irish Motor Industry Training Council
- Future Training for Individual Occupational Roles
- Control Functions of the IMITC

10.6 THE IRISH MOTOR INDUSTRY TRAINING COUNCIL

Central to the proposal for the ideal system of training and development for the Irish Motor Industry is one theme; the necessity to establish a central agency to reorganise and control all training and development currently undertaken by the Industry. The establishment of such an agency would allow for the implementation of the many changes in the current system proposed by the author. A proposal for such an agency first came from SIMI and was described as the "Industry Training Council". For the purposes of this study, the central agency will be called: The Irish Motor Industry Training Council (IMITC).

If this agency were to be established it would serve to co-ordinate all the various strands of training provision that currently exist and to initiate new training

programmes for those members of the Industry whose training needs are currently neglected.

The IMITC is envisaged as having a full-time staff and adequate funding to carry out its role. While such an organisation is an ideal, the training model proposed must describe the ideal training system for the Irish Motor Industry, not a series of bland modifications to the current system that might be more readily accepted by the various interest groups involved.

The descriptions of the working of the IMITC represent a practical method of implementing the study's model for the future of training and development for the Industry.

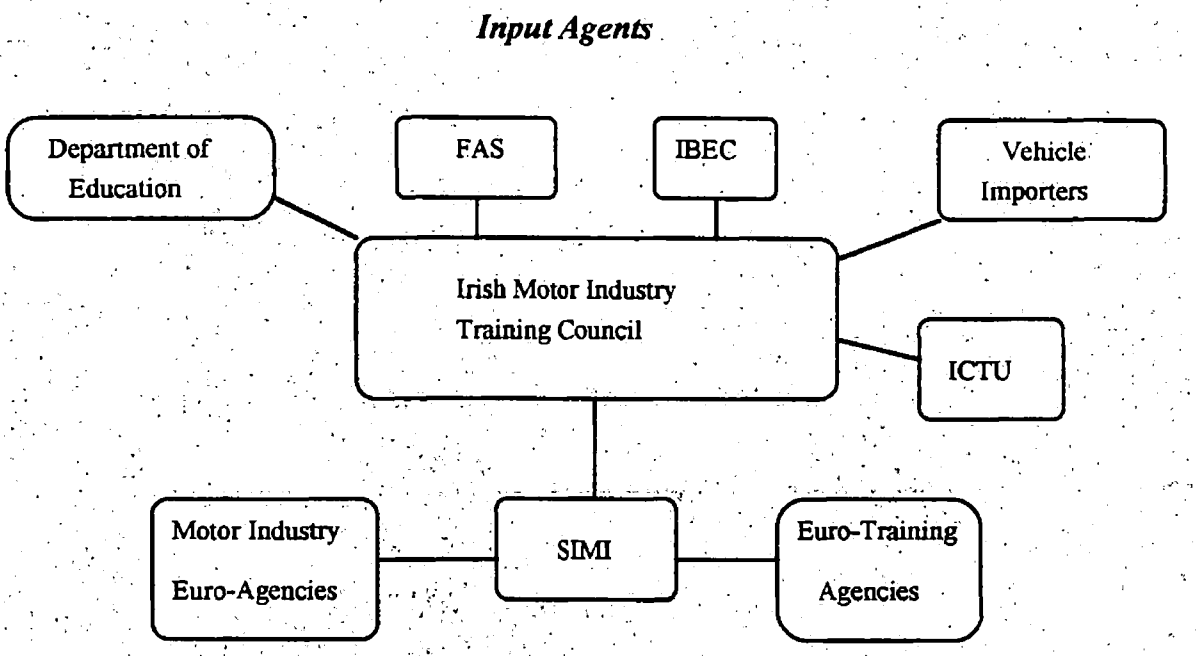
Constituent bodies of the Council

The Council itself should be comprised of representatives of the various interest groups currently involved in training. These groups are as follows: SIMI, Department of Education, FAS, IBEC, ICTU, motor distributors and a full-time secretary to the Council who would also serve as Chief Executive for the day to day running of the IMITC.

SIMI currently represents the Industry at European level both for training and Industry organisational purposes. It is envisaged that this arrangement would continue. The SIMI representatives would act as intermediaries with the various European Motor Industry Training Agencies and report at Council level.

Figure 9.1 shows a graphical representation of these groups.

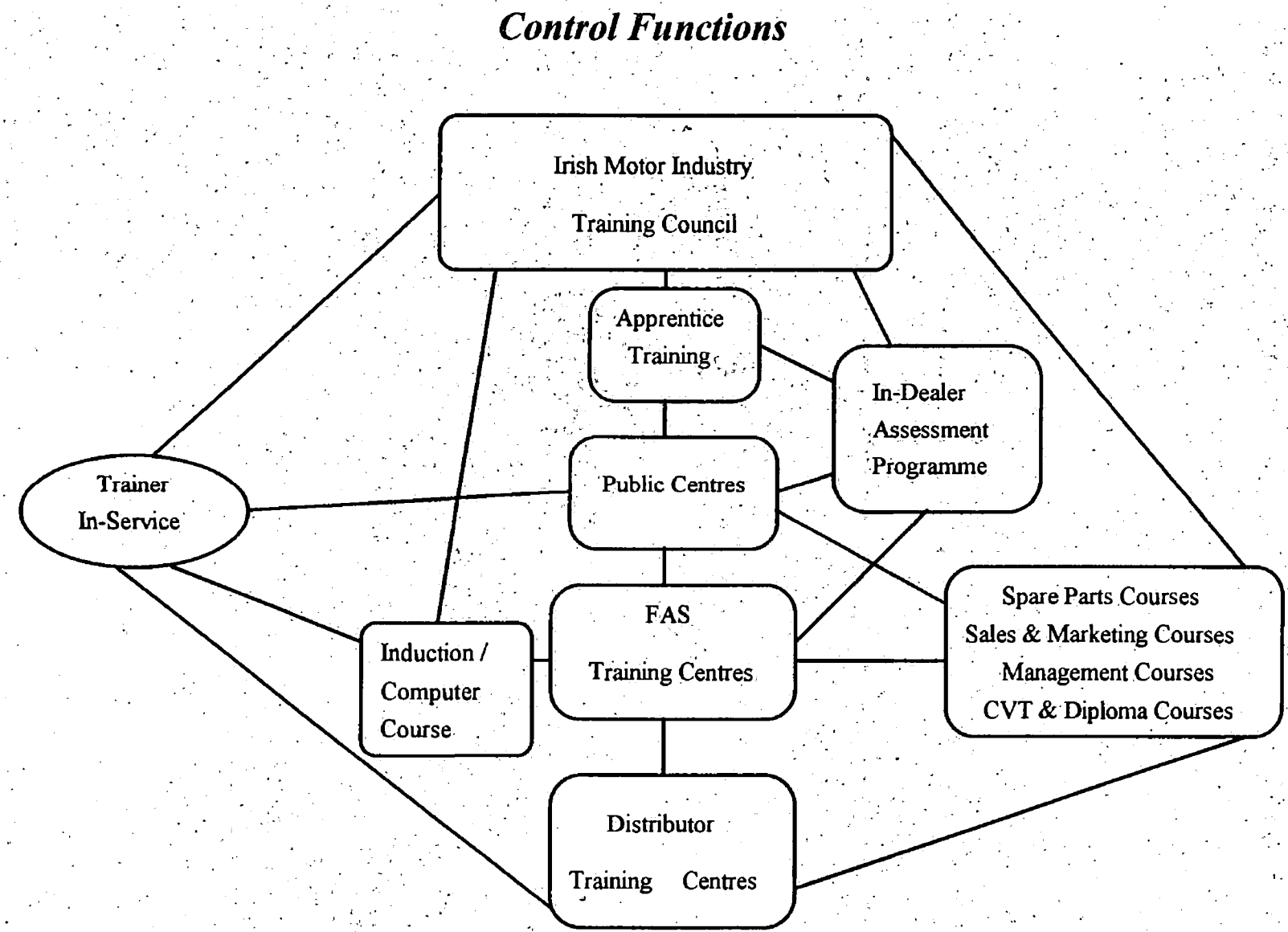
Figure 10.1: IMITC Council Model



It would also be desirable to set up a number of sub-committees to oversee particular functions. Such sub-committees could be used to avoid unnecessary discourse at Council level, thus allowing the Council to focus on policy issues. Envisaged are sub-committees in the following complex areas: Apprentice Education, In-Service for Trainers, Certification, Liaison with other National Organisations, and Course and Curriculum Design. It would be desirable to secund experts from the various constituent groups to work on such sub-committees

Figure 9.2 shows a graphical representation of the proposed functions of the IMITC.

Figure 10.2: IMITC Functions Model



Funding for the operation of the IMITC could be made available through grant aid from FAS and the Department of Education; with contributions from IBEC and the distributors. A case could also be made for an industry levy, similar to the Governmental employment levy, which could be directed into funding the IMITC. It would also be desirable for some of the Public Sector employees with relevant experience to be seconded to work for the IMITC.

10.7 FUTURE TRAINING FOR INDIVIDUAL OCCUPATIONAL ROLES

The following section outlines the training system envisaged for each of the following occupational roles in turn:

- Apprentices
- Spare Parts Personnel
- Motor Technicians
- Sales Persons
- Outlet Managers
- Administrative Personnel

Apprentice Training

Training Provision

As outlined previously there are some strains within the training system of the motor vehicle apprentice. FAS and the Department of Education will, in the near future, have to formalise arrangements regarding off-the-job training provision. The author would propose that in future FAS should continue to provide Phase 2 of the apprentices off-the-job training and other general training courses for the Industry. The author believes that FAS Training Centres are not equipped to implement higher level technical training and the possibility that apprentices could be trained at Phase 4 and 6 in FAS Centres should be discontinued as unworkable.

Examination System

The IMITC should oversee the apprentice system and act as extern examiner to the system, thus ending speculation and trepidation on the part of those trainers involved in the system. A function of the IMITC would be to provide training for those Industry employees that will be required to act as assessors for apprentices in their charge.

The changeover from the old system of apprenticeship to the new modular system seems to be going unnoticed in some sections of the Department of Education controlled institutions. No plan has been announced for the end of Trade Certificate Exams as yet and many apprentices are still studying for the attainment of same. The Department of Education would relinquish total control of the exam system in favour of a shared role of control with the IMITC.

Apprenticeship Changes

The role of Spare Parts Person would also come under the remit of the IMITC and would also follow a modular approach. The obligation to undertake off-the-job training at a College, or at a FAS Centre, should be removed and candidates allowed the option of undertaking distance learning for those that are geographically remote from the main cities. This would encourage more personnel to qualify formally in this role than is currently the case.

The establishment of the new role of technician would entail some change to the current system of training motor mechanics. In a manner similar to that within the German system, employers, managers or trainers could recommend that a worthy individual be upgraded for technician training. It is proposed that this recommendation should be made at Phase 5 or 6 of the basic training period, and that the candidate should then receive more intensive and higher level training than the apprentice motor mechanic.

Recruitment

Recruitment procedures have been identified by public sector trainers as unsuitable with employers often employing low achievers and those with no real aptitude for the trade. It is proposed that recruitment would be in consultation with the IMITC. Prospective recruits could apply to the IMITC and the prospective employer could be furnished with a list of suitable applicants which the employer could then add to if they wished and a short list compiled. The IMITC could then nominate a suitable person to assist the employer in their final choice. Nepotism should be discouraged.

In line with the position of M. Debargue, apprentices, particularly for the role of technician, could be recruited in co-operation with the distributor, thereby associating the perceived better image of the motor marque with the position being offered. This should help to improve the standard of individual being recruited.

FAS and the Department of Labour should co-operate with the IMITC to encourage employers to train more apprentices. This co-operation would help overcome the difficulties for the training and education centres presented by the cyclical nature of recruitment which the Industry naturally employs. It would also encourage the Industry to train more personnel. The qualified personnel could then be released from employment after their training period with a real qualification. Presently the Industry concentrates on training only those staff that it requires on a permanent basis.

Increased emphasis on training apprentices in the workplace will have the desirable effect of increasing other workers' awareness of the need for training. It may also encourage employers to improve training facilities within their premises as a training ethos prevails in such an organisation.

Educational Attainment Standards

Educational attainment as a pre-requisite for recruits to apprenticeship has been identified by the Public Sector Trainers (PST) as an area of concern to them. The minimum standard of education required should be higher than that currently required, but not excessively high as many academic low-achievers can successfully fill a role in the trades sector. The consensus from the PST Survey was that Grade C in at least 4 subjects in the Junior Certificate Exams, with one of these subjects to include Science, Technical Graphics or Engineering, would be appropriate.

For those candidates wishing to train for the role of technician, an alternative higher standard would apply. Leaving Certificate Grade C in 5 Ordinary level subjects, to include a Science or Technological subject, would be appropriate for such a candidate. Alternatively, a trainee pursuing the training programme of Motor Mechanic that showed a high level of ability should be afforded the opportunity to change to the Technician training programme, if they show an interest in pursuing such a change.

In the case of those not specifically qualified for employment in a given occupation, the IMITC will be able to review an individual's achievements and issue an exemption if they believe it to be appropriate; for instance in the case of mature applicants, or early school leavers.

Gender Balance

The IMITC should co-operate with employers and the Public Bodies to improve actively the current gender imbalance that exists in apprenticeships in the Industry. This gender imbalance is also experienced in the Netherlands but the Dutch authorities have implemented policies to improve the situation. As with most other employment problems, it will be necessary to provide some financial incentive package to overcome the initial inertia to change. The introduction of the role of technician may also provide an incentive as this role will depend less on the physique and more on the intellect than the traditional role of Motor Mechanic.

Distributor Apprentice Training

In line with practice in the UK and Germany the apprentices of franchised dealers should be trained in the distributor training centres as well as at the public centres. The practice in these countries is that the apprentice qualifies as a "Toyota" technician or "Mazda" technician and is thus perceived, in some way, as better qualified. It is proposed that the distributor training input would only supplement and not supplant public centre training. It would be desirable, but probably difficult, for all apprentices to undertake a short training module at several different distributor training centres in order to broaden their experience.

Spare Parts Personnel

Training Provision

As outlined above, the distance learning programme is one that should continue with the DIT liaising with the IMITC to provide the learning materials and the tutorial back-up required. It would be possible, but not necessarily desirable, to sever the link

established with the Institute of Road Transport Engineers (IRTE) if such a new arrangement existed. The IMITC would be in a position to offer accreditation for this and other distance learning courses.

Recruitment and Curriculum

The training arrangements for recruits to the role of Spare Parts Person should be formalised and a modular and standards-based curriculum introduced as a matter of urgency. This curriculum should be broadly similar to the Distance Learning Programme in content. Educational attainment at a similar level to that for the role of motor mechanic should be a pre-requisite for employment. Recruitment procedures should be similar to those outlined above for apprentices generally.

Staff Qualifications

A case should be made for the introduction of a higher level qualification qualifying the candidate to be competent in management for a Spare Parts operation. Registration of qualified persons would be undertaken by the IMITC and after a suitable transition period, non-registered personnel should not be employed in the Industry. While appearing somewhat draconian, such a development would improve standards of professionalism and customer care, objectives of all manufacturers and many outlets in the Industry. At regular periods during the course of their employment, parts staff would be obliged to attend at short duration refresher training courses. For franchised outlets such courses could be held at distributor training centres while non-franchised outlets could attend courses run at public centres.

Technician

Recognition of Role

The role of technician will have to be formalised without delay. The IMITC should assess the qualifications and work experience of those candidates wishing to be considered for such a role and award status accordingly. The agreement of the Industry will have to be sought and remuneration scales agreed as a matter of priority.

Training System

Training for the role of technician would take two paths:

High-ability apprentice motor mechanics should undertake extra tuition at Phase 6 of their apprenticeship. This tuition should consist of a solid educational grounding in Maths, French or German, English, Physics, Chemistry, Material Science, Instrumentation and Electronics. Laboratory work in all except Maths and the languages would be required. This will allow the apprentice mechanic to join the apprentice technicians with a minimum educational disadvantage.

The 7 phases normally required should be extended to at least 11 phases allowing for two extra off-the job phases. During this time the trainee would receive more in-depth training in the technical aspects of the motor vehicle. Public Centre equipment and facilities will have to be improved for such a development. Those apprentices that are employed at franchised outlets would spend some of their time at the distributor training centre during these additional off-the-job training phases. It is likely that the biggest number of technicians will be employed at franchised outlets in the future; employment opportunities at non-franchised outlets for this role will be limited.

Recruitment Methods and Attainment Standards

High academic achievers will be recruited on the basis of Leaving Certificate results and an interview, and will join the training programme for the ordinary role of motor mechanic. Such a group however, should start their training at a different time of the year to the apprentice mechanics in order to avoid placing two very different streams of ability within a single class grouping. The way that the curriculum is taught should reflect the higher ability of individual candidates with quicker progress possible and a greater depth of understanding likely. General subjects, such as those listed above for phase 6 of the high-ability motor mechanic, must be included from the beginning of the technicians' training in order to give the broadest possible education. Note that training is not sufficient for this role, education of the individual is paramount.

Both groups would join as one at phase 8 and continue on to undertake 11 phases of training in total. Phases 8 and 10 would be of 10 weeks duration and spent at one of the Public Centres; i.e. Vocational College, RTC or DIT.

Curriculum Design

In designing curricula for the role of technician, cognisance should be taken of the experience of other countries where emphasis is placed on the development of the individual; the encouragement of traits such as overarching-abilities must be included in curriculum objectives. In order to encourage such abilities non-conventional training methods should be employed and events such as team-building weekends and personal development seminars may be necessary. The employer too has an important role to play, both in terms of improving the social status of the employee and in providing improved training support for the individual. Encouraging technicians to join professional associations and encouraging their participation is one way of achieving this. Debargue suggested ways within the company organisation of improving the technicians status and these could be considered at Industry level.

Sales Persons

Training System

In setting out to improve the training of Sales Persons we must, first of all, state that no actual training scheme exists for this role. It is proposed that the IMITC should establish a training scheme similar to that of other apprenticeships, which would be modular in design. It may not be necessary that it consist of 7 phases, with 40 weeks of off-the-job training, as is the case with technical apprenticeships. It is suggested that a six phase system could be employed with three ten week off-the-job phases included. In common with the role of the Spare Parts Person, it should also be possible to undertake the study required during the off-the-job phases by a distance-learning method. This would accommodate those personnel that find it difficult to attend at a regional venue.

Personal Skills

While the attainment of considerable technical skill and financial acumen is necessary for the successful vehicle sales person, the focus of training should be towards the refinement of personal skills and abilities. The organisation of training must reflect this reality.

CVT Provision

CVT in the area of sales is very much on an ad-hoc footing; the FORCE report has suggested that very little training takes place in this area. Feedback from the distributors would reinforce this suggestion. Some distributors suggest that there is demand from sales persons for CVT but this demand is not satisfied by current CVT provision. The IMITC should provide frequent short duration seminars and courses at the public centres to meet this demand. The purpose of such CVT would be twofold: 1. To improve product knowledge and; 2. To improve personal abilities e.g. sales techniques, buyer psychology, marketing strategies etc. A modular design approach should be taken to such courses in order that they follow the modular approach now being taken by the apprentice training system. Distributor sales training should reflect this public sector approach and should be undertaken in conjunction with the IMITC in order to regulate standards.

A registration system for sales persons should also be initiated, in line with that proposed for the other occupations discussed previously.

Outlet Management

Individual Qualification

Unlike some other countries, most notably New Zealand, no formal qualification is required before a person can operate an outlet. No regulatory body exists with the purpose of overseeing the establishment of outlets. It is proposed that registration with the IMITC would be a pre-requisite for outlet management or operation. The Council

could determine the suitability of an individual given previous experience and qualifications for inclusion on such a register.

Training Provision

Current training provision in the area of management has been identified by the FORCE Report as an area that is poorly catered for and is essentially confined to the Motor Industry Management Diploma offered by DIT Bolton St. While there is no doubting the integrity of this award, it has limitations. The intake for this Diploma consists mainly of school-leavers that seek to pursue a career in the Motor Industry. The reality, in the Irish Motor Industry, is that the majority of managers have no management qualifications and have risen through the ranks of the Industry. The graduates of the Diploma course are obviously inexperienced, usually young and are really ill-prepared for immediate management status. This leaves a void.

Aspiring managers of the Industry should have the facility to study for a management qualification, again employing a modular approach to study and leading to a Diploma, such as that already offered. This should be attainable after a one year full-time study period for those with relevant experience and a certain proven ability. The modular approach lends itself to the possibility for establishing a distance-learning programme.

Recruitment Procedures

A degree level programme should also be offered at some third level institution such as DIT, with the co-operation of the IMITC, to encourage the recruitment of a higher calibre of individual to the Industry. Larger outlets and distributors may benefit from such a level of education and it may help to ensure the future development of the Industry. The proliferation of qualified accountants at the upper levels of the Industry could be taken to suggest that there is a lack of suitably qualified personnel to manage the various functions of the Industry. Suitably qualified candidates should be afforded the opportunity, and encouraged, to undertake the degree programme with due credit being given for relevant qualifications and experience. This approach might help to increase the academic qualifications of the Industry as a whole and improve the training ethos of the non-technical aspect of the Industry.

Administrative Personnel

Training Provision

Even though this group is badly catered for by the current system, training provision designed specifically for this group is not an urgent necessity. In the AnCO Report on the Retail Motor Trade of 1983 computer training was suggested as a necessity for this group. While computer companies generally provide purchasers with some introductory training, this type of training is only efficient for those staff that are employed at the time of purchase of a new computer; staff employed subsequently receive no formal training. It is proposed to introduce a new induction course for administrative staff joining the Motor Industry, or transferring from another branch of the industry. This Induction course could be hosted by FAS at their training centres and would focus on computer and keyboard skills, communication skills, interpersonal skills and similar topics. Such a course should be of one or two weeks duration. A similar Induction course could be provided for all new recruits to the Industry including apprentices.

Such an Induction programme could be followed up at intervals with more advanced training in similar topics, serving to improve computer skills and interpersonal skills across the entire Industry. It is suggested that all Industry staff be involved in such a programme; Public Centre and distributor staff included.

10.8 CONTROL FUNCTIONS OF THE IMITC

The day to day control functions of the IMITC would encompass a number of important areas:

- Public Centres
- Distributor Training
- In-Service Training
- Accreditation of Awards
- Trainer Qualifications
- In-Dealer Assessment of Apprentices

The following section deals with the IMITC's role in these areas.

Public Centres

The establishment of an Industry training council would have far reaching consequences for the Public Centres if, as proposed, the control of apprentice training and CVT is taken from the current training providers and vested in the IMITC. Over the past number of years apprentice numbers have fallen in many areas of the country and as a result the Motor Departments of the various colleges have found their staff being seconded to fill other teaching roles. The introduction of the IMITC would necessitate the establishment of autonomous Motor Industry Training Divisions within the colleges. Having such an autonomous unit would allow the college to react to the demands of Industry without having to seek the prior approval of the college authorities for every development.

Although FAS training Centres still retain separate Motor Sections the new system would require more autonomy for the Instructors and require more liaison on their part with the new IMITC. Again, this would lead to training being Industry-driven. The establishment of an Induction course for all recruits to the Industry would also present challenges for the Instructors as it is they who should co-ordinate this Induction course, not the general skills instructors.

Considerable co-operation between the different groups will be required at Council level and this co-operation will have to extend down to the level of the classroom. The provision of distance-learning options for the different occupations as described previously will entail the establishment of a learner support system at the education centres. It would be advantageous if the learner could avail of the support of the nearest education centre to them. This would mean in some locations that a FAS Centre would be expected to provide learner support; while in other locations a College would be expected to provide learner support. In these cases expertise in areas other than mechanical will have to be forthcoming. This will no doubt provide a challenge that the Public Centres can rise to meet.

Ultimately, the establishment of the IMITC and the various recommendations improvements outlined will lead to an increased level of training activity in the Industry

generally. The experience in Germany would suggest that increased training activity leads to further training demand, leading to further activity, growing exponentially. If this is the case then the Public Centres are likely to need to provide extra CVT programmes for all of the occupational areas. Such programmes would be carried out using a modular approach and accredited by the IMITC.

Distributor Training

Co-Operative Arrangements

As discussed previously all of the major Irish distributors employ full-time training instructors. Each of these instructors works only for one employer. The suggestion that the distributors should co-operate with the IMITC will lead to a certain amount of agreement by those concerned. The proposed increased level of co-operation will meet with resistance from the more commercially-minded organisations.

Training Staff Affiliations

It is proposed that training instructors employed by the distributors should no longer be affiliated solely to the Service Department, as is normally the case, but to the distributor organisation and also directly to the IMITC. If the Instructor is affiliated in this way then a sharing of resources and facilities among competitors and the Industry generally is possible. Rather than being an all-round expert the Instructor could draw on the expertise of others to provide training in areas of personal doubt.

This would also allow for the pooling of resources in providing training in the common areas of personal skills. Such a pooling of resources would enable the distributor instructor direct access to regional public centres to present training and reduce the amount of travelling for dealer staff.

In-Dealer Assessment

The introduction of assessment for apprentices by workshop staff presents a challenge to the Industry. It marks the beginning of an increased level of formal training activity in the workplace. Franchised outlets will look to the distributor for assistance in

implementing this new departure. The reality is that the distributor instructors have not been involved in such a programme before and will need some assistance themselves. Interestingly no discussion has taken place among instructors on the implications of this development.

Benefits of Increased Co-Operation

The involvement of distributor instructors with the IMITC would improve levels of communication; coupled with the independence gained by the training instructors being freed from departmental constraints, a proactive training approach could be implemented. The instructors would be in the position of being able to provide the dealer organisations with the best of public training and the necessary specialist training for a franchise holder; the outlet would be encouraged to develop their own training programmes.

The duplication of training programmes that results from each distributor providing their own training courses could be avoided and more progressive training programmes initiated.

All courses undertaken by the distributor would be under the remit of the IMITC and could be considered for accreditation. This would include technical, managerial, sales and administrative courses; at CVT and apprentice levels.

In-Service Provision

In-Service training for the public sector has been identified as insufficient by the NESC, FORCE and AnCo Reports; it has also been highlighted as a problem by the Public Sector Trainers survey. In that survey the author proposed the establishment of an agency to co-ordinate in-service demand with places available on manufacturers courses. The vast majority of respondents welcomed the idea and believed that it would probably reduce the barriers that prevent them form attending such courses. In the proposed model the IMITC would serve this purpose and match demand with supply. It would also ensure the regular attendance by all public sector trainers at in-

service training and pay expenses to those that incurred them in the course of their attendance.

Class cover in the colleges was identified by the respondents as a major barrier to attending in-service courses. While the colleges should be obliged to provide cover for teachers attending in-service, they are constrained by budget restrictions. Holidays in this sector are excessively long and the working week is reasonably short; it is therefore proposed that the IMITC would organise in-service courses during June and at the time of the Easter vacation in order to facilitate this group. FAS instructors should be facilitated by their organisation with class cover and not have to attend during their free time.

The IMITC would also undertake to host seminars that would encourage the exchange of information and ideas between distributor trainers and public sector trainers.

Accreditation

Modular Curricula

One theme has run through all of the proposed improvements and refinements to the training system; Modular Curricula. The reason that the author favours this approach is simple; ease of accreditation. Debargue and Stoy both impressed the reader on one theme for improving the status of the technician; career opportunity. There has to be a path open for career progression by the individual.

In line with the NVQ system of the UK, it is proposed that every course undertaken consist of a number of units of learning. Attainment of a number of credits entitles the learner to an award. These awards could, perhaps, be structured in a similar manner to the hierarchy of occupations defined by the EC, beginning at Level 1 and rising to Level 4. Level 4 would be approximately equivalent to a primary degree. The new role of technician would be at level 3 or perhaps, level 4.

In this way the learner is encouraged to attain the maximum number of units of learning possible and the IMITC can certify the learner accordingly. The Industry

would have to encourage such attainment by rewarding those that are successful with suitable status and remuneration adjustments.

If all training and learning is undertaken in a modular manner then all training will increase the worth of the trainee within the system.

Accreditation of Prior Learning

One of the most worthwhile features of the NVQ system is the possibility for "Accreditation of Prior Learning". This allows experienced personnel to gain training credits for learning that was carried out prior to their inclusion in the NVQ system. In the Irish situation the IMITC should have the same power to award retrospectively credit for training or learning carried out at some time in the past. The applicants can then be encouraged to build on their experience and complete the extra training necessary to obtain the desired qualification.

Trainer Qualifications

It is proposed that new educational attainment requirements be introduced for trainers in the public and private sectors. These new standards would be necessary as a result of the increased quantity and diversity that would follow from the establishment of the IMITC. The required standard should be revised upward from the possession of the Junior and Senior Trade Examinations to the possession of a primary degree, or equivalent, in a related discipline. A teaching qualification would also be required, although this could be completed after the appointment is made. If, as proposed and is current practice, FAS only train first year apprentices and provide the proposed induction course then there will be no need to increase the current minimum educational attainment requirement for FAS Instructors.

For distributor trainers the possession of a degree level of education is probably more important, given the cognitive level of the training carried out. It would be inappropriate that the personnel being trained were better qualified than the trainer.

Given the increasing level of educational attainment in the Industry, this is becoming increasingly more likely.

Direct contact with the proposed IMITC would necessitate such a development in any case.

In-Dealer Assessment

The IMITC would undertake a central role in the provision of the assessment portion of the new modular curriculum. The IMITC would train current employees for their role as assessors and provide an extern function for the outlets concerned. This role as Industry assessor could be broadened with time to include the overseeing of the assessment procedures of the entire apprentice training scheme. The current stock of trainers could be employed for this purpose in a similar manner to that currently employed for the Department of Education Exams. Industry employees should also be involved however, to ensure balance and the application of an Industry-focus to the overall programme.

CONCLUSION

While the maximum benefit for the training system of the Irish Motor Industry is to be gained by implementing all the improvements suggested as part of the model outlined, certain benefits can be gained by implementing various parts of the model. The improvements suggested are in various 'blocks' or 'units'. Improvements can be made by using single blocks of change and then reviewing the consequences of those changes. This philosophy is in keeping with the 'building block' approach to strategic planning as outlined in the review of literature. The intention is that this makes the model more practical and, therefore, more useful to the Industry.

In proposing a method for implementing change the IMITC is proposed as the vessel for that change. In the case of every proposal it is possible for the Industry to adopt the improvements suggested without the IMITC, or its equivalent, ever becoming a reality. It will, however, take the efforts of some central agency to co-ordinate the training system; such an agency urgently needs to be established.

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APPENDIX A: QUESTIONNAIRES

TECHNICAL TRAINING SURVEY

At some time during the past year you attended a training course in order to better understand Fuel Injection Systems.

Please check the box (✓), opposite the statement made, that best describes your feelings toward that training course now:

	strongly agree 5	agree 4	uncertain 3	disagree 2	strongly disagree 1
The course was enjoyable					
The course was not really very useful for everyday problems on the car					
It's good to meet other mechanics and to discuss the problems that they encounter.					
It's pointless having these courses					
Mechanics need much more training					
Too much time is spent on theory					
The problem with these courses is that there are no practical problems to work on.					
The trainer is good and knows how to put the information across					
These courses are only good if you have the right equipment and our garage won't buy it					
More basic courses might help us as some of the courses are too advanced.					
I would like to see more courses, like this one, run at night time, nearer to my home, so that I could keep up to date.					
The money spent on this type of training is well spent.					

Please feel free to make comment on any aspect of the training that you received:

PUBLIC SECTOR TRAINERS SURVEY QUESTIONNAIRE

No._____

It would be of considerable benefit to my work if you could answer the following questions as honestly as possible. Any information given will be treated in the utmost confidence and will only be reproduced in the form of numerical data, or anonymous quotations, with no reference to specific sources. The information will be used only as part of a study of training in the Motor Industry in general.

Please specify the nature of your employment.

FAS ☐ RTC ☐ DIT ☐

VEC ☐ Other ☐

Please state the county in which you work: ☐

Section 1

Scale of Education Training in the Irish Motor Industry

Q.1 Please estimate the number of trainees / apprentices which your department will train, or educate, for employment within the Motor Industry in the current academic year:

10 - 50 ☐ 50 - 100 ☐ 100 - 150 ☐ greater than 150 (please specify)_____

Q.2 Please advise the number, listed by category, of these trainees:

Apprentice Motor Vehicle Mechanic ☐

Qualified Motor Vehicle Mechanic ☐

Apprentice Agricultural Vehicle Mechanic ☐

Qualified Agricultural Vehicle Mechanic ☐

Apprentice Heavy Goods Vehicle Mechanic ☐

Qualified Heavy Goods Vehicle Mechanic ☐

Apprentice Panel Beater or Painter ☐

Qualified Panel Beater or Painter ☐

Auto Electrician / Appren. Auto Electrician ☐

Other (Please Specify) _____ ☐

_____

Q.3 Please estimate the average cost of training per capita during the academic year for those trainees / apprentices designated as being part of the Motor Industry using the following broad categories:

Salaries: £_____

Trainee Remuneration / Expenses £_____

Capital Expenditure Budget: £_____

Non-Capital Expenditure Budget: £_____

Section 2

Evaluation of educational attainment of trainees / apprentices in the Motor Industry

The stated requirement of minimum education standard for FAS and Department of Education recognised apprentices is three "D" grades in the Day Vocational (Group) Certificate or three "D" grades in the ordinary level Junior Certificate.

Q1. In your experience / opinion have all apprentices achieved this standard?

Yes ☐ No* ☐

* If you answered no please estimate the percentage of apprentices that do not, in your opinion, meet the statutory minimum standard of educational attainment : _____ %

What is your view on this situation?

_____

_____

Q.2. Is this minimum standard of education adequate for the Motor Industry of the future?

Yes ☐ No* ☐

Q.3. * If the answer is "No" to 2 above then please suggest an alternative appropriate minimum educational standard for entrants to the apprenticeships of the Motor Industry:

Q.4 Do Garage Owners and Dealer Principles have any influence on the standard of personnel that are recruited ?

yes ☐ no ☐

Please feel free to comment on this situation:

Curriculum

Q.1. Are you satisfied with the curriculum that you currently use in your training programmes?

Yes ☐ No * ☐

* If No, with which aspect of the curriculum are you dissatisfied and please suggest some improvements that you would like to make in the curriculum :

Q.2 The pilot scheme, currently being operated in the Waterford area, for the Modular approach to Motor Apprentice education has met with mixed reaction from interested parties. A number of draft curriculum documents have been circulated. If you have any views on this new approach to apprentice education please express them under the headings suggested:

Type and Duration of Off the Job Training :

Standards Based Approach:

Assessment Methods:

Curriculum:

Selection of Apprentices:

Other:

Curriculum Design

Q.1 Is there any formal structure to involve Instructors / Lecturers in curriculum design in your college or centre?

Yes ☐ No ☐

Outline your comments on improving this situation:

Q.2 Does the current curriculum allow for any Instructor / Lecturer autonomy in its content ?

Yes ☐ No ☐

How would you change this situation given the opportunity?

Q.3 Does your Department /Faculty liaise with any external agency * regarding curriculum content and assessment?

Yes** ☐ No ☐

(* Please discount your own organisation / funding body in this matter)

** If Yes, please list the agency('s) and briefly describe the liaison procedures:

Section 3

Non-Technical Training in the Motor Industry

The following questions relate to training provided for the Motor Industry that is non-technical in nature such as Management, Computer Skills, Accountancy, Language, Interpersonal Skills, Sales and Marketing Studies.

Q.1. Does your institution provide courses, such as those listed above, with a focus on the Motor Industry? Yes* ☐ No ☐

*If yes please set out the type of training provided vs target group by ticking the relevant box in the matrix below:

Target Group	Management Studies	Computer Skills	Accountancy	Languages	Interpersonal Skills	Sales and Marketing Studies
Management Personnel						
Office Personnel						
Sales Personnel						
Parts Personnel						
Technical and Crafts Personnel						
Operatives and Ancillary Personnel						

Q.2 In your experience is there a demand for such courses from the local Motor Industry? (This can be a demand that is satisfied or one that is not satisfied by courses)

Expand:

_____

_____

Section 4

Resources and Policy

Q.1 In your view does your department / faculty receive adequate funding to implement its training / education programmes at an optimum level?

Capital Funding Yes ☐ No * ☐

Non-Capital Funding Yes ☐ No * ☐

* If no please estimate the percentage increase in funding (based on current levels) that would be necessary to redress the situation:

_____% Capital Funding
_____% Non-Capital Funding

* What, in your view, should such an increase be spent on?

_____

_____

_____

Q.2 Is your organisation's (e.g. FAS , Dept. of Educ. etc.) In-Service training programme adequate for your requirements as a professional facing technological change on a continuous basis?

Yes ☐ No * ☐

* If No, please outline the changes you would deem necessary to bring In-Service training to an adequate level:

1. _____

2. _____

3. _____

4. _____

5. _____

Q.3 Please list the practical barriers, if any, that arise in terms of attending In-service Training Courses:

1. _____

2. _____

3. _____

It is a stated aim of the SIMI that they would welcome funding toward providing a liaison service between the Education / Training Sector and the Motor Industry. Such a service would strive to improve the dissemination of technical knowledge from the manufacturers. Such a service would help meet the demand from the Education / Training Sector for up-dating, with places available on manufacturers courses as well as disseminating other information available.

Q.4 Given the opportunity, would you use the services of an agency set up to co-ordinate offers of places to educational personnel on manufacturers training courses, if such an agency existed?

Yes ☐ No ☐

Q.5 Would the existence of such an agency be likely to help reduce the barriers as mentioned above?

Yes ☐ No ☐

Q.6. Would you actively support a lobby to have such an agency established?

Yes ☐ No ☐

Section 5

Division of Labour in the Industry

Q.1 Are there skill shortages in the industry at present?

Yes ☐ No * ☐

* If yes please specify _____

_____

Q.2 In your opinion what skills will be required of the Motor Industry personnel of the future ?

Apprentices: _____

_____

Technical Personnel: _____

_____

Sales Personnel: _____

_____

Parts Personnel: _____

_____

Management and Administration Personnel: _____

_____

Q.3 What changes in the training / education system will be required if we are to meet the personnel requirements of the Motor Industry of the future?

Apprentices: _____

_____

Technical Personnel: _____

_____

Sales Personnel: _____

_____

Parts Personnel: _____

_____

Management and Administration Personnel: _____

_____

Any other comments:

Thank you for your help.

Please send this completed document in the SAE provided today, that way you wont forget to do so in the future!

If I can be of any help to you in the future please dont hesistate to call me.

DISTRIBUTOR QUESTIONNAIRE

1. *How many "Man Training Days"* did your company provide during 1993?*
2. *Of these MTD's, how many were spent in Technical Training and how many were spent in Non-Technical Training?*
3. *What was the approximate net cost to your company of providing training?*
4. *How many personnel in your company are solely dedicated to training? Could you supply some detail regarding these personnel perhaps?*
5. *Are your training personnel affiliated to a particular department? Why is this the case? Do you foresee any change in this situation? What might such changes consist of?*
6. *Does your company receive assistance from any external agency in providing training courses?*
7. *What are your views on this general area of State support for training?*
8. *How is your company policy on training determined?*
9. *How is the type of training currently provided likely to change? (Given: Technological Change, Increasing Consumer Awareness, Increasing Litigation Tendencies and other factors that greatly affect the Motor Industry).*
10. *What changes have your company planned for the future in the area of training?*

** "Man Training Day" might be defined as a day (or large portion of a day) spent by a person, in a training environment, with the specific intention of upgrading their skills in a particular work related activity.*[A12]

APPENDIX B: SURVEY DATA

PUBLIC SECTOR SURVEY RESULTS

Please specify the nature of your employment.

FAS [9] RTC [9] DIT [2] VEC [2]

SECTION 1

Scale of Education Training in the Irish Motor Industry

Q.1 Please estimate the number of trainees / apprentices which your department will train, or educate, for employment within the Motor Industry in the current academic year:

Estimates totalling approx. 2,200 incl. post-apprenticeship candidates

FAS figures show that 1,918 apprentices were registered as of end of 1993.

Survey coverage totals some 1500 of these apprentices- Note that not all registered apprentices actually attend college at any given time due to block and day release systems.

Q2. Capital Expenditure Budget:

The figures returned show a huge variance and are unreliable.

Q.3 Please estimate the average ***cost of training per capita*** during the academic year for those trainees / apprentices designated as being part of the Motor Industry using the following broad categories:

Salaries: Figures are unreliable

Trainee Remuneration/Expenses: Figures are unreliable

Capital Expenditure Budget: Figures are unreliable

Non-Capital Expenditure Budget: Figures are unreliable

FAS employs some 28 instructors affiliated to Motor Trades; this would include Panel Beating, Agricultural Vehicle and Heavy Goods Vehicle Instructors. The majority are Motor Vehicle Mechanic Instructors, however. FAS suggests that £7,200 was spent in providing training for these 28 instructors during 1993. This amounts to an average of £257.14 per instructor. Such a figure includes travelling allowances, tuition fees, subsistence allowances and so on. It is unlikely that this figure would cover much more than one day's training expenses per instructor given the geographical locations of the training centres and the fact that virtually all training courses are hosted in Dublin.

SECTION 2

Evaluation of educational attainment of trainees / apprentices in the Motor Industry

The stated requirement of minimum education standard for FAS and Department of Education recognised apprentices is three "D" grades in the Day Vocational (Group) Certificate or three "D" grades in the ordinary level Junior Certificate.

Q1. In your experience / opinion have all apprentices achieved this standard?

Yes FAS 6 Rest 7 No FAS 3 Others 8

* If you answered no please estimate the percentage of apprentices that do not, in your opinion, meet the statutory minimum standard of educational attainment _____ %

RTC 10% FAS 30% RTC 50% FAS 60% RTC 10% RTC 8%
RTC 7% RTC 25 % RTC 25%

What is your view on this situation?

FAS This level is too low, should be higher.
FAS Depending on motivational levels will not be a problem with practical applications.
FAS Garages do favours for customers/clients by sending sons or relations to FAS for training. These app's go through no screening or aptitude test for suitability.
FAS Should not be permitted.
FAS Good standard app's not possible due to poor pay and conditions in the motor industry.
RTC Cause of probs for App., Employer and RTC. App becomes frustrated as cannot reach standard.
RTC Apprentices are becoming better educated each year LC now common
RTC Would like entrance test to assess weak areas and intervene
RTC Grades mentioned may have been attained but this may not be reflected in their interpretative abilities and abilities to write simple descriptive articles.
RTC Motor Engineering is becoming more complex and that calibre of student can't cope.
RTC Disgraceful everyone suffers - Employer, Employee and Educational Establishment.
RTC Bad for garages later on. We seem to be going for lower skill and no education.
RTC One man operators don't seem interested in academic qual's.
RTC Standard appears to be disimproving over the years
RTC 1½ % can't read or write
RTC About 30% have LC

Q.2. Is this minimum standard of education adequate for the Motor Industry of the future?

Yes	FAS 2.	Rest 3	Total = 5
No	FAS 5	Rest 10	Total = 15

Q.3. * If the answer is "No" to 2 above then please suggest an alternative appropriate minimum educational standard for entrants to the apprenticeships of the Motor Industry:

FAS x2 5 grade D's FAS 5 grade C's
FAS Suggests that standard of maths taught in RTC is too high.
FAS At discretion of industry.
FAS LC Maths/Physics to aid diagnostics.
RTC Grade C's with Science subject. RTC LC standard.
RTC 3 D's LC Students who drop out prior to LC usually not interested in advancement.
RTC At least grade C in relevant subjects at Junior Cert.
RTC Science, Engineering or Maths at least C and one of these compulsory
RTC C in English, Maths, Physics and Euro language. Also, qualification in Engineering Technology would be desirable.
RTC Junior Cert instead
RTC A or B in Junior Cert, or C and D in pass Leaving Cert. Also Aptitude and Ability test.
RTC C in specified technical subjects or B in others
RTC Pass Leaving Cert. in at least 5 subj's with good interest in motor industry

Q.4 Do Garage Owners and Dealer Principles have any influence on the standard of personnel that are recruited ?

Yes	FAS 9	Rest 12	Total = 21
No	FAS 0	Rest 2	Total = 2

Comments:

FAS Employers do not pay enough attention to ability of Apprentice to do calculations.
FAS New system means that employer recruits.
FAS Recruitment should be based on ability.
FAS They are the employers they hire and fire.
FAS But most employers do not see it as their job to get involved in the recruitment stage.
FAS 80% of app's are sponsored by employers. some app's sent by employers are a long way off being the best available. The new system will increase that number to 100% sponsored.
RTC If it's somebody they know any standard can apply, normally very low.

RTC Owners have great numbers (of potential candidates) to pick and choose from.

RTC Important that employers know exactly who and what they are getting.

RTC Recruitment often equates with nepotism. Tendency now for larger concerns to encourage a family member to undertake business studies or similar and then to return to manage the family business.

RTC Garage owners tend to employ their sons or good customers' sons irrespective of their education.

RTC Close relatives any standard or no standard can apply

RTC Overall the standard of app's is very good LC standard but a small percent is well below standard.

RTC Garage owners seem to be pressurised into recruiting relations or good customers' children

RTC Employers should examine educ.standards and quals. Employers' selection abilities leave a lot to be desired, or is it that they pay very little?

RTC DoEd decides the standard however I feel that garage owners and dealers could influence the skills required by staff

RTC Garage owners assess aptitude and ability very quickly which is a good thing. also should insist on a high standard of second level education.

RTC Employers don't care what he should have educationally

RTC Decisions to employ personnel are not always based on person's ability

CURRICULUM

Q.1 Are you satisfied with the curriculum that you currently use in your training programmes?

Yes	FAS 4	Rest 8	Total = 12
No	FAS 4	Rest 7	Total = 11

RTC More money req'd to update equip and modern demonstrator units and to keep abreast of latest technology.

* If No, with which aspect of the curriculum are you dissatisfied and please suggest some improvements that you would like to make in the curriculum :

FAS Is satisfied with new system.

FAS Short time for each module, assessment of each module allows no time for re-assess. Extend course to 6 mths min removing some of hi-tech and allowing more time for basics

FAS Curr doesn't reflect present technology i.e. dynamo and reqt that practice cars have points

FAS Curriculum under review by Nat. Appr. Advisory Comm.

RTC Curr. now used very broad but standard of appr. and lack of capital doesn't allow its full use. Main drawback is level of apprentice.

RTC Maths and Science for all who do not have an adequate standard. More emphasis on electrics/onics and incl of A/T overhaul and Power Steering.

RTC Needs to be updated every year. i.e. Turbo, Engine Management Systems, ABS etc.

RTC Amount of Auto Elec is not enough. Also introduction of continuous assessment.

RTC Curriculum is not big problem, experienced teachers/lecturers will modify course content to keep in line with changes in vehicle technology.

RTC New syllabus looks better.

Q.2 The pilot scheme, currently being operated in the Waterford area, for the Modular approach to Motor Apprentice education has met with mixed reaction from interested parties. A number of draft curriculum documents have been circulated. If you have any views on this new approach to apprentice education please express them under the headings suggested:

No Comment: 1 and RTC Involved at Dept. level

No views: RTC,RTC, FAS

Type and Duration of Off the Job Training :

FAS Well thought out, well presented, and should be given every opportunity to succeed.

FAS Short time for each module, assessment of each module allows no time for re-assess. Extend course to 6 months minimum, removing some of hi-tech and allowing more time for basics

RTC Time adequate. Needs large capital investment.

RTC Garage owners favour day release

RTC One day per week for four years plus one night per week for special subjects

RTC Pilot scheme should be allowed run its full 4 year term. Idea of block only will probably change. Day release may still be possible as FAS are still registering D/R app's in ***

RTC Duration adequate. Type of training a little ambitious requiring a huge capital investment in the education centres and an intensive updating for staff.

RTC Too narrow in its approach will result in stalemate in regard to further development of apprentice education.

RTC Too short,

RTC OK

FAS 20 wks in "1st" year, should be ok. Two x 10 weeks in "2nd" and "3" years seems a bit short

FAS 20 weeks ok but rapid. I don't know until I get involved in it.

RTC New system too complex with 7 modules some at train centre and some at college. who will monitor apprentice through the 7 modules?

RTC End of day release is a problem but duration is not a problem

RTC Training/education should be 50/50. Training/education period is about 30% too short considering level of sophistication of new technologies

Standards Based Approach:

FAS Ensures every appr has to achieve a certain standard before proceeding to next

FAS Keep to basics.

RTC Good to see SBA. Fear of less maths, science and technical drawing. Worry is that this may reduce apprentices' options for further advancement.

FAS More accurately described as "Time served/Standard based" - 4yrs min (?)

RTC Not in favour of this system

RTC Proper approach. Dept. of Environment now insisting on sen and jun trade certs before issuing DOE test certs.

RTC The pilot scheme because of its shorter duration and downgrading of maths, science, metalwork and drawing will produce a narrower type with less options for career advancement.

RTC "You can train a monkey to push keys. Standard based - no longer contemplated."

RTC Good if operated correctly.

FAS Seems good

RTC Useless without a proper exam structure. There must be be a minimum length of time served.

RTC This "sounds" good but cannot see appr's passing junior and senior stage exams with good practical experience in less than 3 yrs.

RTC Balance of teaching time vs Assessment is wrong. Too much emphasis on assessment.

RTC Good idea provided that certification is determined by independent exam system.

Assessment Methods:

FAS Each specific area assessed using practical and written tests on all phases, difficulties in assessment for On-The-Job phases

RTC Do not agree with methods proposed as no independent check: Propose final exam & ass't

RTC Retain Junior and Senior Exams

RTC Should be an extern body

RTC Much will depend on criteria developed in the education centres evolving from the new programme and also in the garages for phases 3, 5 and 7.

RTC Wide open to all kinds of interpretation around the country.

RTC No info as yet.

RTC Very unclear as to how it will be implemented

FAS Satisfactory but demanding on Instructor, especially with repeats.

RTC Continuous assessment is good if carried out conscientiously.

RTC Assessment takes up too much teaching time

RTC This method is subjective, requires very specific guidelines together with independent assessment of the assessors on on-going basis.

Curriculum:

FAS Written & presented by best experts of the trade and should produce results.

FAS Not the most suitable.

RTC Not as broad as before. Won't allow people to develop to technician level.

RTC As exists, but with updating. Modification of workshop practice exam requirement.

RTC Not unlike present.

RTC Narrower than present won't produce any technicians'

RTC Requires expansion not contraction - too narrow.

RTC Good.

RTC Good if it can be implemented in the time allowed.

FAS Satisfactory

RTC To make progress with any class group they must have good stand of secondary education

RTC Generally good.

RTC Good but method of delivery is too loose and therefore at the discretion of the Instructor/lecturer; better guidelines req'd.

Selection of Apprentices:

FAS To be carried out by employer possibly with external agencies

FAS Instructor choice; or somebody who realises importance of selecting correct persons.

RTC Should be left to employers but where no sponsorship can be found RTC should be allowed to train them by introducing a special programme.

RTC Needs to be tightened up.

RTC Only appr's interested in auto trade and with correct standard should be selected.

RTC No problem here if operated correctly.

FAS If appr's are selected on merit and not as a favour to "parents" it would improve.

RTC As for employers mentioned before

RTC Good idea and should be better than before but needs a minimum standard.

RTC Correctly lies with the employer but may lead to an uneven number of app's being recruited each year, resulting in great difficulties in FAS and RTC's

Other

RTC Problems will arise in phases 4 and 6 if standards are not in phase 2.

RTC General Comments: Pilot is simply a method of introducing a new system gradually. Interested parties will not be given copy of any reports on matter. Selected sections of appropriate topics will be used to make a case for retention of new system. Fairer recruitment structure needed. A study of, test in and certification for, the basics and a reasonable range of specialist aspects of the trade, facilities to study and practice in modern systems with appropriate tests and recognised qual's for these additions to their trade.

FAS This is a pilot prog and is under constant review

RTC Phases 4 and 6 will be an uphill battle if phase 2 standards are not thoroughly met

RTC On completion of their app'ship further study to enhance their knowledge and qualifications should be possible.

FAS Pilot in Waterford is now completed. Problem areas have been identified and are the subject of a series of meetings called to rectify same.

RTC System will produce fitters with no extra technological eye.

CURRICULUM DESIGN

Q.1 Is there any formal structure to involve Instructors/Lecturers in curriculum design in your college or centre?

Yes	FAS 5	RTC 5	Total = 10
No	FAS 3	RTC 10	Total = 13
No Comment	FAS		

Outlme your comments on improving this situation.

FAS "It is generally accepted (though not formal) that the best of expertise from each or any area would be consulted by curriculum where necessary"

RTC Change around those involved in Curr design and have at least half of each panel in age bracket <40 yrs.

RTC Everybody should have an input

FAS This is internal policy

RTC Their views are expressed at Dept of Educ meetings

RTC There should be some form of structure whereby the examiner would comment on students ability to answer their Question paper etc.

RTC At beginning of each school year we update various schemes of work

RTC Get a representative from each centre on a curr'm dev board, preferably a young person.

RTC Only some lecturer's involved. All lecturers should have an input.

FAS The curr is agreed by employers, trade unions, Dept of Ed and FAS instructors are asked to "deliver" it

RTC Curr. should be presented in ring binder form so that page could be changed without having to produce a new doc

RTC Lots of informal contact because many members of college staff on Curriculum Development committee of Dept. of Ed.

RTC Should be organised on a national basis between FAS and DoEd

Q.2 Does the current curriculum allow for any Instructor / Lecturer autonomy in its content ?

Yes	FAS 4	RTC 5	Total = 9
No	FAS 5	RTC 8	Total = 13
No Answer	RTC 2		

How would you change this situation given the opportunity?

FASx2 No Comment

FAS Use of the instructors in the new course design was well considered by curr/course design

RTC "Develop assessment and exams in education centres for phases 4 and 6 with an overview from an external agency"

RTC Allow more contact time which would allow individual lecturers to add interesting and relevant topics to curriculum.

RTC All instructors should have option of attending manufacturers courses in order to introduce the latest technology to trainees.

FAS Curr. Dev. Unit seems to use same lecturer/instructor to develop or change curr. instead of a cross section of other experts in the designing.

RTC Develop assessment criteria for an individual educ centre relating to areas 4 and 6 of the proposed prog.

RTC Give 100 % encouragement to the dedicated one.

RTC Since its set up by DoEd and assessed by Dept exams we cannot change it.

RTC Allow time at college or FAS to be longer. Time is too short to allow for moving away from curriculum; app's must pass exams.

FAS "The nat curr should only be changed after discussion and agreement by all those interested."

FAS An expert working party together with relevant trade background, to draw up a more detailed syllabus and workable type.

RTC Time factor often dictates how curriculum will be covered.

RTC Provide better guidelines and documentation, independent exams.

Q.3 Does your Department/Faculty liaise with any external agency regarding curriculum content and assessment?

Yes	FAS 6	RTC 3	Total = 9
No	FAS 4	RTC 12	Total = 16

If Yes List:

FAS "Various sections of the Motor Industry" FAS,RTC and Bolton St.

FAS FAS has been in contact with industry, education, and unions during the development of this new programme.

RTC Not formally but yes informally through contact with the manuf instructors and their advice.

FAS Trade Unions and Dept of Ed.,RTC, FAS, RTC, FAS and ETMTA

RTC FAS and DOEd have own curr dev team I was never asked for my opinion during the last 20yrs.

RTC City and Guilds Institute, IMI IRTE and now new parts distance learning SIMI FAS C&GI and DIT

SECTION 3

Non-Technical Training in the Motor Industry

The following questions relate to training provided for the Motor Industry that is non-technical in nature such as Management, Computer Skills, Accountancy, Language, Interpersonal Skills, Sales and Marketing Studies.

Q.1 Does your institution provide courses, such as those listed above, with a focus on the Motor Industry?

Yes	FAS 3	RTC 2	Total = 5
No	FAS 6	RTC 11	Total = 17

*If yes please set out the type of training provided vs target group by ticking the relevant box in the matrix below:

Target Group	Management Studies	Computer Skills	Accountancy	Languages	Interpersonal Skills	Sales and Marketing Studies
Management Personnel						
Office Personnel						
Sales Personnel						
Parts Personnel						
Technical and Crafts Personnel						
Operatives and Ancillary Personnel						

FAS G2	Computer skills for Sales/Parts/Tech, Language Skills for Parts/Tech, Tech=Interpersonal Skills for Technical personnel.
LRTC	Computer skills for Management/Office/Parts, Accountancy Skills for Man't/Office.
FAS C2	Computer Skills and Lang's for technical personnel.
DIT	All of above Skills for Management students (language optional). Management, Computer, Accountancy, Interpersonal and Sales/marketing Studies provided for Parts personnel.
FAS Galway	Offer Computer Skills Training for Sales, Parts and Technical Personnel. Languages for Parts and Technical Personnel. Interpersonal Skills Training for Technical Personnel.
Limerick RTC	Offer Computer Skills Training for Management, Office and Parts Personnel. Accountancy for Management Personnel.
FAS Cork	Offer Computer Skills and Languages for Technical Personnel.
DIT	Offer Management, Computer, Accountancy, Interpersonal Skills and Sales and Marketing Training as part of their Motor Industry Management courses. Parts Personnel are offered the same options without the option to study a language.

Q.2 In your experience is there a demand for such courses from the local Motor Industry? (This can be a demand that is satisfied or one that is not satisfied by courses)

No	FAS 3	RTC 6
Possibly	FAS	

RTC Limited demand

RTC Encourage Apps to take at least two assoc subjects to widen their knowledge base

RTC Qualified mechanics want updating courses on higher technologies

FAS Question should be addressed to SIMI

FAS In past 5-10 yrs there is an awareness to do these type of courses

RTC College have tried on a number of occasions to run such courses but local employers are not interested in training their personnel.

FAS I have no experience of this as I am in training.

RTC Would be demand at national level; Perhaps DIT meets at present

Resources and Policy

Q.1 In your view does your department / faculty receive adequate funding to implement its training/education programmes at an optimum level?

Capital Funding

Yes	FAS 4	RTC 2	Total = 6
No	FAS 4	RTC 11	Total = 15
Dont know/No comment	FAS	RTC 2	Total = 3

Non-Capital Funding

Yes	FAS 5	RTC 5	Total = 10
No	FAS 2	RTC 7	Total = 9
Dont know/No comment	FAS 2	RTC 3	Total = 5

* If no please estimate the percentage increase in funding (based on current levels) that would be necessary to redress the situation

_____% Capital Funding

_____% Non-Capital Funding

FAS 50 % Cap Fund RTC 80% Cap Fund

RTC 400% Cap Fund RTC 200 % Cap Fund RTC 300%

RTC 25% Cap Funding 30% Non-Cap fund

RTC 50% Cap Funding 100 % Non-Cap fund RTC 100 % both

RTC 100 % both FAS 6,000% more Cap fund

RTC 90% cap and 200% non cap

DIT £3m for new app sys

* What, in your view, should such an increase be spent on?

FAS and RTC Updating technology and equip
RTC x 2 Modern electronic test equip. ABS, EGI, TD, S.Pt. Inj. ATX, P/S, etc.
FAS New Technology RTC Updating Motor Eng Labs
RTC Currently upgrading to comply with EC legislation
RTC Modern equip, ABS system, Eng Man syst.
RTC New Modern equip and demonstration units
RTC Modern diagnostic equip, Brake tester, Modern Engines
FAS New Equipment for modern technology
RTC Modern machinery and training units. Staff training
FAS New technology. eg fuel injection diagnostic equip.
RTC Depends on new system but maybe latest test equip.
RTC Replacement of equip and modern vehicles
RTC New equip and Research and Development.

Q.2 Is your organisation's (e.g. FAS , Dept. of Educ. etc.) In-Service training programme adequate for your requirements as a professional facing technological change on a continuous basis?

Yes ☐ No * ☐

Yes	FAS 3	RTC 2	Total = 5
No	FAS 4	RTC 12	Total = 16
Dont know/No	FAS x 2*	RTC 1	Total = 3

comment

* Currently under review

* If No, please outline the changes you would deem necessary to bring In-Service training to an adequate level:

FAS Give instructors the courses that they apply for
RTC 2-3 day course per term. More support from importers. External work.
RTC Many training progs suited more to people involved in design rather than testing and overhaul.
RTC In Service is non existant
RTC Manuf's courses for instructors and computer skills courses for instr's

RTC Left to the individual to go out and look for training. Not refused if reasonable

RTC Proper funding on the course RTC Specialist courses once a term

RTC One week in service at least every two years on Eng Man (petrol and diesel)/Electr/AT

RTC No training in the area is given by the colleges. We would need short duration courses given by the Motor Companies to keep us up to date. Almost impossible to get info from local garages.

RTC As it is over 6 yrs since last In-Service, any knowledge gained was at own initiative.

More In-Service!

FAS Staff dev't in all areas of modern technology e.g. Eng Mang't, Fuel Inj., Catalyst and 4w ali.

RTC Courses on Electronic Equip, Transmission sys's and Diesel Equip.

FAS Attend courses on new technology at several diff motor manufrs and spend time in a workshop for "hands on" experience, on an on-going basis.

FAS More technical courses. "Availabilty", I find is the problem. I have nobody offering such specialist courses. e.g. ABS. EGI etc.

RTC In Service provided by Dist's, Seldom organised by FAS or DoEd Course should be organised during June July when teach lect could attend.

RTC There is no In-service programme.

Q.3 Please list the practical barriers, if any, that arise in terms of attending In-service Training Courses:

FAS Difficulty of practicing training received.

FAS none.

RTC none

RTC none

RTC Funding; Class Cover sometimes.

RTC Funding.

RTC EPT have to attend at their own expense.(Lot of them about now).

FAS Suitable cover being available.

RTC Up to individual to organise cover but without extra salary; usually section will assist.

FAS None

RTC Geographical distance

RTC Class cover

RTC Getting lecturers instructors together! Most people prepared to go on courses during non-teaching or holiday times.

RTC Finance
FAS Availability to attend course due to class involvement.
FAS Another Motor Instructor being available to take the class
FAS None
RTC Substitution difficult
RTC No class cover and no expense funds
RTC No class cover.

Q.4 Given the opportunity, would you use the services of an agency set up to co-ordinate offers of places to educational personnel on manufacturers training courses, if such an agency existed?

Yes FAS 8 RTC 14 Total 22
No
Dont Know / No Comment FAS x 1 RTC x 1

Yes	FAS 8	RTC 14	Total = 22
No	-	-	-
Dont know/No comment	FAS 1	RTC 1	Total = 2

Q.5 Would the existence of such an agency be likely to help reduce the barriers as mentioned above?

Yes	FAS 7	RTC 14	Total = 21
No	FAS 1	-	Total = 1
Dont know/No comment	FAS 1	RTC 1	Total = 2

Q.6. Would you actively support a lobby to have such an agency established?

Yes	FAS 6	RTC 15	Total = 21
No	FAS 1	-	Total = 1
Dont know/No comment	FAS 2	RTC 1	Total = 3

RTC Comment: Courses need to be balanced between gen principles and manufactureres syst's

SECTION 5

Division of Labour in the Industry

Q.1 Are there skill shortages in the industry at present?

Yes	FAS 4	RTC 13	Total = 17
No	FAS 3	RTC 2	Total = 5
Dont know/No comment	FAS 2	-	Total = 2

* If yes please specify

FAS In areas of auto-elec and electronics.

RTC As above & ATX and diagnosis of small problems tendency to repalace units and hope its ok.

RTC Many garages that he would not leave his car into for any sort of technical problem.

FAS In more specialist areas.

RTC App no's not being trained in sufficient no's.

RTC Electronics, AT, A/C.

FAS New technologies and electronics.

RTC Shortage of motor technicians.

RTC Electrical and Electronic diagnosing.

RTC App's after qualifying do not continue to update themselves.

RTC Electrical.

RTC Electronic equip repairs.

FAS Highly technical mechanics are scarce.

RTC Wages dont entice people to stay SIMI role here.

RTC Auto electrician

RTC Mechanics with knowledge of auto-elec

Q.2 In your opinion what ***skills*** will be required of the Motor Industry personnel of the ***future*** ?

Apprentices

FAS High Degree of skills in Electronics and eng management

FAS Language, computers, Interpersonal.

RTC Develop diagnostic skills in all areas.

RTC Appreciation of importance of good training in basics of their trade.
RTC Computers and Languages.
RTC People who are in the trade of their own choice and who are willing to advance.
FAS New technology, Computer controlled petrol and diesel, CAD CAM design,
RTC Diagnostics generally but particularly in electrics/onics
RTCx2 Greater knowledge of electronics.
RTC Ability to understand electronic control circuits, test and repair same.
FAS Electronic and Diagnostic Equip.
RTC Conventional and electronic skills. Computers.
FAS Greater emphasis on Auto Electronic knowledge rather than mechanical knowledge.
RTC Reduced no's but better quality with better understanding of Sc and Elec.
RTC Problem solving and high degree of literacy.
RTC Good basic education, good interest and motivation.

Technical Personnel

FAS Fuel inj, eng man, elec.
FAS Management, computers, accountancy and language.
RTC Ability to use diagnosis equip
RTC Good general knowledge of modern technologies with in-depth study of at least 2 areas.
RTC Up to Date Technology.
RTC Those with a leaning toward elec areas, capable of understanding technical instructions
FAS As Above
RTC Capabilty to use hi-tech sophisticated equip to diagnose, service and repair
RTC Electronics and ability to use test equip
FAS Electronic and Diagnostic equip.
RTC Good fault diagnosis skills.
RTC Good knowledge of electric/onics.

Sales Personnel

FAS language and interpersonal.
RTC Need more tech knowledge.
FAS Not much of a change.
RTC More technical knowledge.
RTC Have a technical background.

RTC Interpersonal skills technical and computers.

RTC Marketing and communication skills.

Parts Personnel

RTC Require more computer knowledge.

FAS Not much of a change.

RTC Computer skills.

RTC Computer and inventory control skills.

RTC Computer skills and knowledge of components appear and use.

RTC Qualifications, Distance learning and technical knowledge.

RTC Formal training in stores procedures.

Management and Administration Personnel

RTC Better motivation to encourage for good apps to strive for excellence in their trade.

RTC Service Managers require up to date training.

RTC Require a business studies course.

FAS Not much of a change.

RTC Improved interpersonal skills.

RTC Good communication skills, lacking in Irish management.

RTC Good knowledge of personnel mang't.

RTC Personal skills to support formal qualification in industrial manag't.

General Comment

FAS More emphasis on Interpersonal Skills

FAS Adaptability to change in all aspects

DK / NC FAS x1 RTC x 2

Q.3 What changes in the training / education system will be required if we are to meet the personnel requirements of the Motor Industry of the future?

Apprentices

FAS Changes already underway in new appr. sys.

RTC Further educ in form of short courses 2 or 3 days or night time.

RTC Improved social standing and acceptability of Motor app and recognition of importance of role of educ and train in their personal professionalism

RTC New Technology

FAS Better selection of persons to suit apprenticeship. Students at second level should see more MV technology in Engineering classes.

RTC Further Educ. e.g. night courses and 2-3 day seminars.

RTC Greater motivation and encouragement so as to achieve their goal.

RTC A completely updated curr is necessary to cope with modern technologies appearing on vehicles.

RTC Better Training.

FAS More emphasis on new technologies.

TRTC 2 In-service courses to develop specialist skills.

FAS Again, more emphasis on Electronics than mechanics.

RTC Suitable Individuals for training and education, with respect it is not a trade for handicapped persons.

Technical Personnel

FAS Suitable Courses Organised (SCO).

RTC Support for a range of night classes and gen courses run by manuf's.

FAS Two tier system ie specialist (manufac trained) and a low skill app.

RTC New Technology.

FAS Main dealer courses should be opened up to none main dealer service personnel.

RTC Greater motivation and encouragement so as to achieve their goal.

RTC Better training.

FAS More emphasis on new technologies.

RTC In-Service courses to develop specialist skills.

RTC Persons available but not being paid for yrs of study

Sales Personnel

FAS SCO

RTC To treat all customers equal big and small

RTC Better Training

RTC In-Service courses to develop specialist skills

RTC Satisfactory

Parts Personnel

FAS SCO

RTC More computer skills to increase speed of dispatch of orders

RTC Better Training

Management and Administration Personnel

FAS SCO

RTC More interest in the training of their staff

RTC Better training

DK / NC FAS x 1 RTC x 21

FAS "Looking at past changes in education does not indicate that any changes that we may feel necessary will occur".

RTC Overall comment Emphasis on sciences / handskills and workshop practice maj investment

RTC Formal training for all grades of personnel with reg updating. New syll should help techn personnel

Any other comments:

FAS Makes comments while answering the last two Q's on future skills and training: *"I am 20 years away from the Motor Trade/Workshop. My opinion at this time could not be useful to the future need of the industry."* also: *"The changes* (in the training system) *will have to be identified and "driven" by the Motor Industry"*

APPENDIX C: CORRESPONDENCE

OCCUPATIONAL PROFILE FOR MOTOR MECHANIC

Trade Family: Motor Trade

Industry Served: The Motor Industry

Profile of Trade:
The servicing, maintenance, repair and installation of the mechanical and electrical equipment of passengers and light vehicles.

At the end of the apprenticeship the Tradesperson will be able to demonstrate competence in the following:

Core Skills	Specialist Skills within Trade	Common Skills For Motor Trades	Personal Skills Required
• **Servicing** Carry out manufacturers service schedule. Complete a vehicle report form. **Engine/fuel** Carry out compression tests. Remove/overhaul cylinder heads. Dismantle carburettors, replace parts, reassemble and adjust. Remove/replace exhaust components. Check exhaust emissions for compliance with C.O.; H.C., and N.O.X. specifications. **Transmission** Remove/refit gearboxes. Diagnose faults in clutch, remove/replace components. Remove/replace driveshaft joints and bearings. **Ignition** Diagnose/rectify faults in ignition systems (breaker and electronic types). **Suspension** Remove/replace suspension components. **Wheels** Balance wheels/repair punctures. **Bodywork** Remove/replace bodywork components e.g. door locks, windows and regulators. **Lights** Remove/replace components and focus head lights.	• **Diesel Fuel System** Remove/test and refit/replace injectors. Remove/replace diesel components. Check exhaust emissions with smoke meter and diagnose faults. **Brakes** Diagnose/rectify faults in A.B.S. brakes. **Engine** Carry out engine overhaul. Diagnose/rectify faults in engine management systems. **Petrol fuel system** Diagnose/rectify faults in carburettor fuel systems. Diagnose/rectify faults in electronic fuel injection systems. Test for correct operation of catelytic convertors. **Transmission** Diagnose faults in and overhaul gearboxes. Diagnose faults in and overhaul differential units. Remove/refit automatic transmissions. **Electrical** Diagnose/rectify faults in electrical circuits using wiring diagrams and multimeter. Remove/refit car radios. Install electrical equipment. **Bodywork** Fit tow hitches.	• **Metalwork** Basic bench fitting. Gas welding; brazing. **Brakes** Diagnose faults in hydraulic brakes system and remove/replace components. **Steering** Check and adjust steering geometry. Remove/replace steering components (manual and power type steering). **Engine** Remove/dismantle/reassemble and refit an engine. Diagnose faults in cooling system and remove/replace components. **Electrical** Diagnose/rectify faults in starting and charging systems and remove/replace components. Diagnose/rectify faults in heating systems and remove/replace components. **Bodywork** Locate/rectify noises and water leaks from bodywork.	• Communications. Customer relations. Adaptability. Ability to work as a team member. Ability to work independently. Initiative. Problem solving. Planning/organisation. Information gathering.

Note: Integrated Curriculum includes Maths, Science and Theory.

Core Skills

The range of skills, and knowledge which are specific and are required by all craftworkers of the trade.

Mastery of these skills is required so that apprentices can function in the trade and progress to higher levels.

Specialist Skills

Are those skills which are identified with an industry/trade and are applied in specialist sectors within that industry/trade. Mastery of these skills allow craftworkers to specialise in particular areas of industry as key personnel.

Common Skills

Common skills are those skills that are required by the trade (either Core or Specialist skills), but which are also common to other trades within a family or group of trades.

Personal Skills

These are the skills which apply to all trades and incorporate the practical application of abilities such as:

- Communications
- Customer Relations
- Adaptability
- Ability to work as a team member
- Ability to work independently
- Initiative
- Problem Solving
- Planning
- Information Gathering
- Quality
- Language
- Report Writing

Mastery of these skills enable craftworkers to enrich their relationships with their colleagues and clients and are essential for progression to higher levels of responsibility, promotion and job - satisfaction.

Coping with Change

Changes in the Occupational Analysis as a consequence of new technologies, new materials, new work practices and changing social/ economic factors, will be reflected by changes in the classification of skills under the headings of Common, Core, Specialist or Personal.

This in turn will require changes in the content of the curriculum of the trade.

By having modules of training which are directly linked to the Occupational Analysis, this Curriculum Model will allow us to readily update both curriculum and certification to keep pace with the changing world of work.

The Specialist Skill of to-day may become the Common or Core Skills of tomorrow.

The following pages outline in diagramatic form an example of the curriculum model which is proposed for the New Apprenticeship System.

Freagra a sheoladh go dtí
Address reply to:
An Rúnaí

AN ROINN OIDEACHAIS,
(Department of Education),
BRAINSE NA SCRÚDUITHE,
(Examination Branch),
BAILE ÁTHA LUAIN,
(Athlone).
Teileafón: 0902-74621
Fax: 0902-78562

Mr. Arthur O'Sullivan,
Training Instructor,
Mazda Motor Distributors Ltd.,
Naas Rd.,
DUBLIN 12.

TAG. (Ref.) DO THAG. (Your Ref.)

28th October, 1993.

Dear Arthur,

With regard to your enquiry of 13th September 1993 I am enclosing herewith all available statistics in relation to the Senior Trade and Technological Certificate Examinations in Motor Car Engineering for the years in question.

The figures for the Senior Trade examinations, which are held in December, March and Summer, are compiled on a yearly basis, by subject. The information enclosed, therefore, shows the overall number of candidates who took each subject in the period December to Summer, in each case. I regret that the figures for the period December 1992 to Summer 1993 are not yet available but I will ensure that this information is forwarded to you as soon as possible.

The Technological Examinations, on the other hand, are held every Summer only and the figures enclosed show the number of candidates taking each subject for the period 1990 to 1993.

I trust that this information will be of assistance to you and I would also like to add that your question in relation to the future of Motor Vehicle Apprentice education has been referred to the Inspector who will contact you in this regard in the near future.

Yours faithfully,

T. O'Neill
Executive Oficer

MOTOR CAR ENGINEERING

SENIOR TRADE EXAMINATIONS

SUBJECT	1990/91	1991/92
MOTOR W/SHOP PRACTICE	508	495
MOTOR VEHICLE THEORY	382	416
MOTOR VEH.ELECTRICITY	162	168
GARAGE PRACTICE	397	431
MATHS/CRAFT CALC.	21	16
ENGINEERING SCIENCE-WR.	14	24
AG. MECHANICS-WR.	17	26
AG. MECHANICS-PR.	17	26

TECHNOLOGICAL EXAMINATIONS

MOTOR CAR ENGINEERING (ELEMENTARY)

	ENTRIES			
SUBJECT	1990	1991	1992	1993
MOTOR CAR ENGINEERING	162	221	201	187
ENGINEERING SCIENCE	87	142	139	115
AUTO ELECTRICITY	175	249	249	208

MOTOR CAR ENGINEERING (INTERMEDIATE)

	ENTRIES			
SUBJECT	1990	1991	1992	1993
MOTOR CAR ENGINEERING	70	114	85	113
ENGINEERING SCIENCE	19	25	18	22
AUTO ELECTRICITY	138	165	142	174

MOTOR CAR ENGINEERING (ADVANCED)

	ENTRIES			
SUBJECT	1990	1991	1992	1993
MOTOR CAR ENGINEERING	65	41	62	49
HEAT ENGINES/APP. MECH.	0	0	1	4
AUTO ELECTRICITY	40	33	35	52
GARAGE ORG.& MANAGEMENT	53	35	69	42