on dollars invested." They conclude that management usually supports evaluation if the case for it is properly presented. Managers understand how evaluation can improve the quality and delivery of training. Furthermore, evaluation is not expensive, when compared to the total expenditure involved in training. A defined percent of total training budgets should therefore be allocated to evaluation. Only with this commitment will training achieve maximum credibility in the organisation.

Brandenburg (1982) attempts to determine what evaluation activities are currently in use. Training professionals were asked about functions, roles, techniques and skills used in training evaluation. He based his survey on two groups of training professionals, the Chicago Sales Training Association (a sub-group within the American Society for Training and Development - ASTD) and the Training in Business and Industry Special Interest Group (of the American Educational Research Association).

The main purposes for evaluation were found to be: to improve the training programme; to provide feedback to programme planners or management; to gain knowledge of employee skill levels; to provide feedback to programme participants. These may be considered as internal feedback functions among participants, trainers and training management.

The main roles which an evaluator may be expected to fill are that of manager, facilitator and objective observer. The most frequently used data collection techniques are: open-ended comments or reactions; objective questionnaire or survey; multiple choice or similar achievement measures and task performance measures. Analysis of cost information and the use of essay or open-ended achievement exams were among the least used. Later, on-the-job performance measures and indirect follow-up studies were found to be done only occasionally. Thus, techniques that were used most often took place on the spot and may be considered as efficient, short and less labour-intensive. More complex techniques requiring more time or personnel, received lower priority and were used less often. With regard to evaluator skills necessary to conduct successful evaluations, the top skill area which was identified was interpersonal skills. A fairly high ranking was also given to observation skill. Data analysis skills were ranked lower.

The implications of these results are as follows:

- The major function of evaluation is that of internal support to the training process, i.e. providing feedback to instructors, planners, management and participants.

- The major roles of an evaluator are that of objective observer, facilitator and manager with technical expertise being of minor importance.

- Cost/benefit and cost effectiveness analyses are not important components of evaluation. This may be because training managers have tried them and found them inconclusive, or they may not know how to conduct them, or other training questions may be considered more important.

- The 'smile' indices are still the most used and longitudinal follow-up is seldom done. If follow-up studies on effectiveness were made easier to do, and if important organisational consequences could be demonstrated, then training managers would attempt them more often.

- Because the evaluation responsibility is allocated to training managers, who therefore need to have an understanding of evaluation, the evaluator role of the training manager should be part of the selection process and he should be properly trained for it.

Brandenburg (1982, p18) summarises the existing situation in training evaluation in the United States as follows:

> Educational or instructional evaluation as a professional emphasis is firmly established in public schools and post-secondary education. Such an emphasis in business and industry is currently gaining support. Many organisations give verbal support to training evaluation, but its implementation is the responsibility of training managers who generally consider other activities more important. Thus, most evaluative efforts are geared only to the immediate aspects of training and do not reflect the context of the total organisation.

1.3.2.5 Summary

This brief overview of the international setting of private sector training and training evaluation has shown that education and training at work has become such a vast enterprise involving so many resources of time, effort and money, that it is essential that it should be properly evaluated. This is important both for the individual, the majority of whom are now dependent on on-the-job training for their lifetime economic success, and for the nation, where effective co-ordination of all the nation's education resources is required. Management now wants professional evaluation of training effectiveness which goes beyond the immediate aspects of training and which reflects training in the total context of the organisation, with its important organisational consequences. A defined per cent of total training budgets should be allocated to evaluation.

1.3.3 South African Private Sector Training and Training Evaluation

1.3.3.1 Introduction

This overview focuses mainly on what private sector training and training evaluation is taking place. Why and how such an urgent need for training has come about is briefly touched upon under the economic and socio-political background, which follows. The writer can only alert the reader to some important features of the training environment, which have been fully dealt with elsewhere.

1.3.3.2 Economic and Socio-political Background

In South Africa, the importance of education and training at work is considerably magnified by economic and socio-political considerations which distort the formal education system and labour market. The result is that the private sector in South Africa is faced with both a quantitative need to train and a qualitative need to train. The quantitative need to train is shown in Table 1.2.

TABLE 1.2

Total Estimated South African Training Requirements (Initial Plus Development Training) by Occupation Category 1979 - 1987

Occupation Category / Origin of Training Need	To Accommodate Employment Growth	Adjustments for Wastage	Adjustments for Occupational Shift	Adjustments to Promote Product	Total Demand
Professional	284 614	112 295	103 616	1 295 218	1 795 743
Management	56 069	31 858	29 392	367 453	484 772
Office, Clerical & Sales	318 536	189 146	174 528	-	682 210
Foremen & Super.	41 812	17 581	16 224	202 782	218 399
Skilled	56 951	66 791	61 632	385 186	570 560
Semi-skilled	432 774	368 909	340 400	-	1 142 083
TOTAL DEMAND	1 190 756	786 580	752 792	2 250 639	4 953 767

(National Manpower Commission, 1982)

This table shows that nearly 5 million people will need to be trained at work over an 8 year period, i.e. more than 600 000 per annum, and that nearly 2 million of these will be in the professional category and 1 million in the semi-skilled category. The qualitative need to train, in terms of the racial composition of the workforce is shown in Table 1.3.

TABLE 1.3

Composition of the Workforce in the S.A. Business Sector by Race, 1980/81

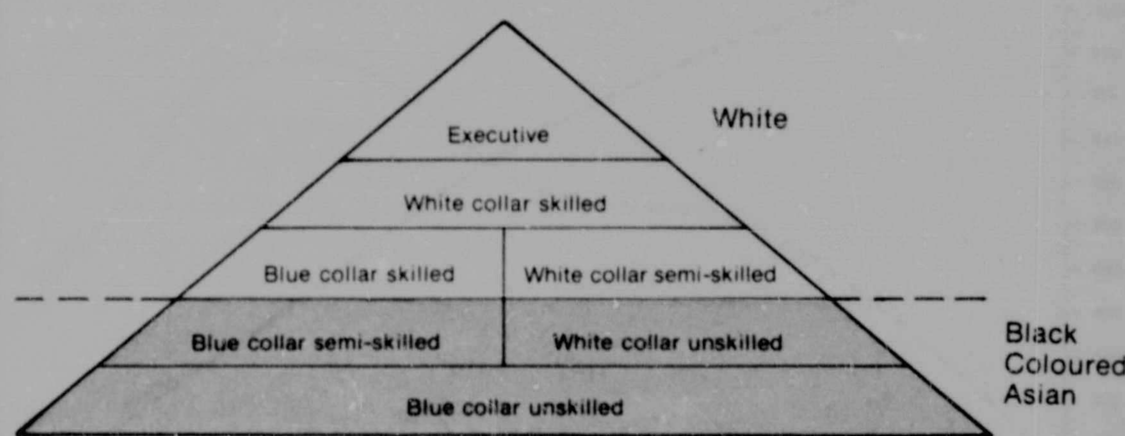
Population Group	Unskilled %	Semi-Skilled %	Artisan %	Skilled %	Highly Skilled %
Whites	2,0	19,0	85,6	73,7	89,7
Blacks	88,0	62,6	3,6	15,7	4,0
Coloureds	8,6	14,2	7,0	7,2	4,2
Asians	1,4	4,2	3,8	3,4	2,1
TOTAL	100,0	100,0	100,0	100,0	100,0
TOTAL WORKFORCE	44,7	24,0	5,1	21,5	4,7

(Based on Department of Manpower, 1984c, p36)

Overall, the skill levels in which the highest percentages for each race were found were for Whites at the skilled level, Blacks the unskilled level and for both Coloureds and Asians, the semi-skilled level. This is illustrated in Figure 1.4 below:

FIGURE 1.4

Composition of the South African Workforce



South African Workforce

(Manpower Supplement to Financial Mail August 27, 1982, p21)

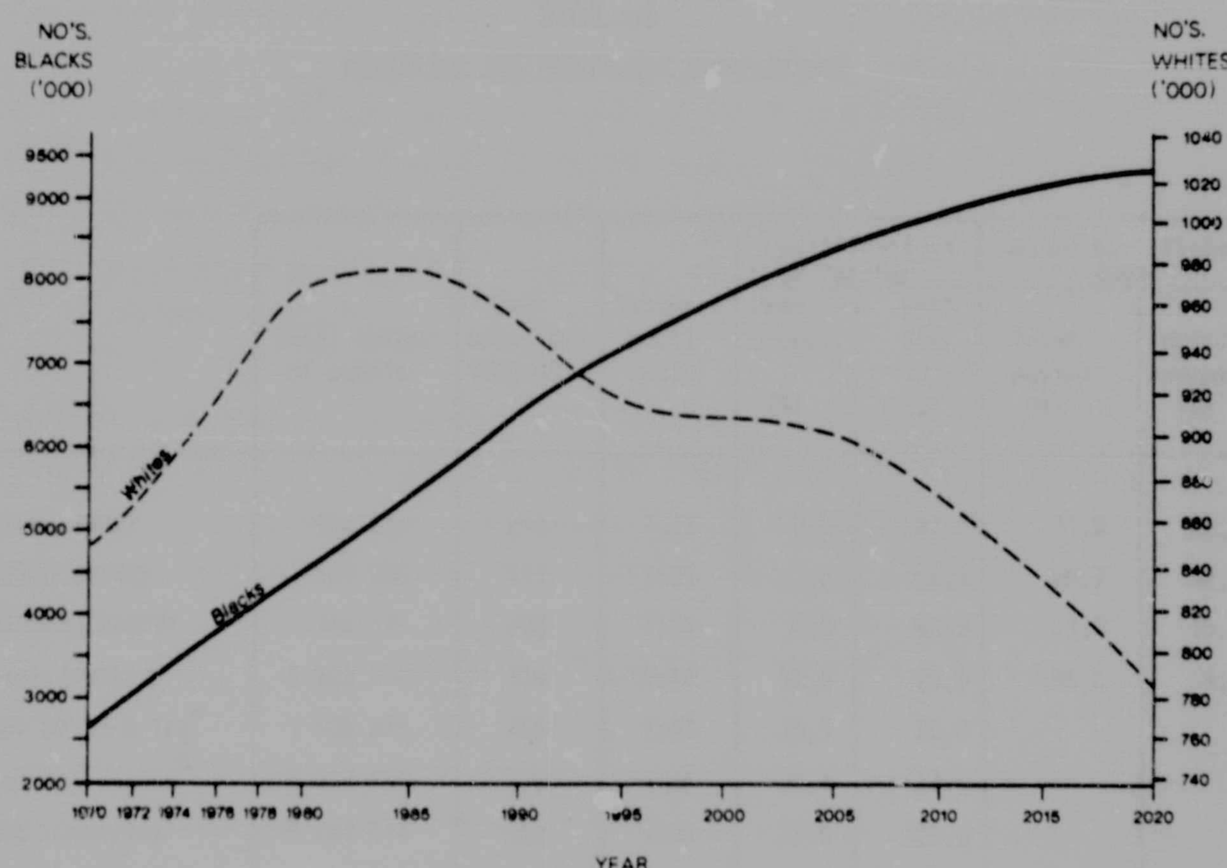
The situation which emerges is that an insignificant number of non-Whites participate above the ..skilled level of the workforce and vice versa. This is in inverse ratio to the representation of the races in the population, where Blacks outnumber Whites by 4:1.

These participation rates for the different races, and the absolute numbers for training requirements, have to be viewed in relation to the demographic character of South Africa. The projected growth rates in school populations for the different races are shown in Figure 1.5.

FIGURE 1.5

Projected Growth of South African School Population for all Races, 1970 to 2020

(Note different scales for Blacks and Whites)



(Adapted from Human Sciences Research Council, 1981a).

The contrast between burgeoning Black school populations, compared with declining school populations for all other groups, means that the participation rates of Blacks at various skill levels in the South African workforce will have to change dramatically. In relation to the need to train, this means that there should be massive training for upward mobility in the occupational levels of Blacks across all skill categories. However, there are extremely serious obstacles to be overcome.

There is a crisis in Black education in South Africa today which can be traced back to the general neglect of Black education over the last 30 years since the Bantu Education Act of 1953. Racial segregation in education was rigidly applied and the State assumed total control over education for Blacks for reasons of political domination. Grave discrepancies in educational provision resulted, with Whites at one end of the scale and Blacks at the other. (See Table 1.6).

TABLE 1.6

Education Indicators for South Africa

	Total number of pupils	Unit costs (R) 1982-83	Teacher-pupil ratio	Qualifications of Teachers		Senior Certificate 1983	
				Prof. unqual. (%)	With Std. 10 + (%)	Total passes (%)	Matric exemption (%)
White (1983)	986 276	1 211	1:17	2,3	97	91,8	46,6
Indian (1983)	229 289	711	1:23	11,0	82,3	86,7	42,4
Coloured (1982)	766 179	498	1:26	8,0	40,9	71,3	15,2
Black (1982) :	5 323 292	134	1:44	16,9	23,6	48,3	9,8
Dept of Ed & Trg[a]	1 626 875	156	1:41	15,1	20,8		
National States[b]	2 034 610	118	1:46	22,3	24,4		
TBVC countries[c]	1 661 816	132	1:45	12,5	25,9		

a. The Department of Education and Training is responsible for the education of black pupils at schools in 'white' South Africa. b. The self governing 'homeland' states within South Africa. c. Transkei, Bophuthatswana, Venda and Ciskei.

(Hartshorne, 1985, p 149).

Further details on some of the discrepancies shown in Table 1.6 can be found elsewhere (Hartshorne, 1983 & 1985, Human Sciences Research Council, 1981b). There was very little public concern about these severe discrepancies until after the student protest in Soweto in June 1976.

However, even education for Whites needs major revision. Meanwhile, a white male in particular, who enters the job market, soon finds himself moved rapidly up the job advancement ladder into:

> ...a managerial milieu which is rather unique. He has to deal with far more subordinates from a variety of language, race and culturally different groups and it is highly likely that his Western European or North American counterpart will be far better educated than himself (Heymans, 1983, p1).

From 1980 to 2000, the demand for high level manpower is expected to increase from 10% to 17% of total demand and for skilled persons from 23% to 25%, while the demand for unskilled persons could actually decline from 37% to 29% of the total demand (Human Sciences Research Council, 1981). These statistics all combine to indicate an increasing requirement for a better educated and trained workforce, involving also, a larger proportion of Blacks.

In the last ten years, since 1976, there have been increasing pressures for reform coming from various sources, including the private sector. The criticisms which business has directed at the education system in general, and education for Blacks in particular, have included:

> ...the so-called "academic" nature of schooling and its failure to prepare young people adequately for the modern technological world, as also in particular the failure of the black education systems to provide the additional skilled manpower required for the maintenance and growth of the economy (Hartshorne, 1985, p148).

Coupled to this was discriminatory labour legislation which through job reservation and a deliberate policy not to recognise black artisans and black trade unions, made job advancement in the technical field impossible for Blacks beyond the semi-skilled level. One effect of this was to confer inferior status on all technical education in the eyes of both black pupils and parents.

Also, about ten years ago industry, commerce and economists from both the public and private sectors, began to say:

> ... with some measure of clarity and general agreement that South Africa was not going to survive without trained black manpower. Faced with serious shortages of skills, ...they wanted educational development to be geared to economic planning and growth, and for emphasis to be placed on industrial, vocational and technical training (Hartshorne, 1983, p89).

One government response, in 1980, was to charge the De Lange Committee of Investigation into Education (Human Sciences Research Council, 1981b) with dealing with those aspects of education that would promote economic growth in the Republic of South Africa (RSA) and create an education infrastructure to provide for the manpower requirements of the RSA. The Wiehahn Commission (Department of Manpower Utilization 1977a) and the Riekert Commission (Department of Manpower Utilization 1977b) were also set up to investigate labour legislation and legislation affecting the utilisation of manpower, respectively, and made recommendations which included: provision for registered Black trade unions; cancellation of job reservation; opening of apprenticeship to all races; inclusion of in-service training for all races in the function of the Department of Manpower. These recommendations have since been implemented by government.

There have therefore been significant new developments affecting education and training for South Africa's total workforce. These improvements have taken place in spite of a sudden, vicious, partly politically induced recession in the South African economy, with the collapse of the Rand. This has been the worst economic recession in the country since the 1930's and followed the unprecedented boom from 1979 to 1982, led by a gold price of more than US$800 per oz. Nevertheless, the education and training legacy of the past remains and is best summed up in the alarming scenarios concerning the skills shortage and the need for training, which frequently appear in the popular press (Manpower Supplement to <u>Financial Mail</u>, August 27, 1982, p5; Duigan, September 22, 1982, p9; Davis, October 29, 1982, p23; Beljakova, March 20, 1983, p30; Mac Millan, May 13, 1984, p6; Mac Millan, November 18, 1984, p4).

In the face of all these daunting problems, South African companies are faced with a cruel dilemma. When, in enlightened companies, equal opportunity and black advancement programmes have become the order of the day, they are faced with a black workforce, the majority of whom do not have an adequate general educational base for further skills training. Yet, perversely, it seems that business does not appreciate the implications for its training task of the educational background of South Africa. When business was asked for its opinion on the adequacy of education in South Africa, i.e. 'poor, fair, good, very good or no answer', the overwhelming majority responded 'no answer' (Department of Manpower, 1984c, p72). Were they, perhaps, just overwhelmed by the enormity of the problem?

Certainly, this lack of an opinion concerning education is not characteristic of the captains of industry in South Africa, as illustrated by this excerpt from the inaugural address of the present Vice Chancellor of the University of the Witwatersrand and Chairman of the Barlow Rand Group of Companies, South Africa's second largest quoted company. He articulates the need for the University to become involved in the education and training problem as follows:

> I had another question to ask myself before accepting nomination. Were there any links between the University and business, and were they of importance to the two bodies?
>
> There are two (links) which are of great importance ... the first one arises from the fundamental problems business is facing in regard to the educational standards of its employees, particularly Black. ...The long term answer can only lie in improving the basic education of all sections of our population, and later in providing them with specialised training. This is an area in which I believe there is an urgent necessity for educational institutions and the private sector to co-operate very closely (University of the Witwatersrand, 1982, pp7-10).

This dissertation concerns an education and training research project in which the University and a private sector company did co-operate very closely.

1.3.3.3 South African Private Sector Training

The information available to the author comes mainly from one source, a report on In-Service Training in t'. Republic of South Africa, 1980/81 (Department of Manpower, 1984c) conducted by the National Manpower Commission (NMC) of the South African Department of Manpower. The study is the first of its kind in South Africa and has, surprisingly, not been previously reviewed in the literature. It includes training in South Africa as a whole and in each of both sectors, as follows:

Private Sector Training

- The Business Sector (which included mining, construction, manufacturing, electricity, trade and commerce, transportation, finance and private community services).

- Training Agencies (any association, institute, firm or organisation, except formal educational institutions such as universities and technikons).

Public Sector Training

- National government and provincial government administrations.

- Local government, public corporations (parastatals) and public services (including hospitals).

The focus of this review of the report is on private sector training. For the purposes of the survey, South Africa was geographically defined as excluding the 'TBV countries' (Transkei, Bophuthatswana and Venda, which had taken independence at that time). As most training in the national states falls within the public sector, the exclusion of data for these three areas does not significantly affect this review of the survey.

The NMC study is described as an inventory-type survey of existing in-service training - personnel, practices and procedures. In-service training is defined as:

> ...training which has been systematically planned and is formally carried out by a trainer within the organisation or externally on behalf of the organisation. It therefore included any activity aimed at the systematic development of the attitude, knowledge and/or skill required by an individual to perform a given task or job efficiently, so that 'on-the-job' and 'off-the-job' training and re-training are covered, but the 'Sit-by-Nellie' type of training and induction training (aimed solely at familiarising employees with their work environment) are excluded (Department of Manpower, 1984c, p4).

The NMC study does not identify any individual organisations. This is because in-service training is linked to tax incentives and tax information is classified as strictly confidential.

Training in South Africa was given a considerable boost with the promulgation of the Manpower Training Act in 1981 (Department of Manpower, 1984c, p204). However, it specifically excluded non-job-related training such as Literacy or Adult Basic Education. The most important aspect of the Act is that it affirmed the tripartite involvement of employers, employees and the state in the training task. This included the state's support and encouragement for the private sector's training effort through financial assistance in various forms.

Financial assistance by the state initially took the form of tax concessions and tax grants for training. Tax concessions were only applicable on training schemes which were registered with the Department of Manpower's Registrar of Manpower Training. The implications of this tax benefit were that training costs could count as much as 150 per cent deduction for tax purposes (Department of Manpower, 1984c).

Registration of training courses was subsequently made more difficult and a ceiling was imposed on the level of training to which tax concessions would apply. This was set at a maximum employee salary of R15 000 per annum, which in effect limited tax deductible training to unskilled and semi-skilled workers. In addition, only 50% of training costs were then tax deductible.

The effect of tax concessions for training was to cause a veritable explosion of company training in South Africa. By 1983, there were an estimated one million trainees in 20 000 registered courses (Deans, 1983, p23) and training tax concessions were costing the country between R100 million and R150 million a year in foregone taxes (Orpen, October 17, 1982, p4). The Manpower and Management Foundation was claiming that 80% of registered training was wasted (Deans, 1983, p23), there had been a proliferation of private training agencies to take advantage of the training bonanza, and criticism was rife concerning misuses and excesses (for example Manga, August 7, 1983, p38, citing the National Productivity Institute; Manga, August 7, 1983, p38, citing P-E Corporate Services (Pty) Ltd.). There was furthermore a considerable fall off in training activity as a result of reduced tax concessions, although this was also linked to the recession in the South African economy.

As a result of these flaws in the system of tax concessions for training, the State has now decided to switch over to a cash grant system of training involving State support for the Industrial Training Boards of the private sector (Department of Manpower, 1986b, c & d). Exactly how the new system will work is presently under investigation, but the State will contribute a cash grant of 25% to the total amount of an industrial training levy, as raised by the industry from its members for training purposes (Department of Manpower, 1986b, p19). The proposed new system will involve the private sector to a much greater extent in accepting responsibility for its own training and should eliminate much of the abuse to which the system of tax concessions for training was prone.

1.3.3.4 <u>South African Private Sector Training Evaluation</u>

The National Manpower Commission report (Department of Manpower, 1984c) included a question on 'formal evaluation of training'. All the report states is that 55% of the responding organisations with training programmes claim that they conduct formal evaluation of training. More large organisations conduct evaluations than small organisations, presumably because they have more resources to do so.

The Human Sciences Research Council of South Africa catalogues the registration of all higher degree research topics at all universities in South Africa. Of 84 registered higher degrees on training in 1984, 7 concerned evaluation of training and only 4 of these concerned evaluation of training in industry. Therefore, in the context of formal research, there is not much interest in the field in South Africa.

The Department of Manpower had a rudimentary form of training evaluation (inspection) for registered training schemes in the previous system. To benefit from the tax concession for training, the company had to submit statistical and other information and receive regular inspections by the Divisional Inspectors of the Department of Manpower.

Only Birt (1982, p4) has conducted a survey, and then only of 22 companies, with the Western Cape branch of the Institute of Personnel Management, to investigate the procedures used by firms to establish training needs and the procedures used to evaluate training programmes (see 4.2.4).

1.3.3.5 Summary

This brief overview of the background to private sector training and training evaluation in South Africa has shown the following: firstly, it has shown that there is a shortage of skilled Whites; and secondly, there are considerable impediments to the training of Blacks; and thirdly it is from the black section of the population that more skilled people are going to have to be provided; and fourthly the current state of training in South Africa is relatively unsophisticated, with companies generally doing only minimal training in relation to the need and with meaningful training evaluation being virtually non-existent or inadequately done. Yet the private sector is committed to reform through training and development, particularly for black advancement.

1.3.4 Carlton Paper Training and Training Evaluation

1.3.4.1 Introduction

Carlton Paper Company of S.A. (Pty) Ltd.) provided the human laboratory setting for the research.

1.3.4.2 Carlton Paper Company

Carlton Paper Company of S.A. (Pty) Limited is a South African company mainly owned by South African shareholders, with Gencor holding 41% and individual South African investors 21%. However, a significant 38% is owned by Kimberly-Clark Corporation of the USA.

Carlton Paper Company of S.A. (Pty) Limited is the country's biggest supplier of disposable tissue products. Sales are worth more than R170m. Prior to 1972, when there was a merger, there were two separate rival companies as follows: Carlton Paper Corporation Ltd., and Kimberly-Clark of S.A. (Pty) Ltd.

The head office is in Bedfordview, Johannesburg, and there are four factories: at Enstra near Springs; at Wadeville near Germiston; in Cape Town; and in Durban. In addition, there is a distribution centre at Jet Park near Boksburg and a warehouse at Port Elizabeth. At Enstra and Wadeville 140 tonnes of tissue is produced daily and the main functions of the company are: wadding manufacture, converting, sales, marketing, engineering, materials handling, distribution, finance, and personnel.

Functionally, the organisation of the company is divided into six divisions, each with its own area of responsibility (see Figure 1.7). The activities of the divisions are co-ordinated by a Management Committee of division heads which meets weekly.

FIGURE 1.7

Carlton Paper Company of S.A. (Pty) Limited

Divisional Functions

Managing Directors Office	Operations Division	Personnel Division	Finance & Administration Division	Consumer Business Division	Commercial Business Division	Health Care Division
General managing directing and controlling	Manufacturing	Manpower Planning	Financial Accounting	Sales	Sales	Sales
	Corporate Distribution	Training	Financial Analysis	Marketing	Marketing	Marketing
	Research & Development	Compensation Planning	Internal Control			
	Quality Control	Industrial Relations	Budgeting			
			Credit Control			
	Corporate Purchasing		Data Processing			

Table 1.8 shows that in 1982 there was a staff of 1 634, of whom 1 101 were non-White, including 924 black employees. There were 533 white employees, i.e. 33% of the total labour strength of the company. Most of the Blacks were hourly paid personnel in the Operations Division and most of the Whites were monthly paid personnel. In other words, the skill level: race ratio of Carlton Paper's workforce is the same as that for South Africa as a whole (see Table 1.3 and Fig. 1.4).

TABLE 1.8

Carlton Paper Company of S.A. (Pty) Ltd - Labour Strength, 1982

LOCATION	Monthly Paid Personnel				Hourly Paid Personnel				GRAND TOTAL
	Whites	Other	Blacks	Total	Whites	Other	Blacks	Total	
M.D.'s Office	3			3					3
Personnel Dept.	5		1	6					6
Commercial Div.	36			36					36
Consumer Div.	45	10	35	90					90
Marketing Div.	18			18					18
Finance & Admin Div.	47	2	26	75					75
New Bus.& Tech. Div.	15			15					15
Operations Div.	181	11	23	215	183	154	839	1176	1 391
TOTAL	350	23	85	458	183	154	839	1176	1 634

(Carlton Paper, 1982f).

At the start of the study, union membership at Carlton Paper was as follows: Amalgamated Engineering Union (3 white employees), Paper, Wood & Allied Workers Union (75 black employees) at the Springs mill only. By the end of the study the latter union was officially recognised at all plants and represented all Black hourly paid workers. The work environment itself was de-segregated, with integrated canteens and washrooms.

In 1982 the external environment of the company was seen by management to consist of these socio-economic factors: economic growth rate high at the time; productivity low; education and skill imbalance; inflation high; competition for skills intense; industrial relations uncertainty (Carlton Paper, 1981d). The in-company environment of the company was described by management as follows: a typical South African company with an organisation structure which is largely labour intensive, with underdeveloped skills at all levels; a history of a single technology base of paper; high capacity for growth; available resources include finance, markets, technology, consumer demand; skill shortage a major restrictive factor (Carlton Paper, 1981d).

1.3.4.3 Carlton Paper Training

There were four main training areas: induction, technical, management and sales. Technical Training consisted mainly of Learner Directed Training (LDT) programmes for operators and apprenticeship training. Management training consisted of a variety of purchased training programmes, e.g. Interaction Management IM (see Appendix A) but a new Management Development programme was introduced in 1982. Sales training consisted of training for every new salesman on Carlton Paper products and in addition, training was required in accordance with sales and marketing trends. A LDT programme was developed in 1982 for the induction of monthly paid workers and another course for hourly paid workers was planned (Carlton Paper, undated a & f, 1977, 1981e, 1982g).

The four main training areas were each the responsibility of the Group Personnel Manager, Technical Training Manager, Management Training Consultant and Sales Training Manager, all at Head Office. There were also other training programmes which were the responsibility of the Mill Personnel Managers, including induction training, supervisory, safety and literacy programmes, for example. (See Fig. 1.9).

In 1982 the backgrounds of the training staff were as follows: two were graduates (B Com and BA Psychology); one was a retired army officer; one had no formal qualification but had previously been a technical trainer; one was a qualified technician with no previous training experience; and two were long-serving staff members who had been developed as a training instructor/technical trainer. The management training consultant had been a senior executive with Kimberly-Clark, USA, and had an MBA, with long and varied experience as a trainer.

FIGURE 1.9

Carlton Paper Company of S.A. (Pty) Ltd: Training Functions, 1982

Location	Position	Responsibilities
Head Office	Group Personnel Manager Management Training Manager Technical Training Manager Sales Training Manager	General control of training Management training Technical training Sales training
The Mills	Personnel Manager Technical Training Officers Technical Trainer Training Instructor	Control of training Preparation of technical training programmes Line training of operators Supervisory, safety, literacy and business orientation training

1.3.4.4 Carlton Paper Training Evaluation

At the time of the evaluation, some evaluation of training was already being conducted at Carlton Paper. In the case of purchased programmes, there was an evaluation component in the programme which would be completed by the participants. The Interaction Management evaluation questionnaire was of the re-actionaire type. The Analytic Trouble Shooting - ATS (see Appendix A) evaluation format was however, of the cost-benefit analysis type. Technical training for operators was being evaluated by means of pre-tests and post-tests to measure learning gains. Sales training was being evaluated through post training performance appraisal of salesmen. Some informal evaluation of management training of the re-actionaire type had been carried out. All of these, with the exception of the ATS evaluation, were evaluations of training efficiency.

1.3.4.5. Summary

Carlton Paper is one of that group of companies in South Africa with a strong American interest. It is therefore subject to the pressures for peaceful political change in South Africa being exerted from abroad. At the outset of the evaluation it seemed that this climate within the organisation would be important for training. The history of merger of two formerly rival companies accounted for fundamental differences of attitude to training in the two original components of Carlton Paper. The geographical distribution of the various facilities of the organisation dictated to the evaluator a focus on the four operations in the Johannesburg area - head office at Bedfordview, Wadeville Operations Division at Germiston, Enstra Operations Division at Springs and Jet Park Operations Division at Boksburg. The size of the company proved to be manageable - big enough to afford interesting research possibilities and yet not so big that representative samples were unmanageably large. It also afforded an interesting contrast between a high technology, capital intensive and rapidly growing First World industry and the low skill, high unemployment situation of the Third World. Training was reasonably diverse and could afford opportunities for different kinds of evaluations. Training had been introduced before the government's tax incentive scheme to promote training and had been planned to involve line management and promote black advancement (see Cole 1982c, 1983b & c). However, Carlton Paper's existing training evaluation efforts were proving unsatisfactory to the company itself, except in the area of Sales Training. The reasons given echo those recorded in Brandenburg's (1982) study of training evaluation in the United States - the evaluative efforts were geared only to the immediate aspects of training and did not reflect the context of the total organisation.

1.3.5 Summary of Background

This overview of the background to the study has been conducted at three levels, international, national and company, and has afforded the opportunity to set both training and training evaluation at Carlton Paper in the context of training and training evaluation within the Republic of South Africa and in the United States of America. In doing so, it has been found that Carlton Paper shares in certain common trends and is exceptional in others. The company shares in the important task of contributing to the nation's learning enterprise by providing education and training on-the-job, both of a formal and non-formal nature. With regard to training evaluation however, Carlton Paper has proved to be an exceptional company. It was fairly exceptional within South Africa in attempting to conduct any form of training evaluation at all. It is exceptional even within the ambit of American companies, in seeking to conduct meaningful training evaluation, by encouraging evaluation research. This puts Carlton Paper in the forefront with those few South African companies which have taken training evaluation seriously.

1.4 Problem Situation

The features of the origin of and background to the study created several problem situations which it was the purpose of this dissertation to address.

1.4.1 The Need for Adequate Training Evaluation in South African Companies

In South Africa there has been a rapid expansion of industrial training in the private sector and considerable resources of time, expertise and money are now being committed to training. Much of this training was funded by the State through rebates on taxes for registered training schemes, but meaningful evaluation of such schemes was not required or conducted. Even for training which was paid for out of the company's own pocket, evaluation is seldom required by management and seldom conducted at more than a reaction level, immediately following course completion. Follow-through impact evaluations of training effectiveness through transfer of training to the job are seldom, if ever, conducted. At best, only training efficiency is evaluated.

Consequently, the real contribution of training to organisation effectiveness, or the real reason why it may fail to make a significant contribution, is never properly understood. Its cost-effectiveness is often considered marginal and training becomes an optional extra, expanding in boom times and shrinking when the economy is in recession. This is an irrational and wasteful, even possibly harmful way in which to approach training. It needs to be properly planned, implemented and evaluated if it is to make a significant contribution to organisation effectiveness. Consequently, there needs to be more and better evaluation of training in industry in South Africa than there is at present.

1.4.2 The Need for Useful and Usable Methods of Industrial Training Evaluation

The use of traditional methods of training evaluation has proved to be a stumbling block for the widespread practice of successful industrial training evaluations. Reasons include the fact that these methods are difficult to implement, requiring: that training programmes be held static for the duration of the experiment; the unethical withholding of training from a control group while it is provided for the experiment group; the near impossibility of controlling for all independent variables in the complex environment of a human laboratory; the exclusion of