

**THE TEACHING OF VOCATIONAL SUBJECTS IN SECONDARY SCHOOLS FOR  
INDIANS: A HISTORICAL-EDUCATIONAL SURVEY AND EVALUATION**

by

**RAJAN DAYANAND**

submitted in fulfilment of the requirements for  
for the degree of

**MASTER OF EDUCATION**

in the subject

**HISTORY OF EDUCATION**

at the

**UNIVERSITY OF SOUTH AFRICA**

**SUPERVISOR: DR F J PRETORIUS**

**NOVEMBER 1996**

## PRELUDE

This study provides a historical-educational evaluation of the teaching of vocational subjects at the Indian secondary school. The Indian secondary school curriculum is examined and evaluated and recommendations are made based on these findings for the future development of vocational education in contemporary South Africa.

The study is structured in the following manner:

\* Chapter One

Examines the concept of vocational education.

\* Chapter Two

Traces the development of Indian education since 1860.

\* Chapter Three

Retrospective look at the development of vocational education in the Indian education system.

\* Chapter Four

Provides an exposition of the vocational education curriculum at the Indian secondary school.

\* Chapter Five

Evaluates the vocational education curriculum.

\* Chapter Six

Recommendations for the future of vocational education in South Africa.

## KEY TERMS

Vocational education;

Indian education;

Evaluation;

Secondary school;

Technically/Vocationally biased;

Historical-Educational evaluation;

Curriculum;

Academic bias;

Occupational competence;

Entry level job skills;

## DEDICATION

I dedicate this thesis to the following pillars of strength in my life:

- \* My wife, Razia, thank you for your belief in me, motivation and inspiration. You were and still are the light at the end of the tunnel.
  
- \* My family, for your invaluable support during the initial years of my study.

R. DAYANAND

1997

## ACKNOWLEDGEMENT

I hereby wish to express my gratitude and appreciation to the following people for their contribution and assistance in enabling me to successfully complete this thesis:

- \* Officials (Education Planners, Subject Advisers and Staff in the Statistics Department) of the former House of Delegates
- \* Heads of Departments of the Historically Indian Technically/Vocationally Orientated Secondary Schools
- \* Dr. F.J. Pretorius (Thesis Supervisor)

R. Dayanand

1997

**CHAPTER ONE**

**THE CONCEPT OF VOCATIONAL EDUCATION**

1.	Introduction .....	1
1.1	Vocational Education - The Need? .....	3
1.2	The Definition of Vocational Education .....	4
1.3	The Difference Between Technical Education and Vocational Education .....	7
1.4	Conclusion .....	8
2.	The Concept of "Teaching" .....	10
2.1	Characteristics of the Teaching Situation .....	10
2.1.1	The Teacher .....	11
2.1.2	Learning Content .....	12
2.1.3	The Pupil .....	13
2.1.3.1	Guidance and Counselling .....	14
2.2	Conclusion .....	17
3.	Methodology .....	17
3.1	The Historical-Educational Research Method .....	18
3.1.1	Choosing and Delimiting a Theme .....	19
3.1.2	Investigation of the Theme in the Present .....	19
3.1.3	Formulating a Hypothesis .....	19
3.1.4	Investigation of Theme in Educational Past .....	20
3.1.4.1	Distinction Between Primary and Secondary Sources .....	20
3.1.5	Critical Evaluation of Data .....	20
3.1.6	Interpretation of Data and Writing of Report ..	21
3.2	Conclusion .....	21
4.	Data Collection Techniques .....	22
4.1	Quantitative Techniques .....	22
4.2	Qualitative Techniques .....	23
5.	Delimitation of Period .....	23
6.	Hypothesis .....	24

(II)

7. Delimitation of Research .....	25
8. Bibliography .....	28

(III)

**CHAPTER TWO**

**OVERVIEW OF THE HISTORICAL DEVELOPMENT OF INDIAN  
EDUCATION IN SOUTH AFRICA (1860 - 1994)**

1.	Introduction .....	30
1.2	The Arrival of the First Indians in Natal .....	31
1.2.1	The Concept of 'Indentureship' and its Implications .....	32
2.	Development of the Indian Education System .....	33
2.1	The Early Beginnings .....	34
2.1.1	Missionary Effort (1860 - 1879) .....	34
2.2	Establishment of the Immigrant School Board (1879) .....	36
2.3	Responsible Government and Indian Education .....	36
3.	Education in the Union of South Africa .....	40
3.1	The Cape Town Agreement of 1927 .....	42
3.2	"Self-Help" - The Indian Resolve .....	43
3.3	Platoon Classes .....	44
3.4	Secondary School Education .....	45
3.5	The Natal Indian Education Act No. 61 of 1966 .....	45
3.5.1	Indians Become Involved .....	49
3.5.2	School Accommodation .....	49
3.6	The Introduction of Compulsory Education (1973)....	49
3.7	Differentiated Education .....	50
3.7.1	Streaming (1968) .....	50
3.7.1	School Phases (1973) .....	51
3.7.3	The Practical Course (1973) .....	53
3.7.4	Subject Based Differentiation .....	53
4.	Establishment of the Department of Education and Culture: House of Delegates .....	54
5.	Democratisation of South Africa (April 1994) .....	58
5.1	Implications for Education .....	58
5.2	Control and Administration .....	58
5.3	Post-Democratic Era (27 April 1994) .....	61



(IV)

6. Conclusion .....	64
7. Bibliography .....	66

**CHAPTER THREE**

**DEVELOPMENT OF VOCATIONAL EDUCATION**

1.	Introduction of Vocational Education in the Indian Secondary School (1924 -1996) .....	68
1.1	Retrospective Look at the Development of Vocational and Technical Education for Indians in South Africa .....	69
1.2	Early Development .....	69
1.2.1	The Indian Technical Education Committee .....	70
1.2.2	Establishment of the M.L. Sultan Technical College .....	71
1.2.3	Impetus of Technical and Vocational Education .....	72
1.2.3.1	Nature of the Practical Course .....	74
1.2.4	Development Since 1982 .....	77
2.	Vocational Education Curriculum .....	80
2.1	Introduction .....	80
2.2	The Need for Change .....	83
2.3	Nature of the Existing Curriculum .....	86
3.	Conclusion .....	88
4.	Bibliography .....	89

(VI)

**CHAPTER FOUR**

**CURRICULUM**

1. Introduction ..... 92

**PART I**

2. The Junior Secondary Phase ..... 93

2.1 Curriculum Choices ..... 93

2.1.1 The Junior Secondary Phase (1970's) ..... 93

2.1.2 The Practical Course ..... 94

2.1.3 The Junior Secondary Phase (1990's) ..... 95

2.1.3.1 First Year (Comprehensive Secondary School) ..... 95

2.1.3.2 Second and Third Years (Comprehensive Secondary School) ..... 96

2.1.3.3 Second and Third Years (Technical Secondary School) ..... 98

3. Conclusion ..... 99

4. Description of Vocational Subjects In the Junior Secondary Phase (Standards 6 - 7) ..... 101

4.1 Comprehensive Secondary School ..... 101

(i) Industrial Arts ..... 101

(ii) Technical Drawing ..... 103

(iii) Needlework and Clothing ..... 104

(iv) Home Economics and Housecraft ..... 105

4.2 Exposition of Vocationally Orientated Subjects Offered at the Technical or Technically Bias Secondary School ..... 106

(i) Trade Theory and Workshop Practice (Standard 6) ..... 107

(ii) Technical Theory and Practice (Standard 7) ..... 108

5. Conclusion ..... 110

(VII)

**PART II**

1. The Senior Secondary Phase .....	110
1.1 National Certificate Course .....	110
1.1.1 Admission Requirement .....	110
1.1.2 Duration of Course .....	111
1.1.3 Certification .....	111
1.1.4 Course Structure .....	111
(i) Commerce .....	111
(ii) Clothing Production .....	112
(iii) Hair Care .....	112
(iv) Art .....	112
(v) Machining Trades .....	113
(vi) Motor Trades .....	113
(vii) Furniture Making .....	114
(viii) Metal Trades .....	114
(ix) Electronic Study Fields .....	115
(x) Refrigeration and Ventilation Trade ...	115
(xi) Building Trade .....	116
(xii) Electrical Study Fields .....	116
1.1.5 Summary of Direction of Study Offered .....	117
1.1.6 Objective of the National Certificate Courses .....	117
1.1.7 Description of the National Certificate Courses .....	118
1.1.7.1 Hair Care .....	118
1.1.7.2 Commerce .....	118
1.1.7.3 Art .....	119
1.1.7.4 Furniture Making .....	119
1.1.7.5 Clothing Production .....	119
1.1.7.6 Motor Mechanics .....	119
1.1.7.7 Plumbing .....	120
1.1.7.8 Refrigeration .....	120
1.1.7.9 Motorbody Work Repairs .....	120
1.1.7.10 Fitting and Turning .....	121
1.1.7.11 Radio and Television .....	121
1.1.7.12 Motor Electrical .....	121
1.1.7.13 Electricians' Work .....	121
1.1.8 Period Allocation .....	122
1.1.9 Promotion Requirements .....	122
2. Technical Course ("T" Course) .....	122

(VIII)

2.1	Admission Requirements .....	122
2.2	Duration of Course .....	123
2.3	Certification .....	123
2.4	Course Structure .....	123
2.5	Period Allocation .....	123
2.6	Promotion Requirements .....	124
2.7	Objective of the "T" Course .....	124
3.	Essential Differences Between the N and the "T" Courses .....	125
4.	Technika Subjects .....	126
4.1	Description of Disciplines .....	126
4.1.1	Technika Electronics .....	126
4.1.2	Technika Electrical .....	126
4.1.3	Technika Mechanical .....	126
4.1.4	Technika Civil .....	127
4.2	Subject Sets for the Technika Direction of Study .....	127
4.3	Admission Requirements .....	127
4.4	Certification .....	128
4.5	Promotion Requirements .....	128
4.6	Scope for Further Studies .....	128
5.	Conclusion .....	128
6.	Bibliography .....	130

**CHAPTER FIVE**

**EVALUATION**

1. Introduction .....	132
1.1 Vocational/Technically Orientated Schools .....	133
1.1.1 Growth in the Number of Vocational/Technically Orientated Secondary Schools .....	137
1.1.2 Teacher Population .....	138
1.1.3 Pupil Population .....	138
1.1.4 Workshops and Other Facilities .....	139
1.2 The N-Course .....	141
1.2.1 Unique Possibilities of the N-Course .....	141
1.2.2 Lack of Preplanning .....	142
1.2.3 Course Content .....	143
(i) Curriculum .....	143
(ii) Practical Component .....	144
(iii) Certification .....	144
(iv) Student Work Experience Programme (SWEP)..	146
(v) Availability of Qualified Teachers .....	147
(vi) Support Services .....	150
(vii) Promotion Requirements and its Consequences (N-Course) .....	151
(viii) Status of Vocational Education .....	152
* Academic Bias .....	152
* Stigma .....	153
(ix) Cost of Vocational Education .....	154
(x) Guidance and Counselling .....	154
2. Conclusion .....	155
3. Bibliography .....	157
4. Appendix 1 (Accreditation for Hairdressing and Cosmetology Industry Training Board)	
5. Appendix 2 (Examination Requirements)	
6. Appendix 3 (National Certificate Courses)	
7. Appendix 4 Questionnaire	

(X)

## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

1. Introduction .....	159
2. Conclusion in Respect of Vocational Education in the Historically Indian Secondary School .....	159
3. Recommendations .....	162
3.1 Vocational Educators .....	162
3.1.1 Supply and Demand of Teachers .....	163
3.1.2 In-Service Training .....	163
3.1.3 Public Relations Function .....	164
3.1.4 Personnel Design .....	164
3.2 The Curriculum .....	165
3.2.1 Prescriptive Approach .....	166
3.3 Certification .....	168
3.3.1 Certificate of Pre-Vocational Education (CPVE) .....	168
3.3.2 Modularisation .....	169
3.4 Work Study Programmes .....	170
3.5 Cluster schools .....	172
4. Administrators of Vocational Education .....	173
5. Contemporary Educational Development in South Africa .....	174
6. Areas for Future Research .....	177
7. Conclusion .....	178
8. Bibliography .....	180

## CHAPTER ONE

### THE CONCEPT OF VOCATIONAL EDUCATION

#### 1. Introduction

It is interesting to note the dynamic changes that are sweeping throughout the entire country in the "new" democratic South Africa. Politically, socially, economically and educationally the country is in the process of breaking down old entrenched traditions and value systems. *"Change is the way in which the future intrudes into the lives of people. As the field vocational education sets foot in a new decade it is important to consider changes and conditions that surround the field..."* (Swanson 1981:1)

A skilled, motivated and competent labour force is becoming more and more critical to the country. It is becoming crystal clear that unprecedented levels of co-operation between employers, labour unions, government departments and education authorities are needed to take us into the challenging future.

One of the greatest challenges that faces education today is education for relevance. There seems to be according to Rautenbach (1989:88) a mismatch between the output of the educational system and the needs of South Africa as a developing country. Less effective efforts at restructuring education during the last decade are attributed to ineffective adaptation to change or "failure to modernise". The South African schooling system to a large degree has failed to meet the demands of a changing society and the education system is still very much academically biased. The traditional curriculum taken from European countries is still being used with very little adjustment. As a result there is an oversupply of matriculants who are armed with a general academic education in the vain hope of finding a job.



Professor Moulder in his assessment of education in the Natal Mercury, October 24 1989, states the following:

*"This bias towards an academic education is rooted in a Colonial mentality that sees education as a preparation for privilege rather than as a road to self-reliance. Its characteristics and consequences were described and criticised by the main committee of the HSRC investigation into education:...a large part of the White population enters the world of work without vocational qualifications, skills or appropriate value systems... the abstract world of ideas is often considered to be of greater importance than the practical world... there is often a tendency to look down on manual and practical skills".*

The question now arises, should schools be using a conveyor belt system of producing generalists or should the academically biased education also educate for a vocation? Emphasis on vocational education is fast becoming a global phenomenon. The answer is very simple and clear cut - our world is changing rapidly as a result of momentous advances in technologically and the information explosion. The occupational structure is in a state of flux with new jobs being created daily and jobs becoming outdated. Old methods, such as the mother or father passing onto their children the skills necessary for occupations which were learnt from the previous generation, to meet manpower requirements are long outdated. As society in general has become more complex and highly differentiated the task of education for occupation has been delegated to schools. Education policy makers South Africa have tried gallantly to meet the new demands but as was stated earlier, schools are still not fulfilling the vocational educational role as society demands. Rautenbach (1989:91) states the following about education in South Africa: *"There is a serious imbalance between technical and academic education: only about 11% of the White and less than 1% of the Black pupils between standard 8 and 10 were receiving technical education in 1981 compared to about 30% in developing countries like Israel and Taiwan."*

This is further illustrated by his [Rautenbach's] manpower predictions provided in the same journal article. [Table 1]

TABLE 1

	1980	2000
Entrepreneurs	1	1
Skilled	5	5
Semi-skilled	19	26
Unskilled	28	45

*"The full extent of the South African crisis is brought into focus when one considers that, despite the rapid increase in schooling the South African workforce will be less skilled in the year 2000 than in 1980. A concomitant tendency is a rising oversupply of matriculants from general academic education who cannot find employment to meet their expectations."* (Rautenbach 1989:89) The ANC Discussion Paper on Education (1994) also pointed out that there was an imbalance between academic and technical education.

### 1.1 Vocational Education - The Need?

Vocational education has the advantage that it can bring about a closer connection between school and society. It, that is vocational education, also increases the individuals' options in terms of relevance of education and self-realisation. Systematic vocational education is a prerequisite for the acquisition of competence needed for self-realisation in the modern technologically dominated society. The relationship between schooling and the working mode of life needs to be perceived in a more dynamic way, because if education is viewed as preparation for life, then it must be noted that, *"Our lives are organised around our jobs. The work ethic is deeply embedded in our cultural values."* (Fuller & Whealon 1979:19)

Therefore if education is a preparation for life then vocational

education must become a priority. The highly rationalised and efficiency-orientated world of work demands of workers a high level of entry level job skills, and it is seen as the task of the school to ensure that job seekers are equipped with these skills. Vocational education *"reflects both the changing needs of society and the changing expectations of individuals."* (Swanson 1981:251)

The question now arises, what is vocational education?

## **1.2 The Definition of Vocational Education**

There is a problem of semantics and definition. The concept vocational education is used so widely and variedly that a precise definition is not always possible or some would say impossible. A definitional disparity exists and a definition usually depends upon the educator's/researcher's point of view.

Young's quotation of Harold S. Baker (1992:1) stated that *"vocational education... should provide each individual with the opportunity of resolving for himself such questions as what work is, its physical and spiritual significance to him, its significance for society at large and its relationship to recreation and leisure."* Baker in his view feels that vocational education should prepare the child holistically for the world of work. He also feels that the child must see the relationships between a vocation and other aspects of his life-world to enable him/her to interact meaningfully with his/her adult mode of life.

Glendenning sees vocational education as *"specific preparation for and participation in gainful employment in an occupational field of social value."* (Young 1992:1)

D.E. Baker (1982:27) states that *"vocational education has two purposes today: training and retraining people for the world of work, and participating in local economic development through a*

*partnership with business and labour.*" Once again vocational education is seen as preparation for the "world of work" .

Foster (1979:7) states that *"vocational education has always been considered as education that prepares people to go to work,..."*. The idea of preparation for work clearly evolves. Foster (1979:7) goes on to state that in order to evaluate the success of education from the point of the person being educated, the following questions need to be answered: *"Are they prepared in the skills considered necessary by the occupations? / Do they have the appropriate attitudes for successful work experience? / Do they obtain jobs in class-room related occupations? / Do they continue in these jobs?"* From these questions it can clearly be deduced that Foster sees vocational education as preparing the pupil for entry level job skills, in other words that the pupil must be able to perform tasks in his field of occupation immediately. The potential worker must be equipped with both theoretical and practical aspects of his/her vocation.

*"In its broadest sense vocational education is that part of education which makes an individual more employable in one group of occupations than in another."* (Evans 1971:1) Evans' view is that a person must be educated in such a manner that he/she can fit into a number of occupations [group of occupations]. He therefore feels that vocational and general education must be closely interwoven in that they supplement one another. But like previous definitions he sees vocational education as a preparation for the world of work.

The Concise Oxford Dictionary of Current English (4th Edition) defines vocation as: *"divine call to sense of fitness for, a career or occupation."* Once again vocational education is seen as preparation for an occupation.

UNESCO's (1978:17) definition of vocational education is in complete agreement with those of Foster and Evans when it states that vocational education is *"designed to prepare skilled*

personnel at lower levels of qualification for one or a group of occupations, trades or jobs. Vocational education, usually provided at upper secondary level, includes general education, practical training for the development of skills required by the chosen occupation and related theory. The proportions of these components vary considerably but the emphasis is usually on practical training."

Fiat Lux (Vol. 21 No. 1 1986) provides the following definition of vocational education: "Vocational education can be described as that part of education that prepares a person for a productive career in a particular field of endeavour and for life in general...". It is further stated that "vocational education covers a large number of careers, ranging from the education of secretaries, nurses, teachers, to the wide field of technical vocational education for industry and agriculture. Vocational education is therefore directly responsible for supplying the input of trained manpower into an economy as well as for the development of manpower during careers." According to the above-mentioned definitions one can argue that vocational education therefore presents one with the logical end points of the whole process of education.

In the Indian Education Act 61 of 1965, which influenced Indian education a great deal, technical and vocational education is referred to as "education and training [theoretical or practical or both theoretical and practical] consisting of:

- o A course that includes education and training in any prescribed trade or any prescribed technical subjects; and
- o A course of education and training in woodwork, metalwork or any other practical art or craft not being specific education or training for any prescribed trade and the duration of which does not exceed 8 hours per week, irrespective of the number handicraft subjects taken."

(Dalton 1995:1-191/2)

It is clearly evident that vocational education can be defined as preparing the educand for a career in order to fulfil his/her adult responsibilities. For the purpose of this study the definition of UNESCO will be considered as a working definition.

### **1.3 The Difference Between Technical and Vocational Education**

*"The term technical education carries the connotation of specific knowledge and understanding of the theory of know-how as compared to manipulative skill. The definitions-of-terms bulletin of the American Vocational Association defines technical education as ... education to earn a living in an occupation in which success is dependent largely upon technical education and understanding the laws of science and technology as applied to modern designs, production and service. / Technical education must therefore be defined in terms of the job or occupation."* (Strydom 1980:2)

Venn in the same book sees the origin of technical education as *"both vocational and technical education were products of essentially the same societal forces: they were designed to meet new educational needs of the industrial classes and had a common philosophy of education: they were comrades in arms in the heavy push for the acceptance of vocational forms of education."* (Strydom 1980:2)

From the above it can be clearly noted that vocational and technical education are almost impossible to separate, however it must be stressed that the technical and vocational education concepts are not one and the same thing. The difference between technical and vocational education becomes clear in the definition of UNESCO.

UNESCO's (1978:17) definition of technical education is given as: *"Education designed at upper secondary and lower tertiary levels to prepare middle-level personnel [technicians, middle management, etc] and at university level, to prepare engineers and technologists for higher management positions. Technical*

*education includes general education, theoretical, scientific and technical studies and related skills training. The components of technical education may vary considerably depending on the type of personnel to be prepared and the education level."* Young in his definition places emphasis on occupational competence.

Young (1964:6) quotes Glendenning's definition of technical education: *"That part of vocational education in which the theoretical content of occupational competence is emphasised and the manipulative aspects are minimised."*

#### **1.4 Conclusion**

From the discussion on the meaning of vocational and technical education it can be clearly noted that vocational education forms the umbrella concept which includes the aspect of technical education. It was also emphasised that the concepts of vocational education and technical education are not synonymous, because these two concepts differ considerably. According to Foster (1979:7) technical education prepares one for occupational competence [preparation for a specific job] whereas, according to Evans (1971:1) and Baker (1992:1), vocational education prepares a person for a group of occupations in a particular field and for life in general. It also became clearly evident that not all vocational education is technical education. Therefore technical education falls under the umbrella concept of vocational education.

Secondly, the discussion on the meaning vocational education emphasised the fact that common to all definitions, is the inescapable fact that vocational education specifically implies the preparation of a person for the world of work. It refers to equipping a person with the necessary skills and expertise to competently fulfil his/her role in the world of work, as part the ultimate aim of all education and that is adulthood.

In light of the views presented above, for the purpose of this

study vocational education for Indians will be defined as follows:

Subjects at secondary school level for Indians that prepares the child specifically for [an] occupation/s. In other words subjects that provide the necessary skills to enable the pupil to be absorbed into the workplace.

The following subjects will be regarded in terms of the definition provided for this study as vocational subjects:

Home Economics, Technical Drawing, Technika Electronics, Woodwork, Metalwork, Typing, Technika Electrical, House-craft, Electricians-work, Electronics, Needlework and Clothing, Motor Mechanics, Fitting and Turning, Wood-working, Welding and Metalworking, Plumbers Theory, Diesel Trade Theory, Electrical Trade Theory, Motor Bodywork Theory, Motor Trade Theory, Industrial Electronics, Engineering Drawing, Engineering Science, Building Science, Building Drawing, Platers and Structural Steelworkers Theory, Fitting and Machining Theory, Bricklaying and Plastering Theory, Carpentry and Joinery Theory, Plating and Structural Steel Drawing, Refrigeration Trade Theory, Furniture Makers Theory, Furniture Design, Motor Electrical Theory, Welders Theory, Retailing [Principles and Practice], Factory Administration and Communication, Office Practice, Communication and Department, Pattern Construction and Grading, Applied Clothing Production, Computer Practice, Business English/Afrikaans, Economic and Legal Environment, Applied Accounting, Public Administration, Career Orientation, Small Business Management Entrepreneurship, Information Processing, Art of Entertaining, Hair Care Theory/Practicals, Cosmetics Theory/Practicals.

(Department of Vocational Education - House of Delegates)

It is also recognised that all general and vocational education is intertwined, in that most if not all, subjects taught at the Indian secondary school is of vocational and occupational value. *"However all general education subjects could be taught in a way which would emphasise their occupational value and relevance to society as a whole."* (Evans 1971:1) It is only when pupils see a relationship between what they are made to learn in the classroom that education becomes meaningful and related to their



life-worlds.

## **2. The Concept of "Teaching"**

The teaching phenomenon cannot be discussed if it is isolated from the phenomenon of education. Teaching takes place within the education framework, therefore teaching and education are inextricably interwoven. The phenomenon of education and the concept of teaching will be clarified in Chapter 1 paragraph 2.1.

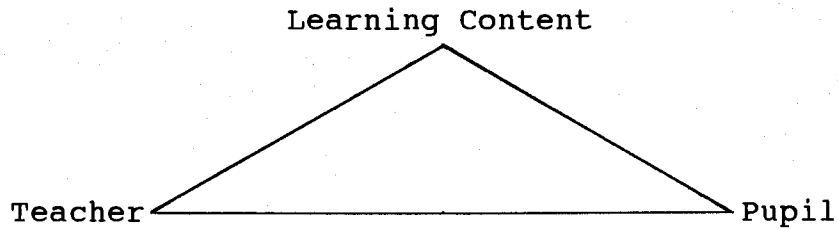
The concept of teaching, according to Gunter (1982:10), can be defined as *"an activity by which a human being, usually, but not necessarily, a child or youth, that is someone that is not yet adult, is taught by another person, as a rule, but not always, an adult, to know and to do certain things. Teaching is always concerned with helping a pupil to acquire knowledge and skills."* It can be clearly noted that teaching must have an educational aim, and that two people and learning content must be involved in the teaching process. The ultimate aim of education is the attainment of responsible adulthood. The teacher, who is responsible for the child reaching his/her ultimate aim uses learning content, extracted from reality [for the purpose of this research learning content will be vocational subjects] to develop the child's innate potential.

Innate potential of a child refers to the ability to be educated and to develop into a responsible adult. The child, if guided by an adult, who assumes the role of a teacher will reach the ultimate aim of education, and that is adulthood. (Gunter 1982:10)

### **2.1 Characteristics of the Teaching Situation**

The teaching situation comprises of 3 essential components namely, the teacher, the adult in the making [pupil] and learning content. [Figure 1]

FIGURE 1



Source: Stuart, van Niekerk, Mc Donald and De Klerk 1985:22

When all these components are present and are relating to one another in an a harmonious manner [with an aim in mind] then the situation can be referred to as a teaching situation. (Gunter 1982:123-4) [Figure 4]

### 2.1.1 The Teacher

The teacher, who is usually professionally qualified, has the task of unlocking and presenting the learning content to the pupil in order for the child to attach meaning and significance to it. It becomes the teacher's task because of his vocational competence and responsibility to establish a relationship that is characterised by love and security in order to facilitate effective teaching.

One of the tasks of the teacher is to, "on the one hand the teacher [has] to anticipate the future of the child. Anticipation means that the teacher experiences in advance the way the child's lifeworld will unfold. The learning contents which are presented at school [the curriculum] in fact gains significance in leading the child towards a particular quality of reality control [responsible adulthood]." (Stuart, van Niekerk, Mc Donald and De Klerk 1985:23)

The insightful teacher is one who knows his/her pupils well, the teacher will know the dreams, fears and aspirations of his/her

pupils and when imparting the learning contents to them he/she will always take cognisance of this.

Teachers of vocational subjects should be able to make pupils aware of what awaits them in respect of job opportunities, changes in the world of work and keep abreast of new developments in technology and industry, and their teaching must reflect this. It also becomes the teacher's responsibility to be familiar with new developments within the sphere of his/her subject area, to make every possible effort to expose his/her pupils to the future lifeworlds and most importantly the teacher must be qualified. One of the aims of this study will be to establish the types of qualifications that teachers of vocational subjects possess and support services provided for them.

### **2.1.2 Learning Content**

In a primitive and uncomplicated society, the child comes into contact daily with a simple and unsystematised culture. A father takes his son with him when he goes hunting, he teaches him the names and the usefulness of trees and plants, and the son helps the father by taking care of the cattle and other animals or by working in the fields. Similarly, the girls in the company of their mothers or older women learn that there are certain necessary things which a woman must be able to do. Introduction of the rising generation to a common culture happens in free and natural way.

However, the task of cultural transmission in contemporary society takes a great deal of effort and is complicated even more on account of new developments such as the knowledge explosion which shrank the world into a "village" and the evolution of a highly complex and differentiated society. The child is able to get a grip on the adult's world and to keep abreast of fast changes by means of learning content transmitted to him/her by the teacher in the classroom. The content of learning which forms a link between the child's lifeworld and the adult's

lifeworld eventually becomes a bridge, which provides the child with a safe crossing to life and its demands. Content of learning plays a very important part in the child's successful transition into the adult world. For that reason a great deal of hard thinking will have to be done about the nature of learning content, and the choice and quantity of learning content as well as the arrangement. (Griessel, Louw and Swart 1986:29-30)

It is of paramount importance that one of the aims of education is to prepare the child for the world of work and therefore today the teaching of vocational subjects is beginning to make great inroads into the curriculum.

Learning content for the purpose of this research will refer to vocational subjects [Chapter 1 para. 1.4]. It is the task of the teacher to present the learning content to pupils in such a manner that the child is motivated to learn. The learning content must be analysed and presented to the learner, taking into account his/her developmental level, the aim of the subject and the broad aim of education.

The second aim of this research will be to examine the vocational curriculum in terms of the following:

- o the balance between academic and vocational education,
- o the vocationally orientated subjects offered and to briefly examine the aims of selected vocational subjects

### **2.1.3 The Pupil**

The child is a being in the making, he/she has the need and urge to take his/her rightful place in his/her lifeworld. The child is therefore open to education and the content of education [taken from reality] appeals to the child. The child although to be led and educated must at all times be motivated to learn. One of the most effective motivators is to make the pupil grapple

with a problem that affects him/her or will affect him/her in his/her future.

All education is future orientated, and it has invariably become the task of the school to prepare the child for a vocation. What better problem to give a child to grapple with than something that he/she will do for most of his/her life, and that is, his/her vocation?

But it must be understood that all pupils are unique, that there are individual differences and that each pupil has his/her conception of what his/her lifeworld is or should be like. It therefore becomes vital that the pupil's uniqueness, individuality, developmental level, aptitude, interest and cognitive ability must be taken into account when the curriculum is being planned. (van Schalkwyk 1986:20-26)

*"In this fast-changing world where the changes which occur are more revolutionary than evolutionary, the child is confronted by a number of confusing possibilities from which to choose."* (Griessel, Louw and Swart 1986:27) It therefore becomes essential that pupils be given sound advice when required to choose subjects in the senior secondary phase of schooling. Although the subject teacher offers the pupil guidance, this task falls within the domain of the guidance counsellor of the school.

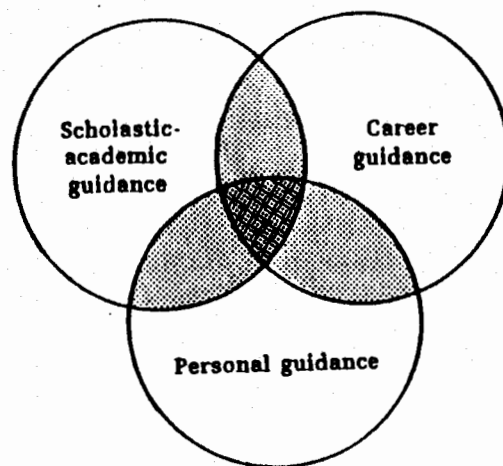
It is important that the counsellor be specialised in the field of vocational education in order to offer the pupil the best possible advice. The choices that the pupil makes in the senior secondary phase of schooling usually determines what career path he/she will follow for the rest of his/her life. Therefore it becomes the task of counsellors, supporting and auxiliary services to prepare the child for these decisions that he/she has to make.

### **2.1.3.1 Guidance and Counselling**

Every child should be helped on his/her path to adulthood to make responsible choices from the multiplicity of choices that he/she faces constantly.

The following components [Figure 2] make up guidance and counselling in the school setting: educational guidance, vocational guidance and personal counselling.

FIGURE 2



Source: UNISA 1991:26

- Educational counselling involves the giving of information in respect of choices regarding subject alternatives.
- Vocational guidance involves a continuous assessment of interests, aptitude and potential and providing information on different careers.
- Personal counselling is related to both vocational and educational counselling, but it is mainly concerned with emotional disturbance and behavioural problems.

(Behr 1977:168)

Guidance and counselling is an on-going process and both subject teacher and guidance counsellor play a vital role in the child's development.

De Klerk and Nieuwenhuis (1982:22) succinctly emphasised the role of guidance and counselling in pupils' development:

- o To enable to become aware of the demands of occupations in the modern business and industrialised world, such as the qualifications necessary for admission to certain occupations; the manpower needs of the country; opportunities for promotion within occupations and the advantages and disadvantages of certain occupations.
- o To afford the pupils the opportunity of sharing in the planning and development of their choice of subjects and field of study with a view to their future occupation, and to impress upon them the close ties between these choices at school and the ultimate success of their choice and practice of an occupation
- o To assist pupils in developing a positive self-image, as well as the ability to evaluate their strong and weak points and in so doing to choose a realistic and satisfactory occupation that will be in keeping with their way of life.
- o To enlighten pupils as to the variety of occupations within a specific field and the possibility of changing one's work in that field as well as the opportunities and limitations of that particular field. In other words, any attempt is made to make pupils aware of both the horizontal and vertical opportunities within the labour market.
- o To encourage pupils to complete their school training by making them aware of better job opportunities open to them if they further their academic studies.

It will be the aim of this study to determine the criteria [if any] that are used in the selection of pupils that follow the vocational education course and the type of counselling offered

to these pupils.

## 2.2 Conclusion

Teaching is one of the most important components of education. Education is impossible without teaching. Teaching comprises of three further components namely the learning content, the teacher and the pupil. [Figure 4] These three components must be present for a teaching situation to exist and more importantly these components must be in harmonious dialogue.

## 3. Methodology

Any scientific investigation must be carried out within the parameters of sound methodology. *"Research is a systematic process of collecting and logically analysing information [data] for some purpose."* But it must also be understood that there are many methods that can be used in the investigation into a problem. *"Research methods [sometimes called methodology] are the ways one collects and analyses data."* (Schumacher and Mc Millan 1993:8)

The following five dimensions of research as elucidated by Venter in his book the Grounding of History of Education: An Introduction was taken into cognisance when methodology was contemplated for research into the topic under investigation:

- o The Sociological Dimension:-  
All research is conducted within a particular community. In this research this community is represented by the educational sphere, specifically the secondary school.
- o The Ontological Dimension:-  
Research is always directed at some aspect of reality. Reality, in this research, is represented by the Indian secondary school.



- The Teleological Dimension:-  
Implies that research is an intentional and goal-directed activity, directed at an understanding and explanation of the theme of research. The theme in this research is the teaching of vocational subjects in the Indian secondary school.
- The Epistemological Dimension:-  
Besides understanding and explaining it includes arriving at true and valid pronouncements. The pronouncements are made in the evaluation and recommendation chapters. [Chapters 5 and 6]
- The Methodological Dimension:-  
This implies that scientific research must be conducted according to objective [critical, balanced, non-biased, systematic and controllable methods].

The methods employed in this research ensures that objectivity is of the foremost importance. According to Venter (1989:110) one should guard against the "*danger of a method - monoistic attitude*". In order to be balanced, non-biased, systematic, objective and critical more than one method was used to elucidate the essential characteristics of the theme.

### **3.1 The Historical-Educational Method**

This method is also known as the "*problem-historical or thematological method*" (Venter 1989:111). The following sequence of steps is followed when this particular method is employed: [Figure 3]

#### **3.1.1 Choosing and Delimiting a Theme**

A suitable theme in terms of the following needs to be carefully chosen: it must be topical, interesting and relevant.

The theme under investigation fulfils the above-mentioned criteria.

The following pronouncements according to Venter (1989) need to be taken into account:-

- o Has the topic been researched or is it a new area of investigation? The theme under investigation has been researched but not from a teaching perspective.
- o Will the research findings contribute to our knowledge and help with future developments? It will enable us to better understand the theme in its present context, in that positive and negative aspects will be acknowledged and recommendations for the future will be made. [Chapter 6]
- o Is there a wide range of primary sources? Primary sources do exist for [Indian] educational endeavours for the past 30 years but prior to this, sources are scarce.

### **3.1.2 Investigation of the Theme in the Present**

A comprehensive study was carried based on the topic as it exists today. The investigation included a literature study of what happened in the past regarding vocational education in the Indian secondary school, the developments of present day and proposed future developments.

### **3.1.3 Formulating a Hypothesis**

*"Landman (1980:49) described a hypothesis as an assumption which is supported by previous research and is the outcome of reflection: on a problem that describes the thoughts of the researcher or the most effective progression and what the outcome of his research will be, which has a good chance of being correct and is of a scientific nature."* (Venter 1989:113)

A hypothesis if worded scientifically provides the researcher with a strict and accurate guideline within which to conduct his/her research.

### **3.1.4 Investigation of Theme in Educational Past**

In this phase of the investigation the educational past was probed by investigating and describing the past using the theme as a guideline. [Chapters 2 and 3] As far as possible primary sources were used, but where primary sources were not available, secondary sources were dealt with as critically as possible. [Chapter 3]

#### **3.1.4.1 Distinction Between Primary and Secondary Sources**

The distinction between primary and secondary sources, according to Venter (1989), can be summarised as follows:-

##### **Primary Sources**

Encompasses relics that were not deliberately preserved to serve as a source of information. Documents written by people who participated in or were eyewitnesses to events, can be considered to be primary sources. [Chapter 2]

##### **Secondary Sources**

This is the repetition [in the form of a report or recount] of an eyewitness or participant.

### **3.1.5 Critical Evaluation of Data**

All data used underwent extensive criticism. Data was considered to be imperfect until proven to be authentic. Two forms of criticism were used namely: external and internal criticism.

##### **External Criticism**

This type of criticism was used to determine whether the document was genuine. [Chapter 5]

## Internal Criticism

This was used to determine whether the information contained in the document was reliable and acceptable. Data was tested for accuracy and credibility. [Chapter 3]

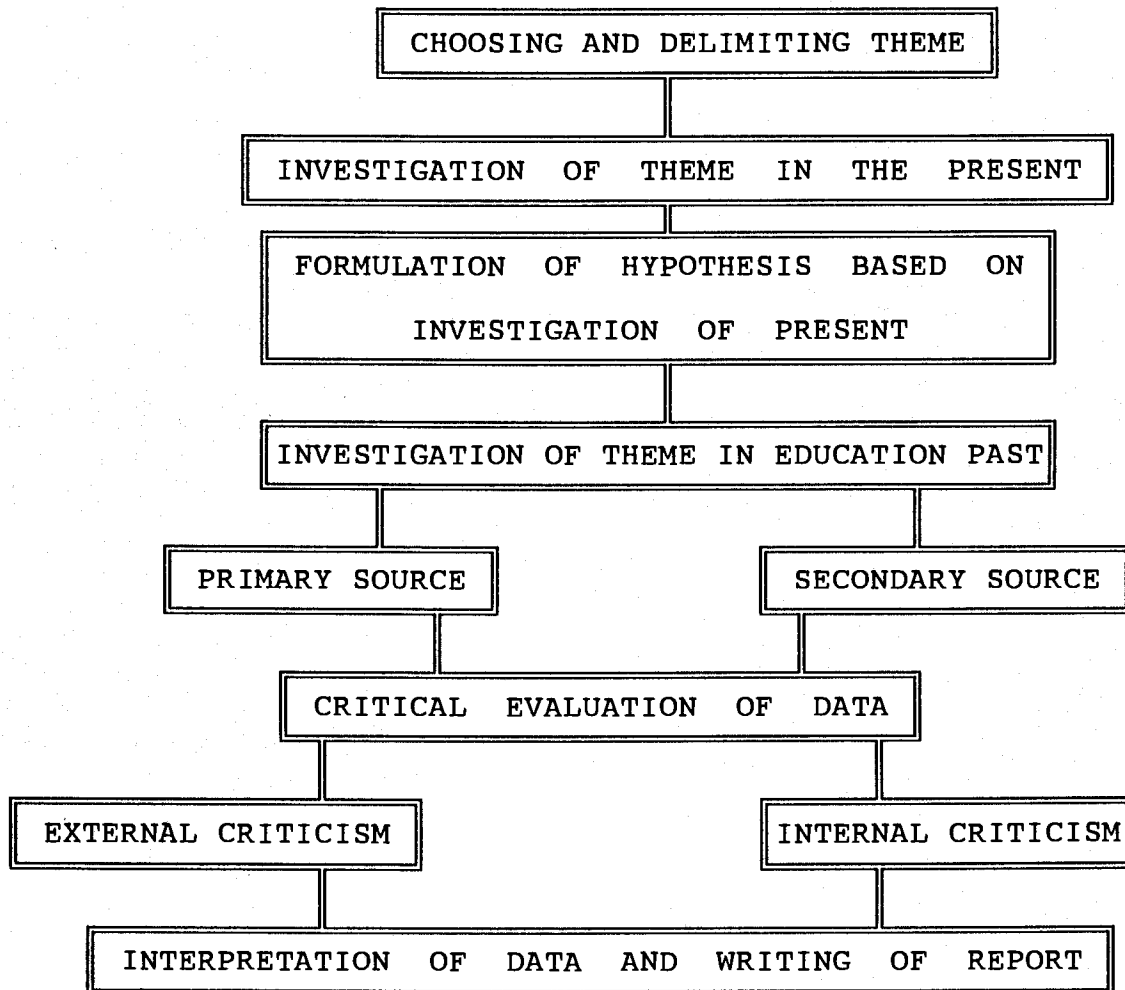
### **3.1.6 Interpretation of Data and Writing of Report**

In this phase the report is written and the researcher links his/her findings to the theme under discussion, thereby contributing to knowledge for future use. The hypothesis must be examined [tested] and this will help the researcher in writing his/her report. The theme must be described as it developed through the ages. Conclusions and recommendations for the future are made based on findings. [Chapter 6]

## **3.2 Conclusion**

It must be understood that although it is possible to classify methods into units by naming them, it is impossible when carrying out research to use one specific research method throughout one's investigation. But rather a combination of methods was used to elucidate the essentials of the theme although the dominant method used was the historical-educational method. Threads of other methods such as the descriptive phenomenological methods will also be detected.

FIGURE 3



Diagrammatic Representation of the Problem-Historical Method of Investigation

#### 4. Data Collection Techniques

During the course of this investigation a number of data collection techniques were made use of, which encompassed both quantitative and qualitative methods.

##### 4.1 Quantitative Techniques:-

Standardised Interviews

This type of interview entailed a person to person interview with the subject and the interview schedule consisted of structured and semi-structured questions. [Chapter 3]

#### Questionnaires

This technique required the respondents to complete a questionnaire. [Chapter 4]

### **4.2 Qualitative Techniques:-**

#### Documents

Extensive use was made of documents in the form of journals, newspapers, official minutes, regulations and any other documents that had any significance on the theme.

### **5. Delimitation of Period**

The period of research spans 1860 to 1995. The Indian Education System developed in such leaps and bounds that restricting the research to a particular period will result in momentous developments being overlooked.

The year 1860 has been chosen because the first Indian settlers arrived in South Africa during the course of this year. It was decided to cover the period 1995 because not only is 1994/1995 a watershed era in the realm of South African politics but that it also heralded dramatic change to the entire fabric of the education system, including Indian education.

The historical-educational survey [in terms of development of the teaching of vocational subject] will be documented for the period 1860 to 1995. this phase of the research will comprise of documenting the development of vocational education in the Indian secondary school.

The evaluation of the teaching of vocational subjects in the Indian secondary school will concentrate on developments during the last six years [1990-1995]. Preliminary literature studies have indicated that vocational education came to the fore during this period. *"Present day South Africa may be regarded both as a kaleidoscope of racial, ethnic, cultural and religious groups"* (Ireland 1970:267), which begs the question: why the investigation into Indian education?

The growth of vocational and technical education among the Indian community in South Africa is particularly significant when seen from the perspective that *"technical and university education have played a very important role in the economic progress of the Indian community."* (Kuppusami and Pillay 1978:67) The economic contribution and achievements in the field of education of the Indian community *"has been insufficiently recognised [and this] contribution could have been vastly greater if had not been cramped by artificial and irrational restrictions."* (Theoria 1960:28)

The Indian settlers that arrived in 1860 did not know the practical significance and the economic value of vocational education, as most were either labourers or merchants. Secondly, in the 1920's the Government's legislation effectively barred non-Whites from the skilled ranks of workers. The Apprenticeship Act in 1922 made it compulsory for a person wanting to enter an apprenticeship to possess a standard 6 level of education. This in effect was beyond the reach of the Indian, and even the few that did meet the requirement, found that tertiary educational facilities did not exist. (Journal of Education 1978:41)

Viewed against the background presented above and the historical perspective of the development of Indian education in chapter 2, it is necessary to acknowledge and record the efforts of the Indian community in the sphere of vocational education.

## **6. Hypothesis**

The following three hypotheses will serve as parameters for the purpose of this research:

- (i) The curriculum at the Indian secondary school over-emphasises academic education.
- (ii) Lack of emphasis on the teaching of vocational subjects at the Indian secondary school has resulted in vocational education enjoying little success.
- (iii) The correction of the imbalance that exists in the curriculum of Indian secondary education will result in:
  - \* A greater correlation between the youth's school leaving qualifications [skills] and the skills [qualifications] demanded by the job market.
  - \* The school going youth will be able to immediately fit into mainstream society without further training.
  - \* Vocational education will be afforded the same status as academic education.
  - \* A closer relationship will be forged between school and society, with its various institutions, thereby increasing opportunities for the youth's self-realisation.

## **7. Delimitation of Research**

The investigation will cover the following areas:-

### **Chapter 2**

Traces the development of the Indian Education System in South Africa from 1860 to 1995.

### **Chapter 3**

Provides a retrospective look at the development of the teaching of vocational subjects at the Indian secondary school



[historical-educational survey].

#### Chapter 4

Exposition of the vocational curriculum at the Indian secondary school.

#### Chapter 5

Evaluation of the vocational education programme at the Indian secondary school.

#### Chapter 6

Addresses recommendations for the future development of vocational education in light of the findings of this research.

FIGURE 4

	-----	SUBJECTS
	-----	AIMS
	-----	THEORY AND PRACTICE
CURRICULUM	-----	PASS REQUIREMENTS
	-----	RELEASE
	-----	ENTRY LEVEL SKILLS
	-----	FURTHER EDUCATION
	-----	
	-----	QUALIFICATIONS
	-----	TRAINING
TEACHER	-----	IN-SERVICE TRAINING
	-----	SUPPORT SERVICES
	-----	KNOWLEDGE OF VOC. ED.
	-----	
	-----	ATTITUDE/PERCEPTION
PUPIL	-----	ABILITY
	-----	GUIDANCE & COUNSELLING

The Teaching of Vocational Subjects

## BIBLIOGRAPHY

### BOOKS AND THESES

1. Baker, D.E. 1982. **High Tech Challenge to Vocational Education.** Voiced.:27
2. Behr, A.L. 1977. **A Textbook of Educational Method.** Pretoria: J.L. Van Schaik
3. Dalton, R.A.E. 1995. **Juta's Statutes of South Africa Vol. 1.** Indabeni, Cape: Rustica Press
4. De Klerk, D., McDonald, M.E.W. & van Niekerk, J.F.S. 1985. **Didactics : Orientation for First Year Students.** Bramfontein: McMillian
5. De Klerk, J.T. & Nieuwenhuis, F.J. 1982. **An Evaluation of the School Guidance System in Indian Schools.** Pretoria: V&R Printing Works
6. Evans, R.N. 1971. **Foundations of Vocational Education.** Columbus, Ohio: Charles E. Merrill Publishing Company
7. Foster, P.V. 1979. **Handbook in Vocational Education Evaluation.** Columbus, Ohio: Ohio State University
8. Fowler, H.W. & Fowler, F.G. 1951. **The Concise Oxford Dictionary of Current English.** Oxford: Clarendon Press
9. Fuller, J.W. & Whealan T.O. 1979. **Career Education: A Lifelong Process.** Chicago: Nelson-Hall Inc. Publishing
10. Griessel, G.A.J., Louw, G.J.J. & Swart, C.A. 1986. **Principles of Educative Teaching.** Pretoria: Acacia Books
11. Gunter, C.F.G. 1982. **Aspects of Educational Theory.** Stellenbosch: University Publishers and Booksellers
12. Ireland, R.R. 1970. Some Effects of Apartheid on Indian Education in South Africa. **Indian Journal of Economics.**
13. Kuppusami, C. & Pillay, M.G. 1978. **Pioneer Footprints.** Goodwood: NASOU

14. Rautenbach, W.L. 1989. The Role of Technical Education in Our Educational Crisis. **Orictation:88**
15. Schumacher, S. & Mc Millan, J.H. 1993. **Research in Education: A Conceptual Introduction**. New York: Harper Collins
16. Strydom, G.S. 1980. **Technical Education for Indians**. Pretoria: HSRC
17. Swanson, G.J. 1981. **The Future of Vocational Education**. Virginia: American Vocational Association, Inc.
18. UNESCO. 1978. **Terminology of Technical and Vocational Education**. Switzerland: Imprimerie Studer S.A.
19. Van Schalkwyk, O.J. 1986. **The Education System: Theory and Practice**. Alkantrant: Educo Publishers
20. Venter, I.J. 1989. **The Grounding of History of Education**. Pretoria: Euro Publications
21. Young, D.R. 1992. **An Historical Survey of Vocational Education in Canada**. Canada: Captus Press

#### JOURNAL ARTICLES

1. **Fiat Lux**. 1986. Vol. 21 No. 1. (page 18)
2. Gibson, J. 1978. Technical Education at Secondary School Level in Durban 1968-1976. **Journal of Education**.
3. **Indian Journal of Economics**. 1970. Vol. 50 No. 198 (page 5 & 7)
4. McConkey, W.G. 1960. Future of Indian Education. **Theoria**.
5. UNISA. 1991. **Subject Didactics: School Guidance and Counselling:MVOG00-C**. Pretoria: University of South Africa

#### NEWSPAPERS

1. **The Natal Mercury**, 24 October 1989

## CHAPTER TWO

### OVERVIEW OF THE DEVELOPMENT OF THE SOUTH AFRICAN INDIAN EDUCATION SYSTEM IN HISTORICAL PERSPECTIVE [1860 - 1995]

#### 1. Introduction

Research or investigation of any educational theme must be placed in context, not only in terms of its origin but also in its relationship and connection with its past that gave rise to its present situation and the implications that it holds for the future. *"No school of thought may ever be seen in isolation from its origin [matrix] and cultural background."* (Schoeman 1985:3)

Vocational education is one of the varied tasks of the secondary school and this has developed in response *"to its calling of moulding and maintaining culture, and thus also of transforming culture in the service of the community from which it originated."* (Verster, van Heerden and van Zyl 1982:118) Vocational education in the Indian secondary school did not develop in a vacuum, but its growth and development took place within the community that was formed when the first indentured Indian labourers landed on the shores of Africa as far back as 1860.

The over-view of the development of the Indian education system that will be provided will highlight the fact that the Indian community strived under very trying conditions to establish educational opportunities for their children and it will also be noted that vocational education, has its roots deeply embedded in the rudimentary education system that prevailed during the 1800's.

Therefore it is vital that any study of vocational education in Indian education be placed in context of its origin [matrix].

## 1.2 Arrival of the First Indians in Natal [1860]

The description of the development of Indian education will depict the zeal and fervour with which the Indian community fought for education since their arrival in 1860. *"The driving force that determines the direction and evolution of an educational system is the spiritual commitment of the people involved."* (Behr 1978:1)

The farming of sugarcane on the coastal belt of Natal became a flourishing industry. The labour requirements of the sugarcane farmers could not be met by the local Zulu population, thus the White farmers were prompted to import cheap labour from India.

After lengthy negotiations between the British [Colonial] powers, the Indian Government and the White farmers of Natal, Law 33 was passed in 1860 which paved the way for the importation of indentured Indian labour into the then Colony of Natal. *"The first batch of Indians arrived in Durban on 17 November 1860. From then onwards there were regular arrivals of Indians to the Colony."* (Kuppusami and Pillay 1978:8)

The initial flow of settlers into the Colony of Natal was small and the population of Indians assumed the following growth pattern. [Table 1]

TABLE 1

YEAR	POPULATION
1866	6 445
1876	10 335
1894	46 000 (APPROX.)

Source: Henning 1992:4

In 1894 the Indian population in Natal outnumbered the White population of the Colony. The 1911 census revealed that Indian population had risen to 133 400. The system of importing indentured labour was terminated in 1911. (Henning 1992:4)

However, by this stage the Indian population had swelled to alarming proportions and the Whites felt threatened because the Indian was now becoming a force to be reckoned in the economic sphere. This resulted in the Whites adopting an antagonistic attitude towards the Indian. This was further aggravated by other factors such as the fact that the children of the Indian labourers were not keen on working in the canefields and this became a problem for the authorities.

### **1.2.1 The Concept of "Indentureship" and its Implications**

Indentureship referred to the introduction of Indian labourers from India to the Colony of Natal for the purpose of providing a cheap source of labour for the White sugarcane farmers. The period of indenture varied between 2 to 5 years. Indians were granted free passage back to India after their first three year period of indentureship had expired, *"otherwise they could spend a further two years under an employer of their choice and then claim a grant of Crown land should the offer of a return passage not be taken up. On completion of their indenture the Indians remaining were to be treated as all other citizens of Natal, that is, they shall be entitled to the vote and be free to own landed property."* (Naguran 1985:4)

The majority of Indians opted to remain and take up the offer of a parcel of Crown land and some became farmers, traders or became self-employed. Some labourers offered their labour on a voluntary basis to the farmers.

The animosity of the White farmers began to grow and this forced the Colonial authorities into action. The White farmers' hostility was aroused as a result of the following reasons:

- o The rapid growth of the Indian population;
- o The "passenger Indians", otherwise known as the Indian traders, became an economic threat to the Whites in Natal; and
- o Reluctance of Indians to reindenture for further periods.

(Kuppusami and Pillay 1978:10)

The Indians were given two alternatives: they could return to India or they could be treated as free men and remain in the Colony upon the payment of a licence fee of three pounds [six rand].

This new law forced parents and children to reindenture. On reaching the age of 16 the children had to work on the canefields or face the prospect of being separated from their families and be sent back to India. In 1897 the immigration of "passenger Indians" and the granting of Crown land came to an end.

But the importation of Indian labour continued. The authorities were now faced with a new problem, and that was, the education of the Indian child.

## **2. Development of the Indian Education System**

Official policy on the education for Indians in the RSA can be traced to four events:

- (i) Establishment of the Immigrant School Board - 1879
- (ii) Smuts-Gandhi Agreement - 1914
- (iii) Cape Town Agreement - 1927
- (iv) Indians Education Act - 1965

(Admin.:House of Delegates 1985:3)

As is evident from the dates, the first three events relate to



the early period of the history of Indians in this country. This was the period when no official recognition was given to Indians as part of the South African nation and when, in fact, efforts were made to discourage their permanent settlement in this country as *"official government policy in South Africa was either to regard the Indian as a non-person, that is to treat him as though he did not exist, or to encourage a policy of repatriation in the form of large scale State-aided emigration."* (Ireland 1970:269)

Anti-Indian feeling was high and this found expression inter alia in the limited provision by the government of educational facilities for Indians. Missionary effort to provide education and the establishment of government-aided schools by concerned communities characterised this period. (S.A.: Admin.: House of Delegates. Dept. of Education 1985:1)

## **2.1 The Early Beginnings**

The events in Natal that gave rise to the Indian education system will be depicted because it is in this province that greatest number of Indians had settled and it is in this province that the roots of the system of education embedded itself.

Although a large number of Indians had settled in the Transvaal, events in Natal had a more profound effect on the development of the Indian educational system. Education for Indians in the Cape was virtually non-existent and the Coloured community of the Cape fulfilled the educational needs of the Indians. In the Orange Free State there were only a handful of Indian settlers and educational opportunities was not provided for.

### **2.1.1 Missionary Effort [1860 - 1879]**

During the initial days of settlement education was conducted within the confines of the family with educated members of the family and community providing instruction. This practice

continued for almost a decade, with no organised system of education for the Indian child. The probable reasons for the lack of educational provision for Indians during this period is highlighted by Dr G.C. Henning (1992:4)

- o Indians were seen as temporary settlers and it was assumed that they would return to India.
- o Laws 13, 14 and 15 of 1859 made no demands on the White employers as regards provision for education for the children of their workers.
- o The employers felt that the more educated the Indian became the smaller the chance that they [the educated Indian] would wish to work in the canefields. This would eventually result in a shortage of labour, therefore it was not in their interest to provide educational opportunities for the Indian.
- o They were too few "teachers" and as a result schools closed.
- o Possibly the Colony's finances were in a poor state so the question of education for the Indian was avoided.
- o The Indians faced an uncertain future in the Colony and they, most probably out of fear made no demands for education.

During this period it is only through the zeal and kindness of the Missionaries [Christian] that a semblance of education was provided for the Indian child. Reverend R. Stott [Methodist Minister] opened the first school in Durban in 1868. The medium of instruction in this school was English. *"It is estimated that by 1872, only 73 boys and 15 girls were receiving education in the three R's. The estimated total number of school-going age in this year was 930. Thus over 90% were still not at school."* (Fiat Lux 1970. Vol. 5 No. 9:8)

In 1877 primary and secondary education was initiated for Europeans. These European schools permitted Indian children, who obeyed the dress code and traditions of the Europeans, to enrol.

## **2.2 Establishment of the Immigrant School Board (1879)**

Law 20 of 1878 saw the introduction of the Indian Immigrant School Board. This Board was established in Natal to promote and administer education for the indentured Indian. (Agjee 181:7) The Board was established in 1879 and the State provided 1 500 pounds [approx. R 3000] to the Board and this money in turn was paid out as grants to individual schools who could prove regular attendance and efficient management. The Board opened 3 schools in the Natal area. These schools were referred to as "Indenture schools" because they were inferior to the White schools and the schools were populated by the children of the indentured labourers. In 1889 there were 27 schools [2 Board schools and 25 State-aided schools] in total with a school going population of 2007. There were 23 teachers, 6 assistants and 20 pupil teachers. (Natal Indian Immigrant School Board Annual Report 1889:2/12)

*"During the period when the Indian Immigrant School Board was in control of Indian education 3 types of schools came into being, these were state schools, state-aided schools and the private venture schools. Provision was also made for classes to be held in the evenings. By 1893 there were 2 state schools with an enrolment of 340 pupils, and 24 state-aided schools with an enrolment of 2 249."* (Behr 1978:233)

The establishment of the Immigrant School Board was the beginning of the first concrete steps in the provision of education for Indians, and this set the ground work for a highly differentiated system of education of the 80's through to the 90's.

## **2.3 Responsible Government and Indian Education**

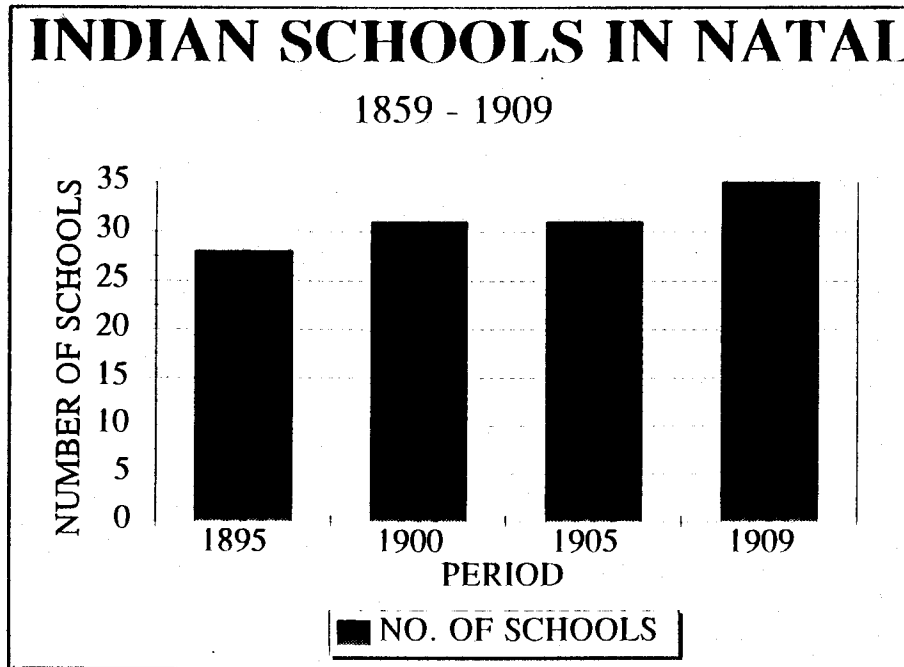
Natal was accorded the status of responsible government in 1894, and with this accord came the abolishment of the Indian Immigrant School Board. The Education Department took control of Indian education in Natal. Education for the Indian child did not

proceed beyond standard 4 at this stage. Indian parents who could afford to and whose children adhered to the norms and traditions of the Whites sent their children to White schools. There was one more condition and this was that the child had to have passed standard 4 to be admitted to a White school. (Agjee 1981:7)

The government's continued reluctance to provide for the educational needs of the Indian community led to the Missionaries virtually taking control of Indian education and a number of private community based schools came into existence.

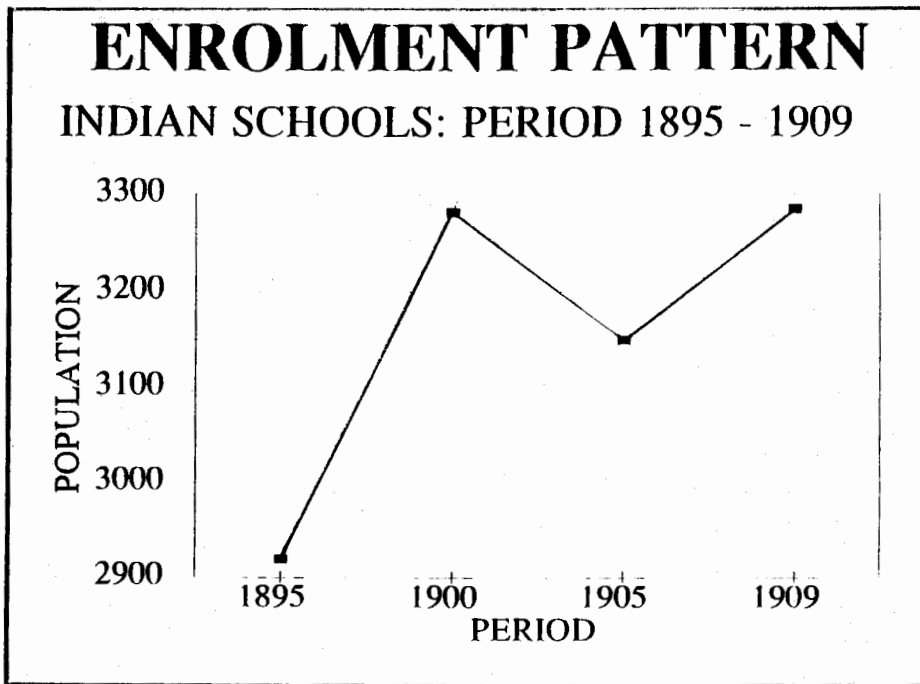
The following statistics portray the situation of Indian education at the time:

FIGURE 1



Source: Fiat Lux Vol. 5 No.9 1970

FIGURE 2



Source: Fiat Lux Vol. 5 No. 9 1970

The following conclusions can be drawn from the statistics presented in Figures 1 and 2:

- o In 1895 there were 28 schools in existence and in the subsequent 14 years only 7 years were established;
- o the enrolment patterns fluctuated between the years 1900 and 1905 the pupil population at school decreased [enrolment: 1895 - 2 929, 1900 - 3 281, 1905 - 3 149, 1909 - 3 284]; and
- o During the course of 14 years these schools only increased their total pupil population by 365 pupils.

Henning (1992:6) provides the following statistics that supports Behr's figures quoted above:

TABLE 2

YEAR	TOTAL NO. OF SCHOOLS	NO. OF STATE SCHOOLS	NO. OF PUPILS AT SCH.	CHILD POP. (APPROX.)	INDIAN POP. IN NATAL
1880	8	0	196	1 000	15 568
1909	35	4	3 284	12 000	100 000*
1915	39	4	5 189	18 000	133 437*
1926	52	9	9 913	32 000	141 469*

\* Represents the population totals as indicated for the 1891, 1911 and 1921 census years.

Source: Henning 1992:6

It can be clearly seen that community built schools far outnumbered state schools, indicating that the efforts of the Indian community and the zeal of the Missionaries outperformed the efforts of the Government of the day in providing educational opportunities for the Indentured labourers' children.

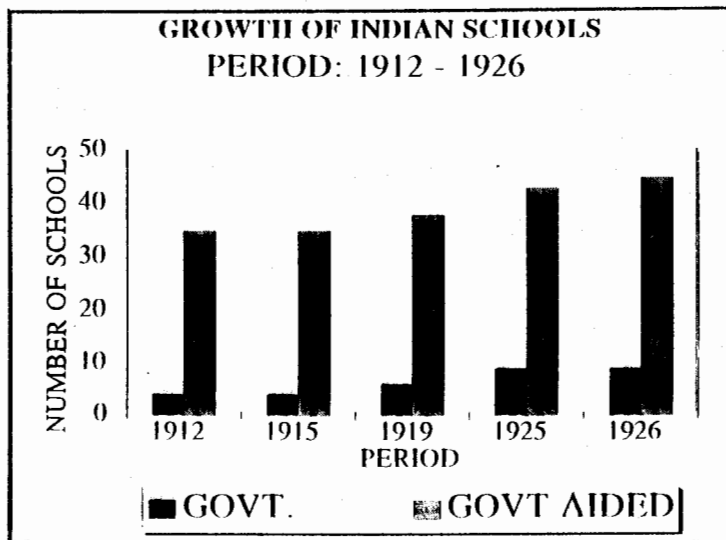
30.97 % of the total child population was in school and one of the main contributing factors for this low percentage of school attendance was the fact that there were too few schools.

The Indian community pressured the then Minister of Education for "better" schools and he yielded when in 1899 a Higher Grade school was established in Durban and in 1902 another was opened in Pietermaritzburg. These schools provided education beyond standard 4. *"Apart from the three R's, Geography, Gymnastics, Drawing and Needlework were the only subjects taught."* (Behr 1970:9)

### 3. Education in the Union of South Africa

The provinces , under Article 85 of the Union of South Africa, were handed over the responsibility of controlling education within their domains. However, very little change was brought about in terms of the administration of education by this new development. This is reflected by the fact that only one third of the Indian school-going population could be accommodated in schools. There was still no determined effort on the government's behalf to build more schools for the ever increasing school population. Figure 3 aptly depicts the situation of Indian education at the time:

FIGURE 3

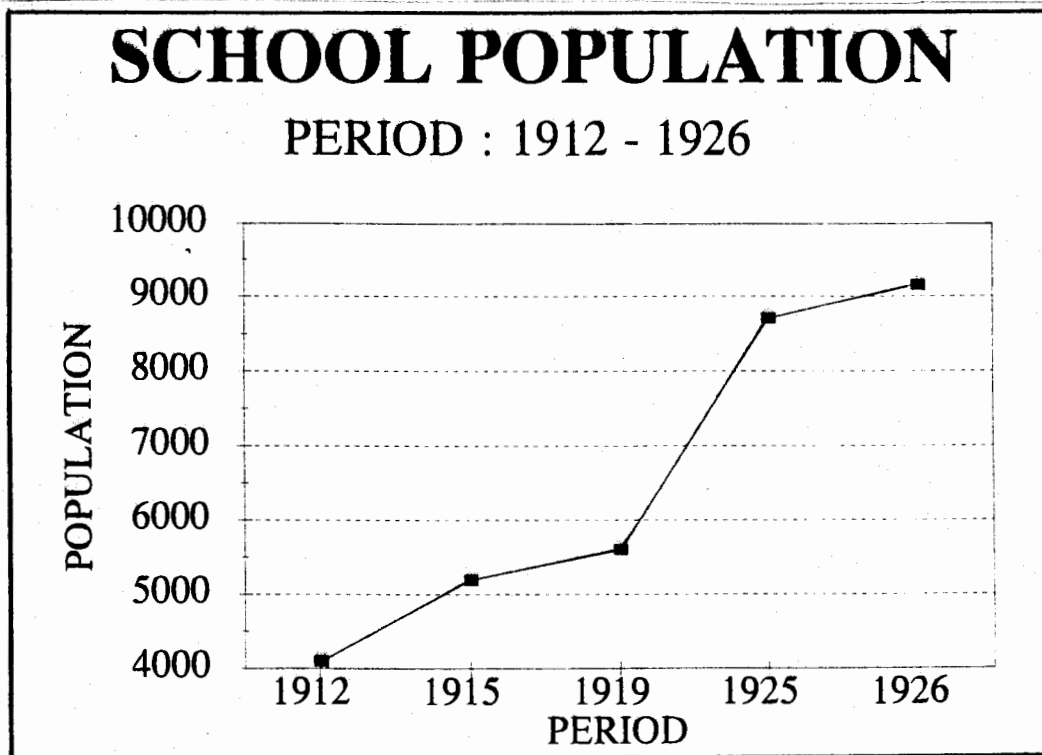


Source: Kuppusami and Pillay 1978:22-23

Naguran summed up the information appropriately when he stated that *"it would be misleading to take the above figures by themselves as a measure of progress."* He [Naguran] quotes a Superintendent's Report of 1924 as proof of this: *"The numbers are practically stationary but the attendance probably does not represent half of the children in the province. For some years no additions have been made to government schools and there is little doubt that every classroom would be filled at once."* (Naguran 1985:15)

The government's reluctance to take any decisive measures to accommodate the rapidly increasing Indian school-going population from the morass within which it found itself led to negotiations between the government of India and the Union of South Africa for improved educational facilities for Indians. The outcome of these negotiations was the Cape Town Agreement of 1927.

FIGURE 4



Source Kuppusami and Pillay 1978:22-23

### 3.1 The Cape Town Agreement of 1927

The Cape Town Agreement of 1927 was borne out of negotiations between the government of India, through its Agent-General in South Africa (Sir Srinivasa Sastri), and the South African Government for improved educational facilities for Indians. (Behr 1978:234)

The following declaration was made by the Government of South Africa in the "Upliftment clause" of the agreement:



*"That in the provision of educational and other facilities, the considerable number of Indians who remain part of the permanent population will not be allowed to lag behind other sections of the community."*

(Behr 1978:234)

The Natal Provincial administration set up a Commission of Inquiry [Provincial Notice No. 82 of 1928] into Indian education in the province. The Commission made the following findings:

- o existing facilities were inadequate
- o buildings were not suitable for educational purposes
- o teachers' status and salaries were unsatisfactory

The Commission based on these findings, made the following recommendations:

- o existing state-aided schools be upgraded
- o better salaries and service conditions for teachers
- o the entire subsidy granted by the government be used for the sole purpose of funding Indian education
- o a training college for teachers to be established

(Naguran 1985:18)

There was a slight improvement based on the recommendations of the Commission's report and by 1931 there were 78 schools as compared to the situation in 1928 when there were only 52.

Post primary education began in 1911 but by 1927 there were only 67 pupils in secondary schools, representing 0.6% of the population. By 1933 the number of secondary school pupils reached 300. (Agjee 1981:9)

### **3.2 "SELF-HELP" - The Indian Resolve**

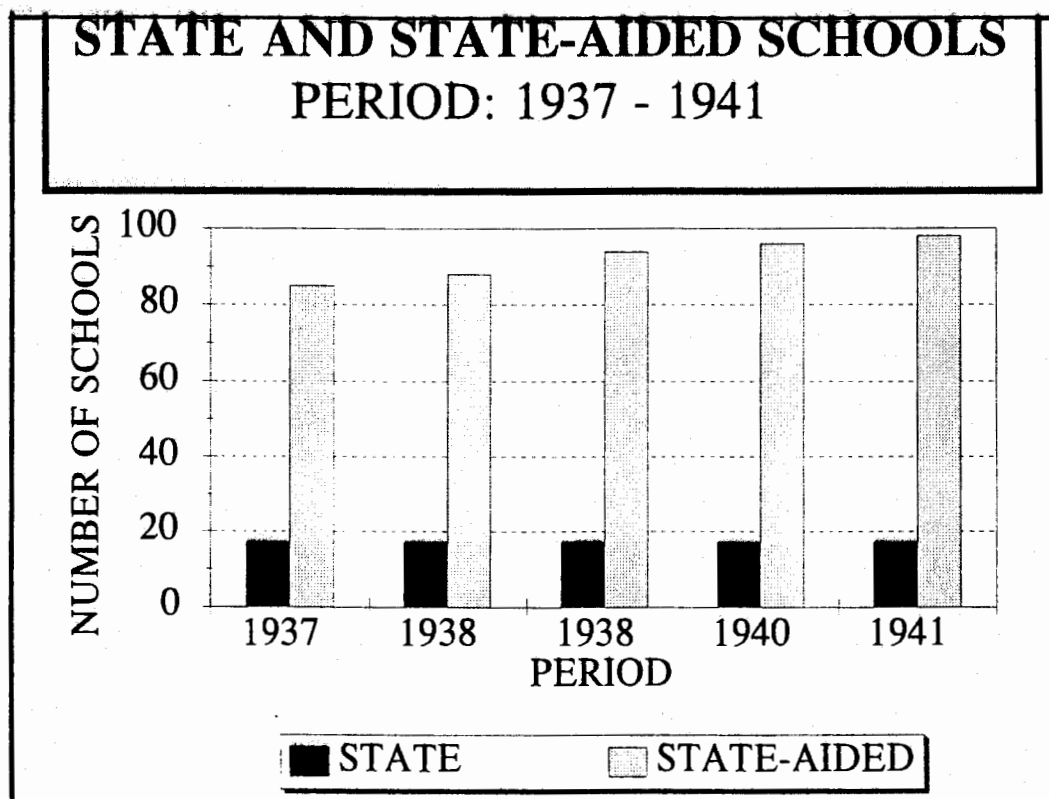
Due to the slow implementation of the education policy and building programme for new schools, the Indian community took it upon themselves to build schools for their children.

The government in response contributed one third of the cost of erection of the buildings and in 1943 this subsidy rose to 50%. Soon the schools built by the community far out-numbered the state schools. [Figure 5]

The following conclusions can be drawn from Figure 5:

Over a five year span the number of state schools remained static at 17, whilst state-aided schools rose by 13, rising from 85 in 1937 to 98 in 1941.

FIGURE 5

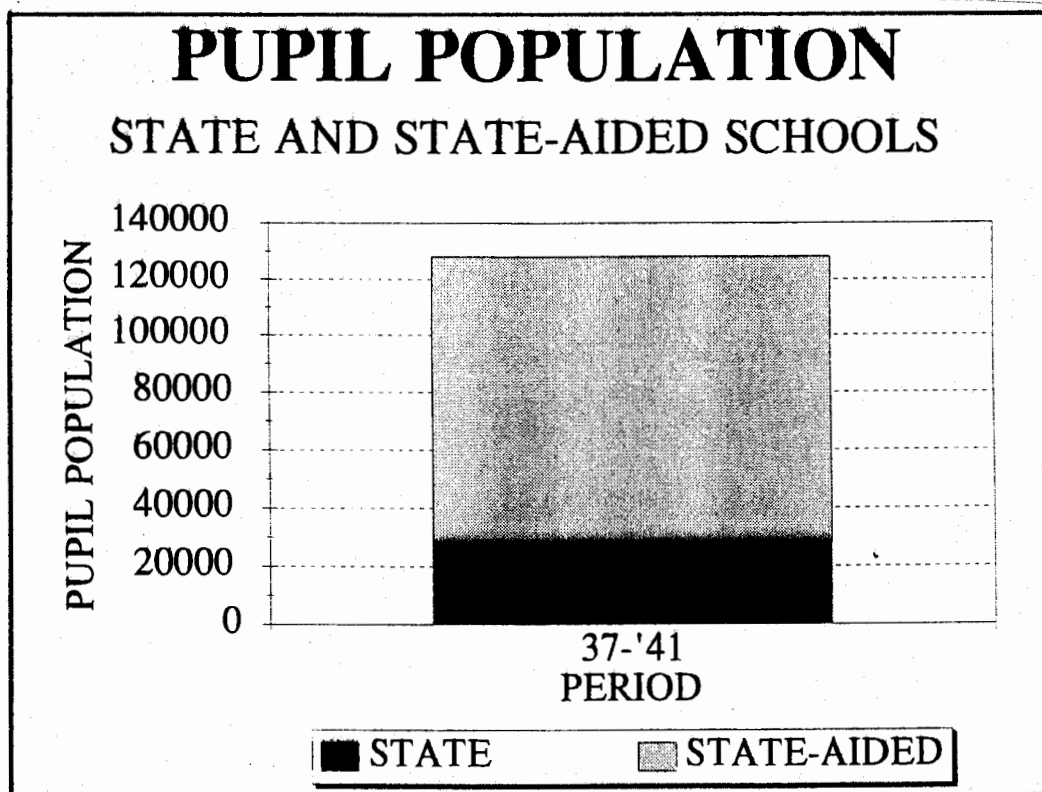


Source: Naguran 1985:20.

Although the number of schools increased with a great number being accommodated at state-aided schools [Figure 6], there was still the problem of pupils who could not be accommodated at schools for the reason that there were still too few schools.

It was at this stage that a system of platoon classes was introduced.

FIGURE 6



Source: Naguran 1985:20

### 3.3 Platoon Classes

This system though not perfect allowed a greater number of pupils access to education. Platoon schools followed the following basic format:

- o The senior primary pupils attended school between 07h00 and 13h00 and the junior primary pupils attended school during the latter part of the day.

(Fiat Lux 1982. Vol. 17 No. 2:2)

### **3.4 Secondary School Education**

Post primary education began as far back as 1899 in Durban but this phase of schooling only came into its own in the 1940's. This phase of schooling allowed the child to reach standard 7, this being the highest standard that a pupil could progress to at an Indian school.

Once an Indian pupil had passed standard 7 he/she could only then be admitted to an European school to further his/her schooling. A momentous step was taken in 1930 when Sastri College was opened and Indians now had a school that provided education up to standard 10. (Maharaj 1960:263)

By 1958 there were approximately 4000 pupils attending secondary schools, representing 4.4% of the total school-going population of 90 000. Between 1957 and 1963 5 more secondary schools were erected, and by 1965 11.5% of the school-going population was in secondary school.

In the period leading up to 1965 the provision of Indian secondary schools was painfully slow but sustained and eventually by 1965, secondary schools were established in all major towns in Natal. (Behr 1970:10)

### **3.5 The Indian Education Act No. 61 of 1965**

In August of 1961, Dr Verwoerd set in motion the plans for the establishment of the Department of Indian Affairs which was to be controlled by the Ministry of Indian Affairs. This Department assumed control of all matters pertaining to the Indian

community, except for education which was still controlled by the provincial administrations. The first National Indian Council was established in 1963 and later, in 1965, this body became known as the South African Indian Council. (Agjee 1981:16)

The Indian Education Act No. 61 of 1965 was proclaimed to provide for the control of Indian education by the Minister of Indian Affairs. *"In terms of the Indian Education Act, a Division of Education was created within the Department of Indian Affairs. Thereafter, and in stages, control of Indian education was transferred from provincial authorities in Natal and Transvaal and the Department of Coloured Affairs as follows:*

Natal	:	1 April 1966
Transvaal	:	1 April 1967
Cape	:	1 January 1971

*Overall responsibility for Indian education was vested in the Minister of Indian Affairs who in 1966 delegated his powers concerning education to the South African Indian Council." (S.A. Admin. - House of Delegates 1985:2)*

The above-mentioned Act proved the then Minister of Education with the following powers:

- o Establishment, erection and maintenance of schools;
- o Establishment of College Councils and Senates of Colleges and College Councils for technical colleges;
- o Teaching and training of teachers in collaboration with certain universities;
- o Transfer of management and control of State-Aided schools to the Department;

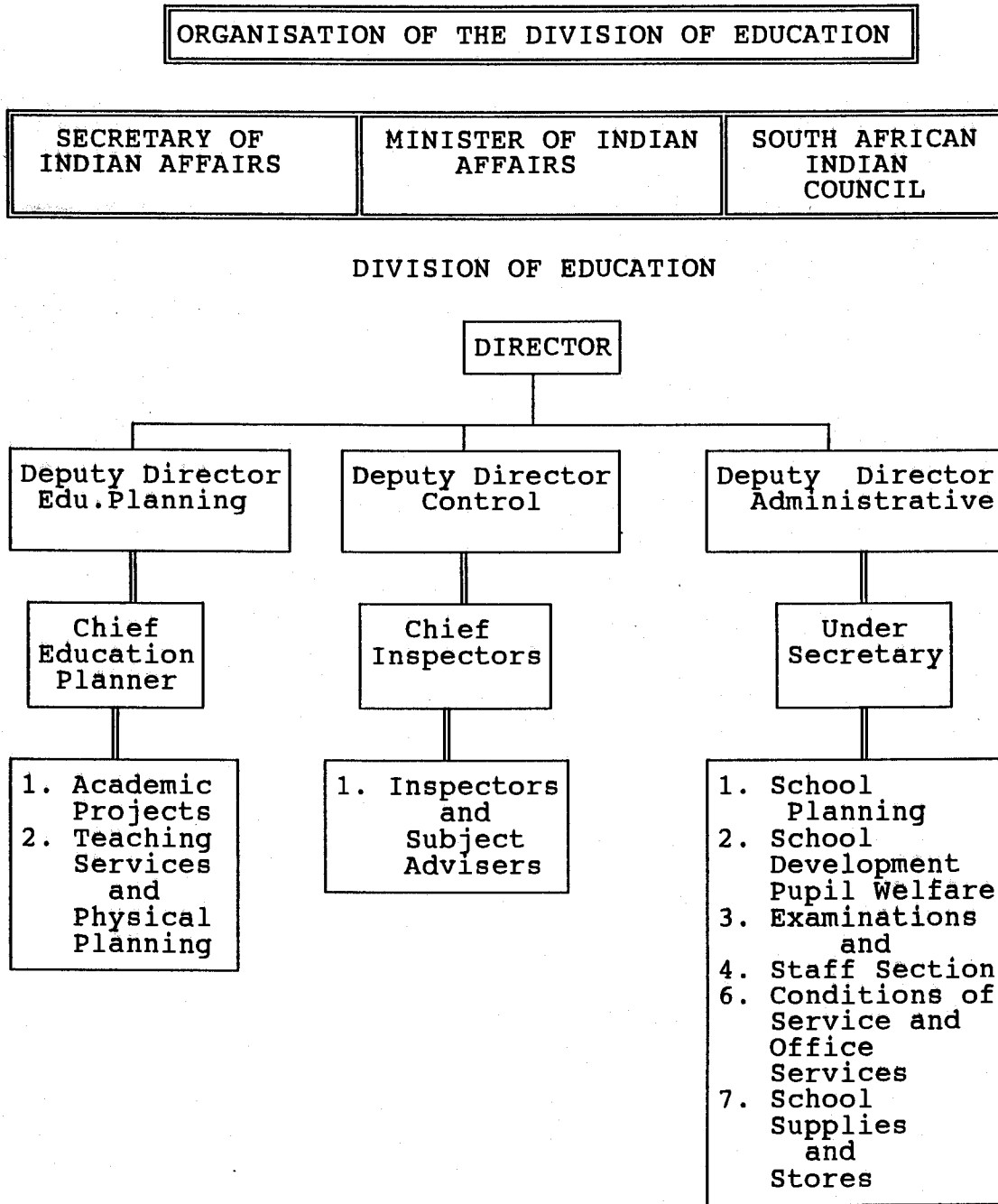
- o Registration and management of private schools;
- o Courses for the education or training of persons in State schools, schools of industries, reform schools and State-Aided schools and conducting of examinations;
- o Compulsory school attendance.

(Dalton 1995:1-192-4)

This is the first time since the first labourers landed in 1860 that Indian education was placed in the hands of Indians.

The organisation and control of Indian education is depicted by a flow chart. [Figure 7]

Figure 7



Source: Fiat Lux Vol. 11 No. 3 1976:12-13

The Minister was now empowered to exercise his authority over all aspects of Indian education. In 1976 the Minister of Indian Affairs handed over most of the responsibility as was vested in him by the Indian Education Act No. 61 of 1965 to the Executive Committee of the South African Indian Council.

### **3.5.1 Indians Become Involved**

During the control of the South African Indian Council a number of changes were implemented which led to a greater involvement of the Indian community in matters pertaining to education.

During the 70's this involvement became a reality when Indians became involved in policy-making, planning, control and the administration of education. This process of involving Indians within the organisational structure of education gained momentum in the 80's and carried forth into the 90's. (Fiat Lux 1970 Vol. 5 No. 9:12)

### **3.5.2 School Accommodation**

To meet with the demands of the differentiated system of education, the Department of Indian Affairs, in 1976, implemented a school building programme with more specialist rooms being added to existing schools and the building of new schools. The results of this programme is reflected in the fact that for every 7 new primary schools that were built 4 new secondary schools were also erected. In 1975 there 194 Indian schools and this figure rose to 426 at the beginning of 1982 and as a result of this increase in the availability of school accommodation the system of "platoon" classes eventually ended in mid 1983. (Fiat Lux 1983 Vol. 8 No. 2:20)

## **3.6 The Introduction of Compulsory Education [1973]**

Although, compulsory education for all children in Natal was *"recommended by the Natal Education Committee in the Wilks Report*



as far back as 1946", compulsory education for Indians was introduced approximately a decade after the arrival of the first settlers. Since that time [1946] the Natal Administration made great efforts to increase provision for Indian schooling, but due to financial constraints compulsory schooling was only introduced in January 1973. (Mc Conkey 1960:32)

This meant that the Indian child who was admitted to class one in 1973 was compelled to attend school up until the end of the year in which he/she celebrated his/her fifteenth birthday. However, although compulsory education was introduced for Indians, the implementation of it was gradually phased in due to the lack of accommodation at schools and the shortage of adequately qualified teachers. (Fiat Lux 1976 Vol. 1 No.2:58)

### **3.7 Differentiated Education**

#### **3.7.1 Streaming [1968]**

In 1968 secondary schools were divided into two streams, the Advanced level and the Ordinary level. The two streams can best be described as follows:

- (i) "The Advanced Level for those who wish to pursue higher education at a University Training College and enter the professions.
- (ii) The Ordinary Level for those who wish to embark on a vocational career."

(Fiat Lux 1967 Vol. 2 No. 5:134)

Pupils were streamed at the end of standard 7 and they followed one of the two courses mentioned above.

The Advanced stream followed the same syllabus as the pupils in the Ordinary stream, but the subject matter was dealt with in greater depth in the Advanced stream whereas the syllabus was

"simpler and more direct" for the Ordinary stream. (Fiat Lux 1966 Vol. 1 No. 2:57)

In 1973 the system of school phases was introduced and this signalled the end of differentiation by streaming. The system of steaming was replaced by the Practical course [para. 3.7.3] In the new type of differentiation based on school phases.

### 3.7.2 School Phases [1973]

The Government Gazette of 12 November of 1971 provided for differentiated education as follows:

Four phases of three years each:-

- (i) Primary school education to take place in two phases. [Table 3]

TABLE 3

PRIMARY SCHOOL EDUCATION		
SCHOOL YEARS	CLASS AND STANDARD	PHASE
1 - 3	Class 1, 2 and standard 1	Junior
4 - 6	Standards 2, 3 & 4	Senior

Source: Jhugroo 1988:62

#### o The Junior Primary Phase

This phase of education caters for the 6 to 8 year age group. It consists of class 1, class 2 and standard 1 and it is during this stage that imagination plays an important part in the child's view of his/her surroundings. (Jooste 1972:31)

o The Senior Primary Phase

The 9 to 12 year olds [standards 2, 3 and 4] now have a more objective and critical approach to their surroundings. (Jooste 1972:25)

(ii) Secondary school education to take place in two phases [Table 4]

TABLE 4

SECONDARY SCHOOL EDUCATION		
SCHOOL YEARS	STANDARD	PHASE
7 - 9	5, 6 & 7	Junior
10 - 12	8, 9 & 10	Senior

Source: Jhugroo 1988:61

Standards 5, 6 and 7 make up the junior secondary phase of the child's and *"it is during this phase that the pupil establishes his life values and self-concept, and makes permanent educational decisions which determines his future personal and occupational life as an adult."* It is at standard 7 level that the pupil will be required to choose a direction of study that will be offered to him/her, and this choice to a great extent will determine his/her vocation thereafter. (Hart 1972:70-71)

The pupil prepares, during this phase [standards 8 and 9] for his/ her matriculation examination [standard 10] which, upon completion, will signal the end of 12 years of schooling.

The various phases outlined above are a means to discern the educational stage of development that a child has reached because there are *"inequalities between pupils, manifested in the abilities they are born with - intellectual abilities, temperament, potential, interest, emotionality"* and these

differences need to be taken into account when providing education for the child. (DNE 88/06:83-84)

However it must be noted that standard 5 is considered to be part of the senior primary phase of schooling but in many areas the junior secondary phase only starts at standard 6. One of the conditions that gives rise to a situation like this the fact that many high schools cannot accommodate standard 5 pupils for the lack of space, therefore it is in these areas that pupils complete standard 5 in a primary school. (Jhugroo 1988: 61-62)

### **3.7.3 The Practical Course [1973]**

A practical course which was "*more practical-vocationally orientated*" (Fiat Lux 1975 Vol. 10 No. 5:17) was introduced for the "*dull-normal*" (Pillay 1988:182) pupil. Initially this course extended from standard 6 to standard 8 but was later extended through to standard 10. [See also Chapter 3 para. 1.2.3.1]

The practical course was aimed at the pupil who could/did not benefit from the academic direction of education. However, the pupils who pursued the practical direction of study were looked down upon both by teachers and fellow pupils. The curriculum, which was intended to be vocational in nature, offered the pupil no meaningful skills to seek employment or to further his/her studies. This led to pupils becoming frustrated and in many instances, pupils who followed the practical course dropped out of school. (Interview - R. Valjee: Subject Advisor of Education: House of Delegates)

The reasons mentioned above resulted in the practical course being discontinued in 1982 and the system of subject differentiation was introduced, which also included vocational education subjects. The nature and the curriculum of the practical course is discussed in Chapter 3.

### **3.7.4 Subject Based Differentiation**

The needs of the pupils who would have found themselves in the Practical course were accommodated within this system.

Examination subjects in standard 6 and 7 were offered on the ordinary and lower grades and in standards 8 to 10 the subjects were offered on three grades, namely: the higher, standard and lower grades.

The pupil has a choice from the following directions of study:

- \* General
- \* Humanities
- \* Natural Sciences
- \* Commercial
- \* Home Economics
- \* Technical

(Fiat Lux 1976 Vol. 11 No. 3:21)

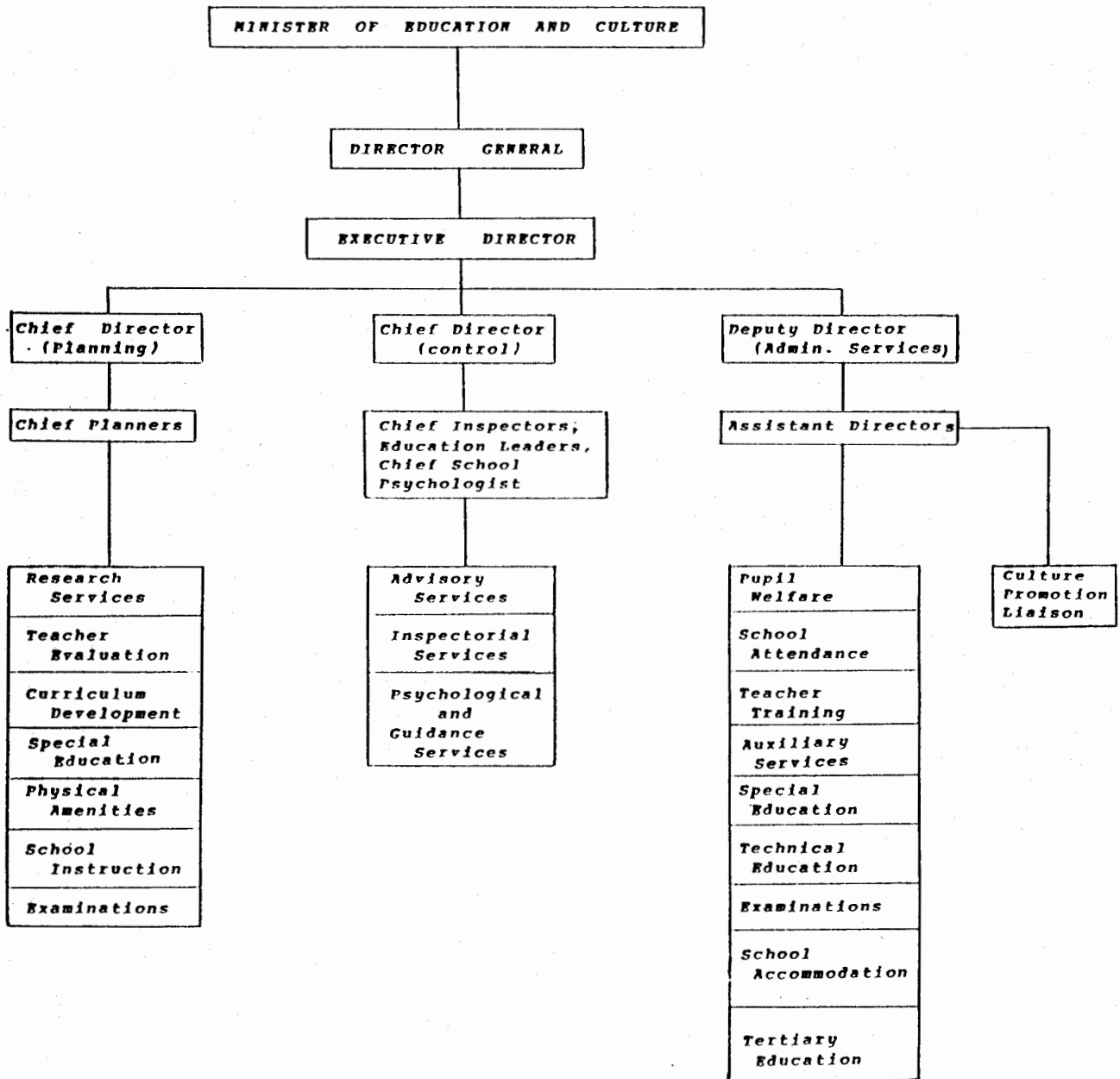
#### **4. Establishment of the Department of Education and Culture: House of Delegates**

A significant change in respect of the control and organisation of Indian education was introduced with the birth of the new constitution for RSA, which was promulgated on 3 September 1984.

The new constitution made provision for three Houses of Parliament, namely the House of Assembly, the House of Representatives and House of Delegates, each assuming control of the affairs of the Whites, Coloureds and Indians respectively. Thus the House of Delegates replaced the Department of Indian Affairs thereby changing the control and administration of Indian education. (Jhugroo 1988:112)

A schematic representation of the organisation of the House of Delegates: Department of Education and Culture is presented in Figure 8. It can be noted, from Figure 8, that every facet of Indian education was now in the hands of the Indians.

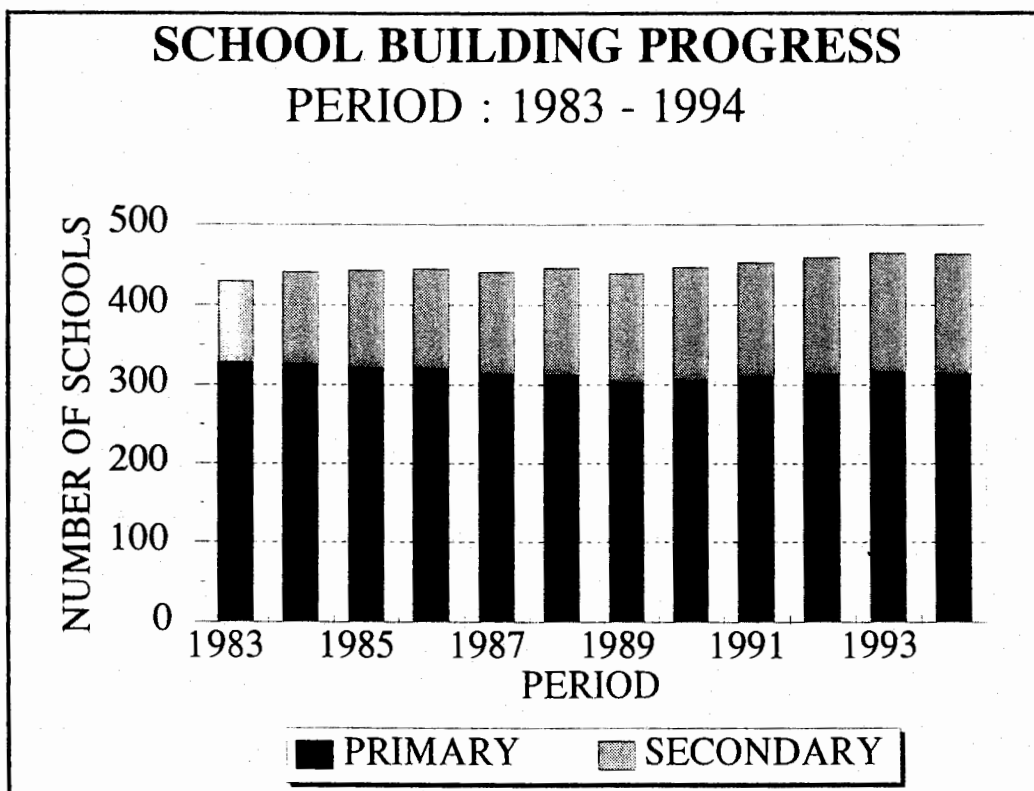
FIGURE 8



Source: Adapted from Fiat Lux March 1967

Tremendous growth and development (see Figure 9) took place during this era, from radical changes in the curriculum to professional planning and the delivery of an efficient system of education which catered for the needs and aspirations of the Indian community.

FIGURE 9



Source: Statistics Department - House of Delegates

Figure 9 gives an indication of the growth that took place during the era of the House of Delegates. There was a steady increase in the provision of schools with the number of schools increasing from 430 in 1983 to 464 in 1994.

This growth and development is effectively depicted in the following statistics:

- o Growth in respect of number of schools

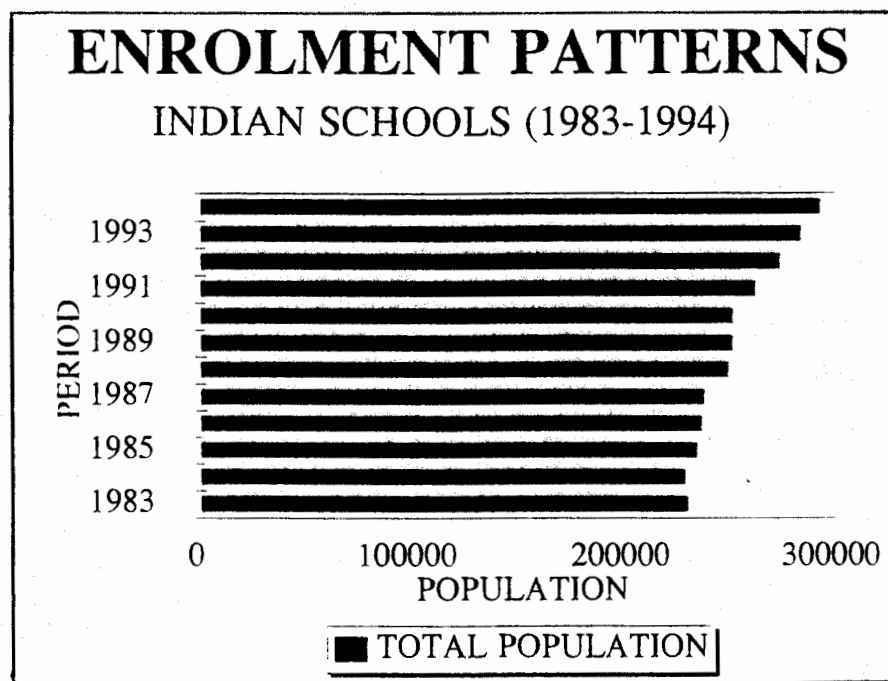
In 1976 there were 360 schools in total [210 state schools and 150 state-aided schools].

(Fiat Lux 1976 Vol. 11 No. 3:49)

o Growth in respect of pupil population

Figure 10 clearly depicts the growth in population numbers. There was a steady increase in the enrolment pattern at schools for the period under review, with the school population increasing from 227 977 in 1983 to 291 388 in 1994. This can be contrasted to the situation for the period 1966 to 1975. In 1966 the school population at Indian schools was 134 152 and in 1975 it rose to 183 348, representing a 36.67% increase. The percentage increase between 1975 and 1994 is 59.93%.

FIGURE 10



Source: Statistics Department - House of Delegates

The following reasons can be postulated for the increase in enrolment at secondary schools:



- o More efficient provision of schools in respect of :
  - \* School accommodation
  - \* Resources
  - \* Qualified teachers
  - \* Pragmatic administration
- o Compulsory schooling
- o Increase in the Indian population

In 1994, with the first democratic election in South Africa, the system of the three Houses of Parliament was dissolved and control of Indian education was transferred to the Provincial Education Departments. [para. 5]

## **5. Democratisation of South Africa [April 1994]**

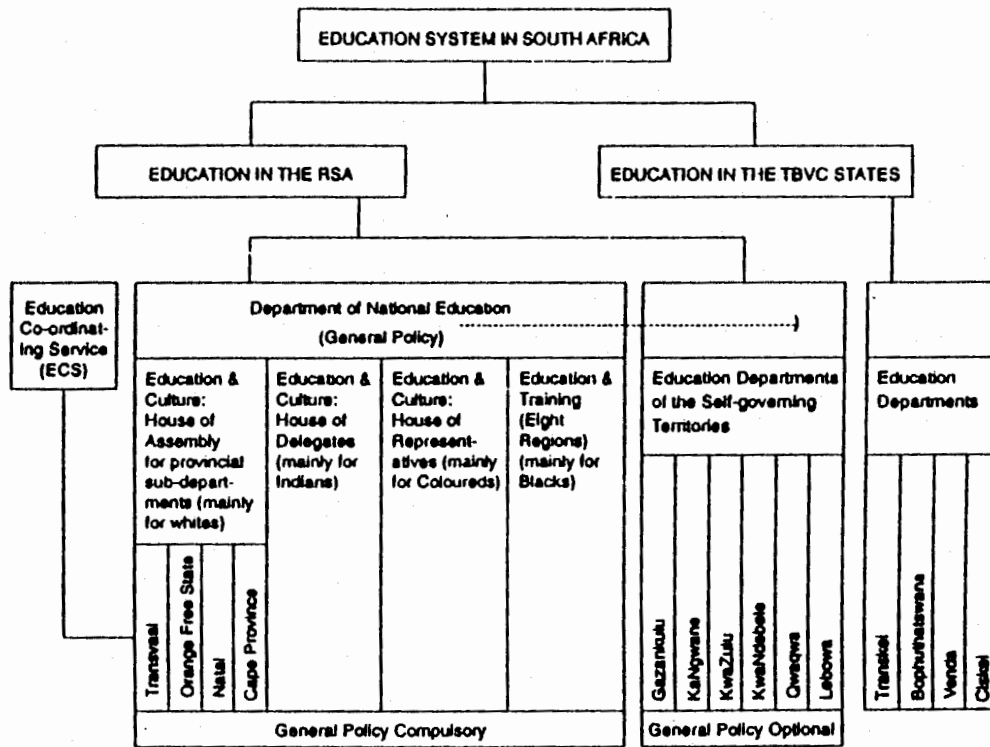
### **5.1 Implications for Education**

April the 27th 1994, heralded the beginning of a non-racial education system in South Africa. *"Previously, the political factor brought about a racially differentiated education system. The entire education system, including aspects such as departments of control, financing and teacher and student bodies, was ordained along racial lines."* (Dekker and van Schalkwyk 1995:461)

### **5.2 Control and Administration of Education [Pre-Democratic Era]**

The schematic representation [Figure 11] provides an indication of how education was administered prior to April 1994.

FIGURE 11

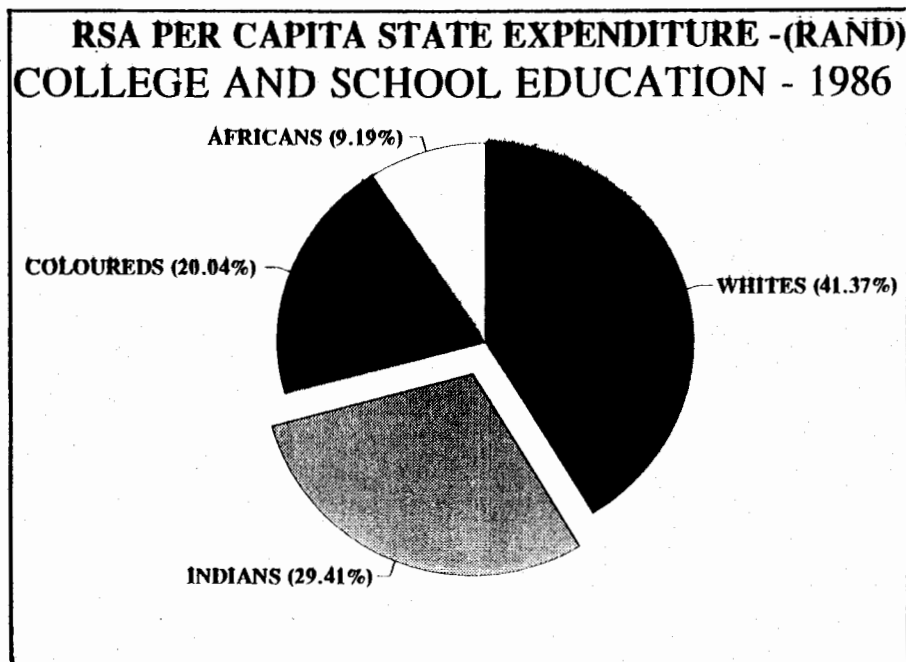


Source: DNE 1993:5

This type of control and administration was characterised by the following factors:

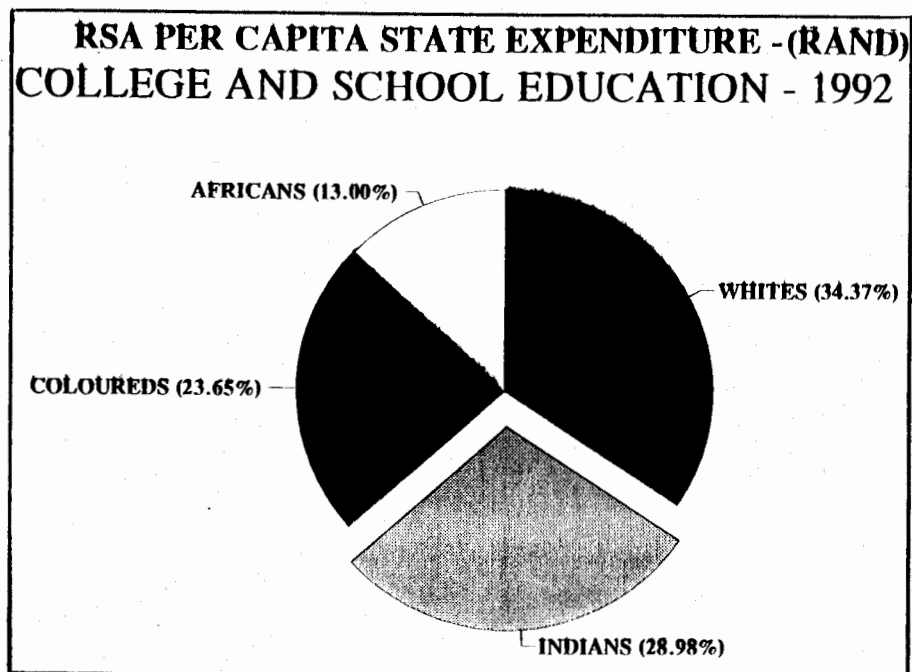
- o The system, and thereby education per se, was organised in a complex hierarchy of separate racial and ethnic departments and services, with financial control in White hands throughout.
- o The historic pattern of governance was top-down, authoritarian or bureaucratic in all departments.
- o The funding of education and training was grossly unequal across the racial and ethnic sub-systems. [Figures 12 & 13]

FIGURE 12



Source: Adapted from Dekker and van Schalkwyk 1995:488

FIGURE 13



Source: Adapted from Dekker and van Schalkwyk 1995:488

The following conclusions can be drawn:

- o The percentage increase in spending on education for the separate departments between 1986 and 1992 can be summarised as follows:

* Whites	: 71%
* Coloureds	: 103%
* Indians	: 143%
* Africans	: 191%

- o Although an effort was made to equalise spending, the difference in spending in actual rand terms between the four population groups is aptly illustrated in Figures 12 and 13.

- \* Access to education and training was severely rationed on a racial and ethnic basis.
- \* The curriculum, textbooks and teacher education were manipulated for ideological purposes and used as instruments of propaganda and indoctrination. State-determined history, religion, value systems, culture and gender roles were imposed.

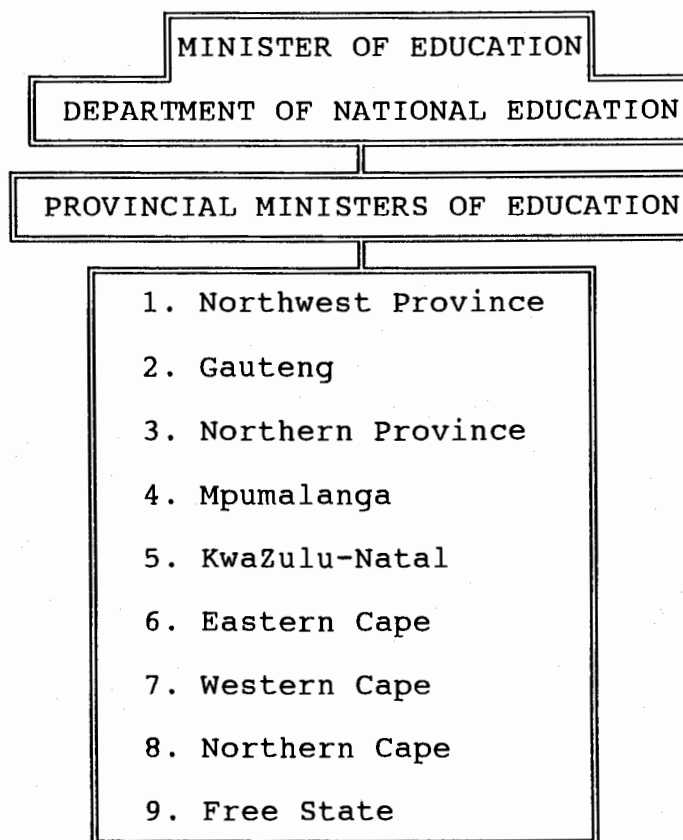
(Education and Training White Paper Committee 1994:2-3)

However in the new dispensation [Post April 1994] education is administered based upon geographical differentiation, with each of the 9 provinces assuming control of all matters related to education. The National Education Department, with the National Minister of Education, has overall control of education in South Africa.

### **5.3 Post-Democratic Era [27 April 1994]**

Figure 14 provides a schematic representation of the administration and control of education in the unified education system. Each province has a Minister of education, who controls education in that particular province within the parameters determined by the National Education Department. This has resulted in the creation of a single unitary education system with a degree of autonomy being granted to the provincial departments.

FIGURE 14



Source: Adapted from Dekker and van Schalkwyk 1995:471

The post democratic educational structure is structured to realise the following vision:

- o The development of human potential, so that every person is able to contribute freely to society, advance common values and increase socially useful wealth;
- o The realisation of democracy, so that independent, responsible and productive citizens will be enabled to participate fully in all facets of the life of their communities and the nation at large;
- o The reconciliation of liberty and justice so that citizens' freedom of choice is exercised within a social and national context of equality of opportunity and the redress of imbalances;
- o The pursuit of national reconstruction and development, transforming the institutions of society in the interest of all, and enabling the

social, cultural, economic and political empowerment of all citizens; and to attain the above-mentioned vision, the Education Ministry will develop educational policy based on the following principles:

- \* The state has a central responsibility in the provision of education and training;
- \* The provision of education and training shall be planned as part of a coherent and comprehensive national, social and economic reconstruction and development programme, including a national strategy for the development of human resources, and the democratisation of our society;
- \* A nationally determined framework of policy and incentives shall ensure that employers observe their fundamental obligation for the education and training of their workers;
- \* Education and training policy and practice shall be governed by the principle of democracy, ensuring the active participation of various interest groups, in particular teachers, parents, workers, students, employers, and the broader community;
- \* In the process of ensuring education and training for all, there shall be special emphasis on the redress of educational inequalities among historically disadvantaged groups such as youth, the disabled, adults, women, the unemployed and rural communities;
- \* There shall be mechanisms to ensure horizontal and vertical mobility and flexibility of access between general formative, technical, industrial and adult education and training in the formal and non-formal sectors;
- \* There shall be nationally determined standards for accreditation and certification for formal and non-formal education and training with due recognition of prior learning and experience;
- \* The education process shall aim at the development of a national democratic culture, with respect for the value of our peoples' diverse cultural and linguistic traditions, and shall encourage peace, justice, tolerance and stability in our communities and nation;

\* education shall be based upon the principles of co-operation, critical thinking and civic responsibility, and shall equip individuals for participation in all aspects of society.

(ANC 1994:3-4)

The dawn of the new democratic era in South Africa brings with it many challenges, and among these will be the effort to make education relevant to the world of work. Vocational education will play a significant role in the restructuring of education.

## 6. Conclusion

As it can be clearly deduced from this chapter that the change and development in Indian education is closely interwoven with the apartheid era and educational policy of the day.

The Indian settlers of 1860 had to overcome many "*frustrations and disappointments*" upon their arrival in Natal to reach a great achievement in the sphere of education. (Mc Conkey 1960:28)

The following highlights which have been discussed in this chapter serve to emphasise the effort that was made to overcome artificial restrictions and reach a stage where a multicultural education system is in existence:

- o The Missionary effort [1860 - 1879]
- o Establishment of the Immigrant School Board
- o The Cape Town Agreement of 1927
- o The Natal Indian Education Act No. 61 of 1965
- o The Introduction of Compulsory Education
- o Differentiated Schooling [School phases and subject differentiation]
- o The efforts of the following Departments of Education:
  - \* Department of Indian Affairs and the House of Delegates

Any person, community or society has the potential to transcend the barriers that retards progress, provided that the urge, desire and drive to progress burns within. This urge and desire coupled with the zeal of many organisations such as the Immigrant School Board and individuals such as Reverend R. Stott helped the Indian community to surpass the bleak prospects when they first landed on the South African shore in the 1800's.

This chapter provided an overview of the development of the Indian education system for the period 1860 through to 1994. The question now arises: Why investigate vocational education in "Indian education" per se? The simple answer is that no educational system can change overnight but rather "many aspects of the pre-democratic school pattern will be retained in the democratic era", and one of these "patterns" will be vocational education. Therefore it is vital that educationists investigate all systems of vocational education available and thereby extract the best of all possible solutions. (Dekker and van Schalkwyk 1995:477)

Chapter 3 will provide a historical survey of the development of vocational education in the Indian secondary school.



## BIBLIOGRAPHY

1. Agjee, M.D. 1981. **The Development of Physical Education in Schools Controlled By the Department of Indian Affairs, Division of Education.** Pretoria: UNISA
2. Behr A.L. 1978. **New Perspectives In South African Education.** Durban: Butterworths
3. Dalton R. 1995. **Juta's Statutes of South Africa Vol. 1** Indabeni, Cape: Rustica Press
4. Dekker E. & van Schalkwyk O.J. 1995. **Modern Education Systems.** Durban: Butterworths
5. Jhugroo S.C. 1988. **A Survey of Indian Education at Secondary School Level from 1966 up to 1987.** Pretoria: UNISA
6. Naguran C.A. 1985. **A Critical Study of Aspects of the Political, Constitutional, Administrative and Professional Development of Indian Teacher Education in South Africa with Practical Reference to the Period 1965 to 1984.** Pietermaritzburg: University of Natal.
7. Schoeman P.G. 1985. **Historical and Fundamental Education.** Pretoria: De Jager-HAUM
8. Verster T.L., van Heerden S.M. & van Zyl A.E. 1982. **Educational Themes in Time Perspective 2.** Pretoria: Butterworths

## PERIODICALS

1. ANC. 1994. **A Policy Framework For Education and Training.**
2. Behr, A.L. **Fiat Lux.** 1970. Vol. 5 Number. 9
3. **Fiat Lux.** Volume 11 Number 3. 1976 (pages 12 - 13/21)
4. **Fiat Lux.** Volume 1 Number 2. 1976 (page 58)
5. **Fiat Lux.** Volume 2 Number 5. 1967 (page 134)
6. **Fiat Lux.** Volume 17 Number 2. 1982 (page 2)

7. **Fiat Lux.** Volume 8 Number 2. 1983 (page 20)
8. Hart, I.E.J. 1972. **The Junior Secondary Phase in Differentiation.** Editor: B.F. Nel. Durban: Publication Series of the South African Association for the Advancement of Education.
9. Henning G.C. 1992. **Teachers Association of South Africa**
10. Ireland R. R. 1970. **Indian Journal of Economics.**
11. Jooste, J.H. 1972. The Role of the Primary School in the System of differentiated Education with Special Reference to Transition from the Senior Primary to the Junior Secondary Phase in the Educational Programme. **Transvaal Education Department Bulletin Vol. 17.**
12. Mc Conkey, W.G. 1960. The Future of Indian Education. **Theoria.**
13. Pillay G. 1988. **Indian Education in the Transvaal up to Secondary Level: A Historical-Educational Study.** Pretoria: UNISA
14. S.A. Administration: Department of Education. **A Brief Overview of the Historical Development of Indian Education in RSA Since 1966.** Durban: The Department

OTHER

1. Statistics Department. Ex-House of Delegates.

## CHAPTER THREE

### DEVELOPMENT OF VOCATIONAL EDUCATION

#### 1. Introduction of Vocational Education in the Indian Secondary School [1924 - 1996]

"Ordinary" education which is made up of academic subjects must form a link with the working mode of life and one of the unique ways of achieving this goal was the introduction of vocational education to the secondary school curriculum because *"it must be accepted that, in order to be able to satisfy the manpower needs in a functionally differentiated and changing economy, it is necessary to differentiate the educational structure."* (South African Journal on Education 1989:15). The following pertinent questions can be formulated:

- o What can the school [formal education] do to help pupils to become workers?
- o What role should a school [formal education] play in the preparation of pupils for the work situation?

(Dekker and Lemmer 1993:255)

The curriculum at the Indian secondary school was revised [para. 1.2.3] to include the option of vocational education. The objective of the introduction of vocational education to the secondary school curriculum was *"to provide all pupils not only with the necessary skills and knowledge required to function in our modern economy, but also with the necessary foundation for future education and training, as well as the necessary skills to become self-employed."* (Mc Gregor's 1992:75)

However, it is not always possible for a school to prepare scholars with entry level job skills, due to factors such as:

- o Occupations becoming outdated
- o The high cost of vocational education
  
- o Highly specialised equipment and human resources that are required

It is therefore essential that all interested organisations, institutions and educationists become active participants in developing a vocational education programme that will take South Africa into a new and exciting future.

### **1.1 Retrospective Look at the Development of Vocational and Technical Education for Indians in South Africa**

George Dunning, an Inspector of Indian education recommended the following curriculum, which was adopted by the Indian Immigrant School Board in 1882:

Elementary English, Reading, Writing  
Arithmetic, Grammar, Geography and  
History

(Nair 1978:111)

Coopan (1948:227) asserts that this *"was not the intention of the Board to make skilled workers out of Indians, who had been imported to do unskilled work."* The curriculum outlined above makes it clear that the Indian child was not being prepared for any type of skilled work.

Vocational education [technical] education was first mooted by Srinavasa Sastri in the year 1927 because it was realised that the Indian community saw a Matriculation pass as a passport to "better things" and this became a goal for pupil and parent alike, *"the wisdom of which becomes subject to question when it is considered that only a small minority of the students concerned proceed to University ..."* (Maharaj 1960:260-2)

### **1.2 Early Development**

Technical and vocational education for Indians in South Africa developed synonymously with the development of the Indian Technical Institute and the M.L. Sultan Technical College. (Soloman 1970:31)

The Cape Town Agreement of 1927 [Chapter 2 para. 3.1] saw the birth of technical education for Indians. On the 13th of August 1929, after unsuccessful requests by the South African Indian Congress to the Government for assistance teachers began offering part-time classes free of charge in Durban. Classes up to and including standard 6 were launched at Mitchell Crescent Indian school [afternoon classes] and the Hindu Tamil Institute [evening classes]. A total of 233 students of all ages enrolled. (Fiat Lux 1983 Vol. 8 No. 2:8)

In 1931 part-time classes were conducted at Sastri College. This quickly led to other centres mushrooming, offering vocational education on a part-time basis [Depot Road Indian School in 1933, Clairwood Indian School in 1936 and at Mount Edgecombe in 1942] and this trend filtered through to other centres along the coast of Natal. (Naguran 1985:37)

A few of the subjects offered at the time were:

Book-keeping, Commerce, Typewriting, Commercial  
Arithmetic, Shorthand, Commercial Correspondence,  
Needlework, Dressmaking and Cookery, English and  
Afrikaans.

One of the catalysts in the rise of technical and vocational education for Indians was the establishment of the Indian Technical Education Committee.

### **1.2.1 The Indian Technical Education Committee**

The Indian Technical Education Committee was established in June of 1930. The task of the Committee, under the chairmanship of B.M. Narbeth was to administer the evening classes, held for Indian workers in the Durban area. The classes ranged from

17 500 pounds (R 35 000) towards the erection of the M.L. Technical College. The site for the building was donated by the Durban City Council. The government and many other members of the community and community organisations contributed towards the establishment of the College. (Maharaj 1960:263 & 266)

On March 1 1969, under the Indians Advanced Technical Education Act of 1968 [Act No. 12 of 1968], this College became a College for Advanced Technical Education [CATE]. (Dalton 1995:1-243) This College was renamed the M.L. Sultan Technikon on 9 May 1979. (Ramjan 1986:95)

The Technikon continued to offer traditional secondary school subjects up until 1983. Courses that were non-tertiary in nature [such as History, Geography, Health Education, and other academic subjects] were transferred to the Division of Indian Education during 1982-1983. This move rekindled a renewed awareness of vocational education at secondary school level.

### **1.2.3 Impetus of Technical and Vocational Education**

In 1966 it was realised, by the Department of Education [Indian Affairs], that the academically biased secondary school needed to re-examine its role in a changing society. Dr van der Walt stated that "*the traditional high schools catered only for the elite, the emphasis in modern schools is on universal education; the trend is to make these schools adaptive ...*" (Fiat Lux 1966 Vol. 1 No. 2:54) Van der Walt further states that one of the functions of secondary schools was to "*face the question of vocational opportunity squarely.*" (Fiat Lux 1966 Vol. 1 No. 2:56) Educationists began looking to the curriculum as far back as 1966 to add impetus for the need to change and move away from the academically biased curriculum. The six subjects offered during this period were:

English, Latin, Biology, Mathematics  
Geography and History

The thinking among educational planners in the Department of Indian Affairs was that secondary school education become more vocationally orientated and that the Comprehensive secondary school offer the following directions of study:

- o an academic direction leading to University
- o a commercial or practical course for public service or office workers
- o technical/vocational direction
- o agricultural

(Fiat Lux 1966 Vol. 1 No. 2:59)

In 1967, the introduction of differentiated schooling [Chapter 2 para. 3.7], that is , two-stream education, the following subjects were incorporated into the curriculum:

English, History, Geography, General Science, Geometrical Drawing, Book-keeping, Latin, Agriculture, Health Education, Housecrafts, Music, Biblical Studies, Handicrafts, Typewriting and Office Routine and Shorthand and Typewriting

(Jhugroo 1988:48)

A trend was beginning to develop, in that more vocationally orientated subjects were being offered at secondary school level as opposed to the situation in 1924.

Table 1 aptly illustrates the impetus that was gained in the Indian community, especially in Natal, for technical education. It can be deduced that the Indian enrolment [proportionately] at this time far exceeded that of other race groups and this impetus was continued by the educational administrations that succeeded this era.

TABLE 1

	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
Whites	2115	81.1	1500	67.7	1451	55.6	1461	48.9	1545	45.3
Indians	143	5.5	316	14.3	683	26.2	977	32.7	1327	38.9
Coloureds	350	13.4	400	18.0	475	18.2	550	18.4	540	15.8
Total	2608	100	2216	100	2609	100	2988	100	3412	100
	1968		1970		1972		1974		1976	

Total N1, N2 and N3 Examination Entries at Technical Colleges in the Durban Area [1968 - 1976]

(Gibson 1978:42)

The Indian Education Act, 1965 [Act 61 of 1965] was amended to provide for technical education [Chapter 2 para.3.5]. Prior to 1982, the Department of Indian Education provided secondary education with a technical bias, leading to a Senior Certificate with eligibility for admission to tertiary institutions. The Practical course provided the education planners with another option to further diversify the curriculum.

### 1.2.3.1 Nature of the Practical Course

The course was established to meet the needs of those *"pupils who cannot derive sufficient benefit from courses normally provided in the Ordinary course of education, that is those who fall between the lowest grade of normal and the highest grade of mentally retarded, a Practical course with a vocational bias is provided for."* (Behr 1980:46)

The view on educational labelling espoused above is further supported by Naicker (1983:27) when he states that placing pupils



Woodworking Theory  
Woodworking Practice  
Welding and Metalworking Theory  
Welding and Metalworking Practice  
Plumbing and Sheetmetalworking Theory  
Plumbing and Sheetmetalworking Practice  
Electrician-work Theory  
Electrician-work Practice

(Handbook for Principals D.I.A. Annexure 1:17-20)

It must be noted that all the above-mentioned vocational subjects were only offered at technically biased secondary schools and no vocational subjects [as defined in this study] were offered at the Comprehensive secondary school. The subjects offered depended "*on the availability of facilities, qualified teachers and economic units.*" (Naicker 1983:20)

Therefore the only schools, in 1977, to offer the above-mentioned subjects were: M.L. Sultan [Pietermaritzburg], M.L. Sultan [Stanger], Loram High [Durban] and M.H. Joosab [Lenasia]. The following subjects were offered at these school:

Motor Mechanics, Woodworking, Technical Drawing,  
Welding and Metalworking, Bricklaying and  
Plastering, Radiotrician-work, Electrician-work,  
Fitting and Turning Plumbing and Sheetmetal  
Working

(Strydom 1980:92)

#### **1.2.4 Development Since 1982**

Although a great effort was made to create an equilibrium between an academic and technical/vocational type of education at the Indian secondary school, most of the Indian schools in the Republic were academically biased, and "*in 1980 only 2.68% of Indian secondary school pupils in the Republic were involved in technical/vocational education.*" (Pillay 1988:243)

The increase demand for tertiary technical and vocational education prompted the House of Delegates to establish a "sister"

- o enablement of the people by providing them with skills for the larger economy and for small business development;
- o the diversification of the secondary school curriculum; and
- o the reduction of astronomical costs of building new technical colleges

In 1990 one purely technical school was established in Phoenix [Natal]. A purely technical school is a secondary school offering pupils the option of studying only technical and vocational subjects with the inclusion of English and Afrikaans leading to a Matriculation Certificate, with or without Exemption. With the addition of additional workshops, the following technically biased schools were converted to technical schools:

M.L. Sultan Stanger, M.L. Sultan  
Pietermaritzburg, M.H. Joosab and  
Meadowlands Secondary

The Department [House of Delegates] went as far as to establish technical and vocational courses at 49 Comprehensive secondary schools in addition to the normal academic curriculum. [Chapter 4] (Interview: Principal Vocational Education Planner - G. Singh: House of Delegates)

Repeated calls for offering "intensive schooling through an enriched curriculum and through practice in making the curriculum relevant to work" (Barth 1989:5) became and has become [today] one of the priorities of education planners and stakeholders, such as labour unions, parents, industry, and teacher organisations. The curriculum is being constantly revised in order to "*prepare youth for today's jobs [and] also emphasise the general skills, knowledge and attributes which will meet tomorrow's needs.*" (Kraska 1981:62)

However, it must be realised that developing and implementing an educationally sound vocational education programme can make a

difference but it cannot succeed without the support of society. *"Programmes of education have great difficulty fostering the appropriate attitudes, when the rest of society, through its institutions and practices, gives little or very limited support" to such programmes.* (Miller 1987:235)

## **2. Vocational Education Curriculum**

### **2.1 Introduction**

Educationists are today faced with the task of revamping the school curriculum in order to better prepare pupils for adult life and to meet the manpower requirements of South Africa as a developing country.

It is becoming more and more evident that the education system should become more relevant to the world of work and thereby contribute to South Africa's economic development. The education structure, especially the curriculum at secondary school level needs to be differentiated according to the variety in vocational demands. Vocational skills [demands] can be classified into the following clusters:

- \* Building Construction and Maintenance
- \* Business and Commerce
- \* Communications
- \* Extractive Industries
- \* Health and Personal Services
- \* Marine Trades
- \* Mechanics and Metalworking
- \* Protective Services
- \* Technology [Electro-chemical and mechanical]
- \* Textiles and Leather

(Draper 1967:52-53)

Vocational education will need to provide and equip:

- o Employees for jobs in new and emerging occupations
- o Programmes to maintain and improve the technological knowledge and skills of present employees to prevent their elimination from the workplace
- o Re-active type services which will provide prescriptive learning to those already employed.

(Journal of Studies in Technical Careers 1981:53)

The vocational education curriculum developed in response to various political and economic pressures. Support for vocational education had come from many quarters - from Dr Gerrit Viljoen [Ex-Minister of National Education] on the one end of the political scale to the National Education Co-ordinating Committee [NECC], Congress of South African Trade Unions [COSATU] and the African National Congress [ANC] on the other end.

The Draft Policy Document on Education and Training in South Africa (1993:40) mentions the following two pronouncements about education in South Africa that has a direct bearing on vocational education:

- o Academic learning has been given a higher status than vocational learning. The two have been strictly separated in education and training systems with different structures of curriculum and teacher preparation, and qualification, and virtually no articulation between them.
- o This has resulted in huge inequalities in skills and competencies in the nation's labour force, with the same racial, ethnic and gender hierarchies reproducing themselves in private and parastatal employment, and in the public service.

The above has increased economic pressures such as the fact that

*"33% of the workforce is unemployed and this figure is increasing / expected to rise to 37% by the year 2000", is putting added pressure on the government to seek solutions in the education sphere. (Sunday Times, Business Times 25/08/96:6)*

As a result of an inflexible labour market that demands skilled workers, the jobless [unskilled potential workers] are pushed to the back of the unemployment queue and this, according to Chris Stals [Governor of the Reserve Bank] *"remains the most intractable economic problems of South Africa and drastic measures are needed to raise the labour absorption capacity of the economy."* (Sunday Times, Business Times 01/09/96:18)

Education and more specifically the curriculum at secondary school level needs to become more relevant to the world of work.

The general tendency in curriculum development today is to make education more relevant in terms of the learners' lifeworld and to pave the way to make a smooth transition from school to society and for the immediate assimilation of the young person into the mainstream of society. The National Policy for General Education, Act No. 76 of 1984 promotes the idea of vocational education:

*"The provision of education shall be directed in an educationally responsible manner at the needs of the individual and those of society and the demands of economic development, and shall take into account the manpower needs of the Republic."*

The pronouncements contained in the General Education Act No. 76 of 1984 seem to be brought to light when it is mooted that a future *"national qualifications framework will take into account vocational training as well as other forms of training to provide a more meaningful educational experience and prepare them [pupils] more effective for life's opportunities."* (The Star 01/03/95)

It can therefore be seen that the "vocationalisation" of

education at secondary schools is not something that has to be debated but has now become a priority.

## 2.2 The Need for Change

The education system is failing to meet the demands for new and varied skills that a technologically advanced society demands of it. *"This function in achievement-orientated industrial societies with their emerging meritocratic patterns and demand for highly qualified manpower has gained rapidly in importance."* (Husen 1990:30), and the present school curriculum is not fulfilling the demands of the modern society.

This view is supported by R.P. de Stadler when he states that *"we are far too academically orientated and still tend to regard technical education and vocational training as second rate. We are also creatures of our own environment where many of us are university educated and trained."* (Fiat Lux 1986 Vol. 21 No. 1:18)

The SA Chamber of Business predicts that "only between 5% and 7% of last year's [1994] school leavers would find employment." This scenario becomes gloomier when the following statistics are taken into consideration:

The number of matriculants produced in 1994 by the following Departments of Education:

Education and Training	: 171 586
Transvaal Education	: 33 535
House of Representatives	: 25 421
House of Delegates	: 15 240

(The Star 19/09/96:5)

It is essential, in light of the manpower needs of the country and the tremendous growth in industrialisation that the school

system provide pupils with both the knowledge and skill aspects of education. It is necessary that the child be provided with the necessary expertise to use the technology that he/she will encounter in his/her technological environment. The child must be equipped with skills that enable him/her to adapt to an ever-changing environment and lifestyle.

Today it is increasingly recognised "*that education and the world of work are interdependent*" and that educational endeavours must adapt to meet the needs of a technologically advanced world and fulfil the aspirations of the school leaver. (The Star 01/08/95:11)

Rautenbach (1989:90) made the following pronouncements regarding the demand and availability of skilled labour:

*"The excess in supply of labour over demand in the industrial sector is changing from 23% in 1960 to 36% in 1985 to 52% by the year 2000, indicating that the labour force is becoming less skilled with the passage of time."*

He [Rautenbach] further goes on to state that South Africa will be confronted with rising unemployment of lesser skilled people and the South African economy will cease to be competitive on the world markets.

The pronouncements made above are now becoming a reality when one studies the following picture:

33.6% of workers [i.e. 4.7 million people] cannot find work in the formal sector of the economy and 87% of these people have no skill or training for any job.

*"Labour Minister Tito Mboweni says that of the more than 400 000 youngsters that left school in 1994, only 3-4% will find jobs."* (Business Day 27/06/95) These statistics are frightening when one considers that out of a total of 400 000 school leavers, only approximately 12 000 - 16 000 youngsters will be able to find employment.

One of the major contributing factors for this alarming situation is that the present schooling system *"has become so academic that pupils are no longer adequately prepared for the world of work in which they will have to exist meaningfully."* (Dekker and Lemmer 1993:251) and this further supported by the Draft Discussion Policy Document on Education and Training presented by the ANC when it is stated that *"the curriculum has been unresponsive to changing labour market needs and has failed to contribute to the development of learners who are prepared for the world of work."* (1994:67)

There must be something amiss in the education system which produces so many school leavers with apparently no skills/knowledge in order to take their rightful places in society and realise one of the aims of adulthood; that of fulfilling a vocation in life and that of economic independence. The answer lies in examining the school curriculum and establishing what the youngster is made to learn in school on his journey to adulthood.

The curriculum forms the bedrock upon which the education system is built. Therefore if schools hope to meet the needs of society and close the gap between school life and working life then the curriculum will have to be re-structured, with emphasis being placed on vocational education. *"The school's curriculum more than any other side of formal education, bears the burden of preparing pupils for life, of passing onto them those things that they must know if they are to live full human lives in an often cruel and demanding world."* (Luthuli 1990:83)

Rautenbach in a paper presented to the 1981 Conference on Technical and Vocational Education in Southern Africa gave the following points on a balanced education system for a developing country: (Fiat Lux 1986 Vol. 21 No. 1:18)



- o The needs of cultural modernisation must be taken into account and the majority of children must receive some kind of vocational education;
- o the education system must provide in the most economical way the correct mix of skilled manpower at all levels needed for the development of the country;
- o all available resources both within and outside the school system should be used to achieve educational and training objectives; and
- o national and regional planning must take place and industry and commerce must be drawn into planning.

### **2.3 Nature of the Existing Curriculum**

The existing school curriculum aims at providing the child with abroad general education. There is an overemphasis on academic education to the detriment of vocational education.

The child is not being provided for in his/her totality in the present curriculum. The four broad aims of pre-tertiary education, listed in the National Education Policy, can be summarised as follows:

- (i) The development of individuals with a developed intellect, a strong moral character and a balanced personality.
- (ii) The development of the inherent potential of each individual.
- (iii) Laying the foundations for further development of the individual, for occupational competence and for economic independence.
- (iv) Education for responsible and useful citizenship in order to equip the individual for service to his community and his nation, his country and the world

These four broad aims cover two fields, namely:

- o The child's talents, needs, interests and potential
- o They relate to society and its needs and values

These aims relate also to "*the economy's need for appropriately trained manpower.*" (NEP: xii) The above-mentioned assumption, that the present school curriculum concentrates on academic education is borne out by the fact that only one of the four aims of education mentioned above touches on the important aspect of vocational education.

The following questions can be posed regarding the curriculum:

- o Is/Has sufficient attention being/been placed on the teaching of vocational subjects?
- o Is enough being done to promote vocational subjects?
- o Is there a balance in the existing school curriculum between :
  - \* a broad general education
  - and
  - \* vocational education?

(Roux 1987:107)

Roux goes on to further state that:

*"Of course there has long been a long-standing aversion to regarding schools as the proper locus for vocational training: their function was broader, reflecting the fact that work related to only one of the roles of adult life. However, critics maintain it is one thing to avoid a narrow vocationalism: it is quite another to fail to induct pupils into the industrial and technological aspects of contemporary life and to equip them with the skills upon which subsequent technological training can be based."*

(Roux 1987:95)

An examination of the curriculum of the secondary school for Indians will reveal that there is not a case of failure to induct pupils but rather a case of "narrow vocationalism".

#### **4. Conclusion**

Any education curriculum that is properly conceived increases an individual's options. Education provides students with options not only in terms of choice of subjects and courses but also choices that he/she will be faced with in life and one of these choices will eventually be, the choice of an occupation.

Therefore the child must be exposed to the widest possible learning experiences in order to prepare him/her to take his/her rightful place society.

Chapter 4 will examine the curriculum at the Indian secondary school.

## BIBLIOGRAPHY

1. Behr A.L. 1980. **New Perspectives in South African Education**. Durban: Butterworths
2. Coopan S. 1948. **The Education of the Indian in Natal (1860-1947)**. Cape Town: University of Cape Town
3. Dalton R. 1995. **Juta's Statutes of South Africa Vol. 1**. Indabeni. Cape: Rustica Press
4. Dekker I.E. & Lemmer E.M. 1993. **Critical Issues in Modern Education**. Durban: Butterworth Publishers
5. Jhugroo S.C. 1988. **A Survey of Indian Education at Secondary School Level from 1966 to 1987**. Pretoria: UNISA
6. Kuppusami C. & Pillay M.G. 1978. **Pioneer Footprints**. Goodwood: NASOU
7. Le Roux A.L. 1987. **Education and the World of Work: A Personal Perspective**. New York: University of New York
8. Maharaj S.R. 1960. **Secondary Education for Indians in Natal**. University of Natal: Pietermaritzburg
9. McGregor R. & McGregor A. 1992. **Education Alternatives**. Kenwyn: Juta & Co.
10. Naguran C.A. 1985. **A Critical Study of Aspects of the Political, Constitutional, Administrative and Professional Development of Indian Teacher Education in South Africa with Practical Reference to the Period 1965 to 1984**. Pietermaritzburg: University of Natal
11. Naicker S.P. 1983. **An Investigation into Placement and Performance of Pupils in the Practical Course within the System of Differentiated Education in Indian Schools**. Pretoria: UNISA
12. Nair G.K. 1978. **Planning and Provision of School Accommodation Viewed Against the Background of the Function of the Contemporary School with Special Reference to the Future Needs of the Indian Community in South Africa**. Durban: University of Durban-Westville
13. Pillay G. 1988. **Indian Education in the Transvaal up to Secondary Level: A Historical-Educational Study**. Pretoria: UNISA

14. Ramjan A.G. 1986. **An Investigation into the Socio-Economic Importance of Technical Education for South African Indians.** Durban: University of Durban-Westville
15. Strydom G.S. 1980. **Technical Education for Indians.** Pretoria: HSRC

#### PERIODICALS

1. Barth P. **Basic Education.** 1989 (pages 2-5)
2. Berkhout S.J. **South African Journal On Education.** 1989 Vol. 9 No. 1 (pages 14-16)
3. **Fiat Lux Special Edition.** Volume 25 Number 4. 1990/1 (page 12/16/18)
4. **Fiat Lux.** Volume 21 Number 1. 1986 (page 18)
5. **Fiat Lux.** Volume 8 Number 2. 1983 (page 8)
6. **Fiat Lux.** Volume 1 Number 2. 1966 (page 59)
7. Gibson J. **Journal of Education.** 1978 (page 43)
8. Husen T. Reshaping the school for the next decades **UNISA Reader.** 1990
9. **Journal of Studies in Technical Careers.** Vol.3 No. 4 (page 349)
10. Kraska M.F. **Journal of Studies in Technical Careers.** Volume 3 Number 1. 1981 (pages 61-62)
11. Luthuli P.C. "What ought to be in education" with special reference to Blacks in South Africa. **UNISA Reader.** 1990
12. Miller R.H. **Comparative Education Review.** Vol. 31 No. 2.
13. Rautenbach W.L. **Oriertation.** 1989 (pages 89-91)
14. Solomon, A. 1970. **Fiat Lux.** Vol. 5 No. 9. (page 31)

#### NEWSPAPERS

1. **Business Day.** 27/06/95
2. **The Star Newspaper.** 01/03/95

3. **The Star Newspaper.** 19/09/96
4. **Sunday Times, Business Times** 25/08/96
5. **Sunday Times, Business Times** 01/09/96

#### INTERVIEW

1. Mr. George Singh: Principal Planner - Technical and Vocational Education: Ex-House of Delegates

#### GOVERNMENT POLICY DOCUMENTS

1. African National Congress. **A Policy Framework for Education and Training (Draft).** 1994
2. Department of National Education: **National Education Policy. Educational Programmes for Pre-tertiary Education in South Africa.** Nated 02-124 (88/06). Pretoria
3. **Handbook for Principals:** Department of Indian Affairs - 1982

## CHAPTER 4

### CURRICULUM

#### 1. Introduction

The vocational education curriculum has to satisfy the needs of the *"traditional constituencies of the school, that is, school personnel, parents, students and also the goals of industry, [thereby] making this type of educational program a hybrid which must therefore satisfy the needs of the school world and the world of work."* (Foster 1979:127)

Employers have come to expect and demand that future employees be equipped with entry level job skills and this in turn has made youngsters realise that in order to compete successfully in the fast changing technological era, they will have to acquire the necessary skills that will allow them to market themselves. *"Government officials, the press and many segments of the public have come to expect that vocational education will help disadvantaged persons find and hold jobs."* (Draper 1967:38)

Increasingly the role of the secondary school is being changed to meet the demands of a social milieu that is in a constant state of flux. The vocational education curriculum offered at the Indian secondary school ranges from that which is specific to a particular employer or enterprise to that which is useful in almost any enterprise thus also offering a youngster involved in the vocational education programme the opportunity to become self-employed.

The vocational education curriculum will be discussed under two headings namely, the Junior secondary phase [Part I] and the Senior secondary phase [Part II].

## PART I

### 2. The Junior Secondary Phase

The curriculum in the junior secondary phase will now be examined to establish the choices that are offered to the pupil ion this stage of his/her schooling.

#### 2.1 Curriculum Choices

The junior secondary phase curriculum will be discussed under three headings namely, the 70's, the Practical course and the 90's respectively.

##### 2.1.1 The Junior Secondary Phase [1970's]

The curriculum during the introduction of differentiated education comprised of the following subjects:

English, Afrikaans, General Science,  
History, Geography, and

in addition pupils could choose two additional compulsory examination subjects from:

Technical Drawing or Industrial Arts  
for boys and Housecraft or Needlework  
and Clothing for girls.

In addition boys and girls had to choose from either Accounting or Typing to make up the additional subject. (Fiat Lux 1972 Vol.7 No.8:10)

In 1975 pupils in standard 7 were offered a 9th compulsory examination subject and the following subjects were offered as choices:



Latin, Arabic, Hindi, Art, Music  
Health Education and Physiology  
or Art

The following four subjects were offered as non examination subjects:

Right Living, Physical Education,  
Aesthetic Education [Music, Art  
Singing, skills including  
Handwork and Handicraft] and  
Guidance.

### **2.1.2 The Practical Course**

The Practical Course, which *"was vocationally orientated, [were] provided for such pupils to allow them to develop their limited talents ..."* (Fiat Lux 1972 Vol. 7 No. 2:10). The implication contained in this statement is that vocational education was for the child who was not academically inclined or who was an underachiever ["limited talents"]. This stigma that has been attached, has since grown in stature and vocational subjects frowned upon and seen as subjects for the below average pupil. This view is further supported by Naguran when he states that the Practical Course was *"a practical vocationally-orientated course offered to pupils who could not derive sufficient from the instruction provided in the ordinary academic course."* (Naguran 1985:225) This is one of the main contributing factors for vocational education not enjoying the success that it deserves in the Indian secondary school.

The Practical course [standards 6, 7 and 8] comprised of the following subjects: six compulsory examination subjects and four non-examination subjects. In addition two specific directions of study could have been followed, of which one could be chosen, namely:

- (i) A Practical Technical course for boys and a Domestic Science course for girls.
- (ii) A Practical Commercial course for boys and girls.

Three subjects from the following directions of study could be chosen:

- (i) Technical:-  
Workshop Practice, Workshop Theory,  
Industrial Arts and Technical Drawing.
- (ii) Domestic Science:-  
Cookery and Home Management,  
Mothercraft and Hygiene,  
Housecraft, Needlework and  
Garment Making.

OR

- (iii) Commercial:-  
Accounting, Business Methods,  
Salesmanship and Typewriting.

(Fiat Lux 1972 Vol. 7 No. 8:11)

### **2.1.3 The Junior Secondary Phase [1990's]**

In the junior secondary phase [7th to 9th school years] education is of a general-formative nature and most of the subjects are compulsory. [Table 1]

#### **2.1.3.1 First Year [Comprehensive Secondary School]**

Standard 5 is the first year of secondary school education. This year of schooling is usually carried out in the primary school. The curriculum for this year of schooling is summarised in Table 1.

TABLE 1

SUBJECTS	MINUTES/PERIODS
1. Compulsory Examination Subjects:	
1.1 English First Language	330 (11)
1.2 Afrikaans Second Language	240 (8)
1.3 Mathematics	270 (9)
1.4 History	90 (3)
1.5 Geography	90 (3)
1.6 General Science	90 (3)
2. Compulsory Non-Examination Subjects	
2.1 Basic Techniques/Needlework	90 (3)
2.2 Physical Education	60 (2)
2.3 Class Music	60 (2)
2.4 Art	60 (2)
2.5 Library	30 (1)
2.6 Right Living/Indian Languages	60 (2)
2.7 Guidance/Indian Languages	30 (1)
<b>TOTAL</b>	<b>1 500 (50)</b>

Source: Principal's Handbook - D.I.A:F7

It will be noted that Basic Techniques and Needlework, the foundation stones for vocationally orientated subjects in the second and third years of the junior secondary phase, constitutes 6% of the total instruction time and these subjects are considered to be non-examination subjects. This had the effect of instilling in pupils' minds that academically orientated subjects [examination subjects] are more important than non-examination subjects. This impression is also imprinted in the minds of parents and this impression is a major contributing factor when choices are made for course selection in the senior secondary phase of schooling [that is standard 8].

#### **2.1.3.1 Second and Third Years [Comprehensive Secondary School]**

In the second and third years [standards 6 and 7] the curriculum

is constituted as follows: [Table 2]

TABLE 2

SUBJECT	Std. 6	Std. 7
1. Examination Subjects:		
1.1 English	245 (7)	245 (7)
1.2 Afrikaans	210 (6)	210 (6)
1.3 Mathematics	245 (7)	210 (6)
1.4 General Science	140 (4)	140 (4)
1.5 History	105 (3)	140 (4)
1.6 Geography	105 (3)	140 (4)
1.7 ONE from		
(i) Technical Drawing	105 (3)	105 (3)
(ii) Industrial Arts		
(iii) Housecraft		
(iv) Needlework & Clothing		
(v) Home Economics		
1.8 ONE from		
(i) Accounting	105 (3)	105 (3)
(ii) Business Economics		
(iii) Typing		
1.9 ONE from		
(i) Latin	105 (3)	105 (3)
(ii) Indian Languages		
(iii) Art		
(iv) Music		
(v) Health Education		
(vi) A subject not already taken from 7 or 8		
2. Non-Examination Subjects:		
2.1 Physical Education	70 (2)	35 (1)
2.2 School Music	35 (1)	35 (1)
2.3 Art/Computer Literacy	35 (1)	35 (1)
2.4 Guidance	35 (1)	35 (1)
2.5 Library	35 (1)	35 (1)
2.6 Right Living	75 (1)*	75 (1)*
	1650 (45)	1650 (45)

\* Right Living is conducted on a daily basis over 5 days (5x15 minutes)

Source: Principal's Handbook - D.I.A.: F7-8

The above-mentioned curriculum [Table 2] is prescribed for pupils

who choose a General, Humanities, Science, Commercial or Home Economics field of study in the junior secondary phase.

It will be noted that vocationally orientated subjects [ as defined in this study - Chapter 1 para.1.4] , if chosen, constitute 12.72% of the total instruction time per week. But it must also be noted that pupils are only compelled to choose a vocationally orientated subject from Group 1.7 [Table 2] and this only amounts to 105 minutes of instruction time or 6.36% of the total instruction time for the week. Typing which is one of the choices of subjects in Group 1.8 is optional, and if it is not chosen then the pupil's curriculum is dominated by subjects from the academic sphere.

Once a pupil has made his/her choice of subjects at this stage, he/she is forced to pursue with the choice in standard 7 although he/she might not have the aptitude nor the interest in his/her choice. This could have the result of inducing dislike for the subjects concerned.

#### **2.1.3.3 Second and Third Years - [The Technical Secondary School]**

Standard 5 which is part of the junior secondary phase, is offered at the primary school with the same curriculum as that outlined in paragraph 2.1.3.1 above.

The curriculum for pupils who wish to pursue a technical direction of study in the junior secondary phase [standards 6 and 7] is constituted as follows: [Table 3].

It must be stressed that the curriculum as outlined in Table 3 is followed by pupils in a secondary school that is technically biased or a technical secondary school whereas the curriculum outlined in paragraph 2.1.3.2 is offered to pupils in the Comprehensive secondary school.

TABLE 3

SUBJECT	STD. 6	STD. 7
<b>1. Examination Subjects:</b>		
1.1 English	245 (7)	245 (7)
1.2 Afrikaans	210 (6)	210 (6)
1.3 Mathematics	245 (7)	210 (6)
1.4 General Science	140 (4)	140 (4)
1.5 History	105 (3)	105 (3)
1.6 Geography	105 (3)	105 (3)
1.7 Technical Drawing	105 (3)	140 (4)
1.8 Trade Theory	105 (3)	105 (3)
1.9 Workshop Practice	175 (5)	210 (6)
<b>2. Non-Examination Subjects</b>		
2.1 Physical Education	70 (2)	35 (1)
2.2 Guidance	35 (1)	35 (1)
2.3 Library	35 (1)	35 (1)
2.4 Right Living	75 *	75 *
<b>TOTAL</b>	<b>1 650</b>	<b>1 650</b>

\* Right Living is conducted over 5 days [15 minutes per day]

Source: Principal's Handbook - D.I.A.:F7-8

It will be noted that vocationally orientated subjects constitute 23.33% and 27.57% of the total instruction time in standards 6 and 7 respectively. This is an improvement on the 6.36% as outlined for the curriculum that is followed by pupils in the Comprehensive secondary school.

### 3. Conclusion

The curriculum in the junior secondary phase of education can be summarised as follows:

- o education has a broadly based, general-formative character;

- o the same core syllabuses are followed and the subject content is presented on a differentiated basis according to the educational needs of specific groups from the second year onwards; and
- o most of the subjects are compulsory

(D.N.E. 88/06:92)

This phase of education is an exploratory phase in the youth's education. The pupil is assessed to determine his/her ability and potential to help him/her to make a choice to decide his/her future direction of study. The initial steps of vocational education is laid in the junior secondary phase of the youth's education. It is in this phase that the pupil encounters Technical and Domestic Science subjects as examination subjects.

The question now arises - what is amiss that pupils who are afforded the opportunity to experience technical and vocational subjects during their junior secondary phase of education do not further their studies in this direction in the senior secondary years of their schooling?

The following reasons can be provided, as suggested answers, for the above-mentioned question in relation to the Comprehensive secondary school:

- o The choice of vocationally orientated subjects is restrictive and pupils are only exposed to optional subjects.
- o Pupils are compelled to continue with subjects they have chosen in standard 6 irrespective of whether they have an aptitude for the subject/s or not.

- o In standard 5 the vocationally orientated subjects are non-examination subjects, and this creates the impression that these subjects are inferior to the academically orientated subjects.
- o Only 6.36% of the total teaching time is devoted to vocational subjects in standards 6 and 7 thus making the curriculum academically biased.
- o The vocationally orientated subjects that are offered in the Comprehensive secondary school are not offered in the senior secondary phase of education, in many of the Comprehensive secondary schools.

Therefore it can be seen that although vocationally orientated subjects are offered in the junior secondary phase, pupils tend not to further their studies in this sphere.

#### **4. Description of Vocational Subjects in the Junior Secondary Phase [Standards 6 and 7]**

##### **4.1 Comprehensive Secondary School**

Technical drawing, Industrial Arts, Housecraft, Needlework and Clothing and Home Economics are the vocational subjects that can be offered at the Comprehensive secondary school, provided that the school has the necessary facilities [workshops, domestic science rooms, etc] to cater for these subjects.

The vocational subjects offered at the Comprehensive secondary school will be examined in terms of aims and subject content.

##### **(i) Industrial Arts**

In this phase of education the pupil is exposed to Technical Drawing, Woodwork, Metalwork, Motor Mechanics and Electricity.

The Industrial Arts syllabus is divided into the following three



components:

- o Hand and machine tools [the construction, use, care, maintenance and precautionary measures]
- o Materials [the processing, characteristics, properties and uses of wood, metal and plastic accessories]
- o The code of practice for drawing and the use of drawing boards

(Fiat Lux 1978 Vol. 13 No. 3:32)

The subject matter is organised in the following manner:

- \* In standard 6 all pupils do Woodwork
- \* In standard 7 all pupils do Metalwork

Each class has three consecutive periods per week, and each is utilised as follows:

- Period One : Drawing
- Period Two : Theory
- Period Three : Practical

Since Industrial Arts is an examination subject the pupil is tested in all three aspects, that is Practical, Drawing and Theory.

The exposition provided above is followed by pupils who find themselves in a Comprehensive secondary school and the effectiveness of this particular curriculum is dependent upon the following factors:

- \* the availability of workshops;
- \* suitably qualified teachers
- \* resources

The aim of Industrial Arts in the junior secondary phase is

summarised below:

- o The pupil is given the opportunity to find out what his/her interest fields are. These fields may be the basis for the choice of subjects at standard 8 level.
- o The pupil is able to develop his/her creative abilities and have the satisfaction of doing something by his/her -self. In this sense the planning of a project as well as the systematic "manufacture" is is therefore important.
- o The pupil is taught how to use and maintain equipment.
- o The practical side of the subject will help develop his/her self-confidence as he/she must make decisions and do work on his/her own.
- o On the whole the subject allows the child to develop his/her sensory as well as motor impulses to place him/her further on the road to mature adulthood.

(Admin. - House of Delegates: Department of Education and Culture  
- Guide to Teaching of Industrial Arts:2)

(ii) Technical Drawing

Technical Drawing comprises of the following aspects:

- \* Theory
- \* Practical

The aims of Technical Drawing during the secondary phase of education is summarised below:

- To inculcate the importance of drawing as a medium of communication;
- To inculcate in the pupil an ability to read a drawing and to apply the knowledge thus acquired to reproduce the drawing, or making a practical project for an assignment;
- To develop the pupil's ability of representing ideas and objects graphically; and
- To teach the pupil correct drawing techniques with the idea of possible advanced study and training in this sphere.

Each class has three consecutive periods per week.

### (iii) Needlework and Clothing

The aims of Needlework and Clothing can be summarised as follows:

- The functioning of the teenager as an individual in the family and environment and as a consumer with regard to clothing.
- The importance of general neatness and well-cared for appearance.
- The judicious selection, care and maintenance of clothes and household textile fabrics and materials.
- The basic construction techniques for the construction and maintenance of clothes and household textile items.
- The responsibilities and rights of the consumer.
- The ways to finance transactions and application of budget planning.
- The art of elements and the application thereof in the selection of textiles and clothing.
- The acquisition of psychomotor and perceptual skills.
- The development of creativity by means of learning experiences.

Pupils in standards 6 and 7 have three consecutive periods per week.

(iv) Home Economics and Housecraft

The syllabus for Home Economics and Housecraft at standard 6 level is summarised below:

- The Environment
  - \* knowledge of the self
  - \* development of the individual
  - \* performance of tasks
- Management and Consumption
  - \* home management
  - \* decision making process [ways in which decisions are made, steps in the process, making a managerial decision about purchases]
- Consumer Education
  - \* the role of the consumer in society
  - \* rights and responsibilities of the consumer
- Financial Management
  - \* purchasing transactions
  - \* satisfying needs within the limits of income
- Food and Nutrition
  - \* food groups and nutrients
  - \* food hygiene
  - \* apparatus and equipment
  - \* reading and following a recipe
  - \* preparation and cooking techniques
- Protection
  - \* housing [needs, utilisation of space and types of housing]
- Clothing
  - \* socio-psychological aspects of clothing
  - \* personal appearance and care of clothing [hygiene and general neatness, good posture, correct underwear, daily care of personal garments, timely mending, care symbols and accepting responsibility for the care of

garments]

- o Textiles
  - \* comparison of the properties of natural and artificial fibres
- o Needlework Equipment
  - \* techniques for construction

Pupils have three consecutive periods per week.

The syllabus at standard 7 level can be summarised as follows:

- o Family Studies
  - \* socialisation
  - \* responsibilities towards family
  - \* responsibility towards community
- o Management and Consumption
  - \* home management [management process, decision-making process and home and environmental care]
- o Food and Nutrition
  - \* eating patterns of the family
  - \* food groups and nutrients
  - \* meal management
  - \* selection and the purchase of food
  - \* storage of foods
- o Reading and Following of Recipes
- o Practicals

Pupils have three consecutive periods per week.

It must also be noted that the various aspects, viz., Needlework and Clothing and Home Economics and Housecraft are completed during the course of one year. Each aspect is completed as part of the cycle or the duration can be of one term.

#### **4.2 Exposition of Vocationally Orientated Subjects Offered at the Technical and Technically Biased School**

(i) Trade Theory and Workshop Practice - Standard 6

The course content is constituted as follows:

- Safety precautions
- Brickwork
- Woodwork
- Metalwork and Fitting
- Gas-welding, Soldering and Rivetted joints
- Electricity and Magnetism
- Plastics

(E.C. Circular No. 45 of 1987:1)

The general aims of this direction of study is summarised below:

- to gain new knowledge and skills as well as to learn the techniques of referring to and making use of sources of reference;
- to deepen interest and to develop an ability to think;
- to instill an appreciation of conscientiousness, thoroughness and accuracy and the ability to adapt to changing circumstances. If the pupils master these concepts, they will be equipped to face problems as they arise;
- to lead the pupils to an understanding of the interdependence of human beings and their relationship to the community. in this technological age;
- to teach the pupils to appreciate how the development and application of technical knowledge influences the progress of civilisation and;
- to give the pupils the opportunity to savour the joys of creative work by designing, drawing and making something on their own.

The syllabus outlined above is implemented in Technical or Technically biased secondary schools at standard 6 level.

(ii) Technical Theory and Practice - Standard 7

The following aspects form part of the syllabus of Technical Theory and Practice:

- Electronics
- Electrician-work
- Fitting and Turning
- Motor Mechanics
- Welding and Metalwork
- Motorbody Repairing
- Woodworking
- Bricklaying and Plastering
- Plumbing and Sheetmetalwork

The course is designed in such a way that pupils are granted the opportunity to explore the basic components that constitute the above-mentioned aspects.

The duration of a course can be between 8 and 40 weeks. The following factors will determine the duration of the course:

- If the school has the facilities to offer FIVE OR MORE of the above-mentioned subjects, then a package of FIVE aspects should be offered and 8 weeks should be devoted to each aspect. The following components: Electrical, Mechanical and Construction must be included to best satisfy the principle of exploration.
- If the school has facilities to offer any THREE OR FOUR of the aspects then the pupil must be offered a package THREE subjects and 13 weeks should be devoted to each aspect.

- If a school has facilities to offer ONLY ONE of the aspects then a 40 week programme is followed.

(E.C. Circular No. 36 of 1988)

The primary aim of Technical Theory and Practice is educational. The child must be given knowledge and should acquire practical skills so that he/she may be equipped to make a contribution to society at large. The subject Technical Theory and Practice provides the child with the opportunity to :

- o examine, explore and apply certain basic principles and concepts used in selected subject areas of engineering technology;
- o explain natural science phenomena in the technological world;
- o use the "language" of technology
- o acquire knowledge and develop learning skills based on empirical observation and scientific method;
- o gain familiarity with design and construction procedures in manufacturing articles;
- o appreciate how the application of technology contributes to and improves the quality of life;
- o form perspectives for future study and vocational prospects;
- o use simple free-hand sketches to develop an ability to express thoughts and ideas on paper;
- o read and interpret drawings; and
- o appreciate the need for safety procedures in a workshop so that he/she may protect not only his/her own person but that of his/her colleagues as well.



## **5. Conclusion**

At a glance it can be deduced that the vocational subjects offered at a Technical or Technically biased school provides the child with an in depth knowledge [in relation to that offered at the Comprehensive secondary school] of vocational subjects. Unlike the Comprehensive secondary school, the Technically biased school prepares the child to follow a vocationally orientated course in the senior secondary phase of education. The technically biased school also has the necessary facilities to offer pupils a choice of vocational subjects at senior secondary level.

It can be seen that there is a shift in emphasis from the general-formative education that is offered in the Comprehensive school, in that the aims and objectives in the Technically biased school is directed at occupational competence and economic independence.

## **PART II**

### **1. The Senior Secondary Phase**

*"In an attempt to bring about a balanced general academic education and to meet the manpower needs of the country"* (E.C. Circular Minute A10/2/11/1), the Department [House of Delegates] introduced two types of vocational courses at the secondary school, namely the N and T-courses. [National Certificate Course and Technical Course]

#### **1.1 National Certificate Course [Implemented 1991]**

##### **1.1.1 Admission Requirement**

The minimum requirement is a pass at standard 7 level

### 1.1.2 Duration of Course

The National Certificate course is spread over three of the senior secondary phase, that is:

- N1 over the standard 8 year
- N2 over the standard 9 year
- N3 over the standard 10 year

### 1.1.3 Certification

Pupils will be awarded upon request with a National Certificate for the 4 N-course subjects and if the pupil passed English and Afrikaans on the Higher or Standard grade he/she will qualify for a Senior Certificate without exemption.

### 1.1.4 Course Structure

The compulsory subjects for each of the courses depicted in the organograms [Figures 1 - 13] are English and Afrikaans. Information for the organograms was obtained via personal interviews with the following people: G. Singh - Principal Planner of Vocational Education; R. Valjee and S. Wishart (Subject Advisers of Vocational Education - House of Delegates.

Figure 1

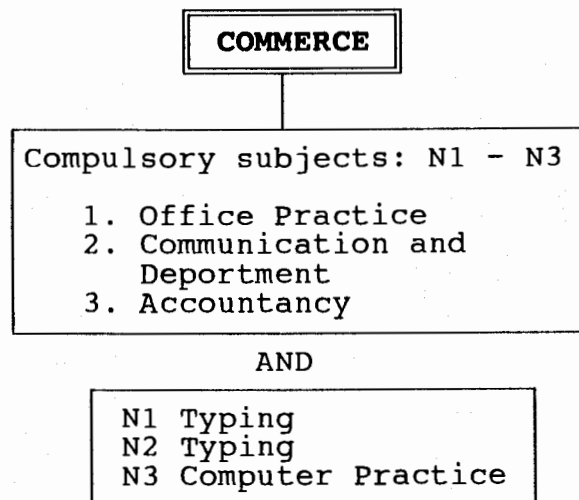


Figure 2

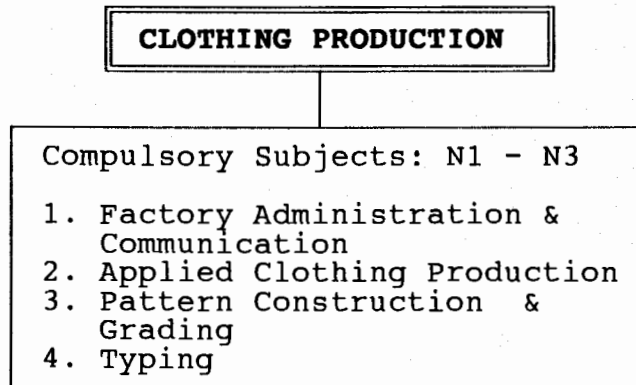


Figure 3

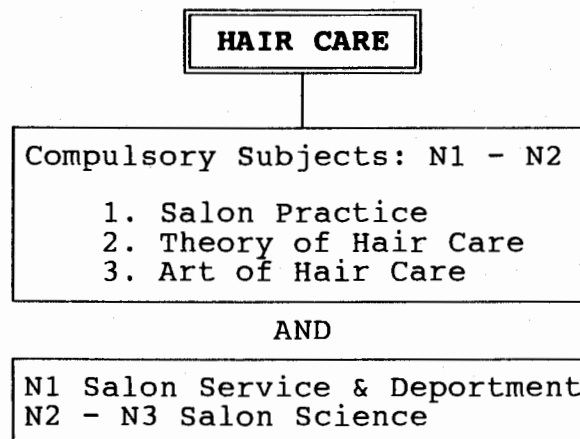


Figure 4

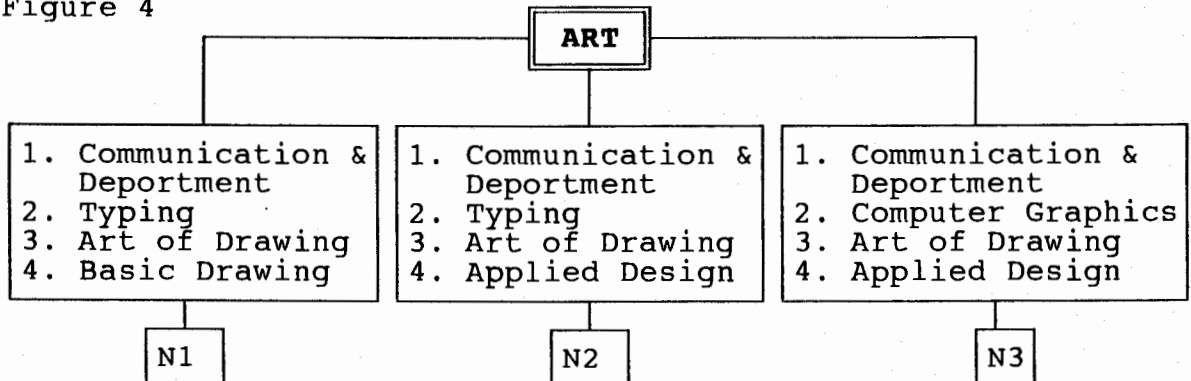


Figure 5

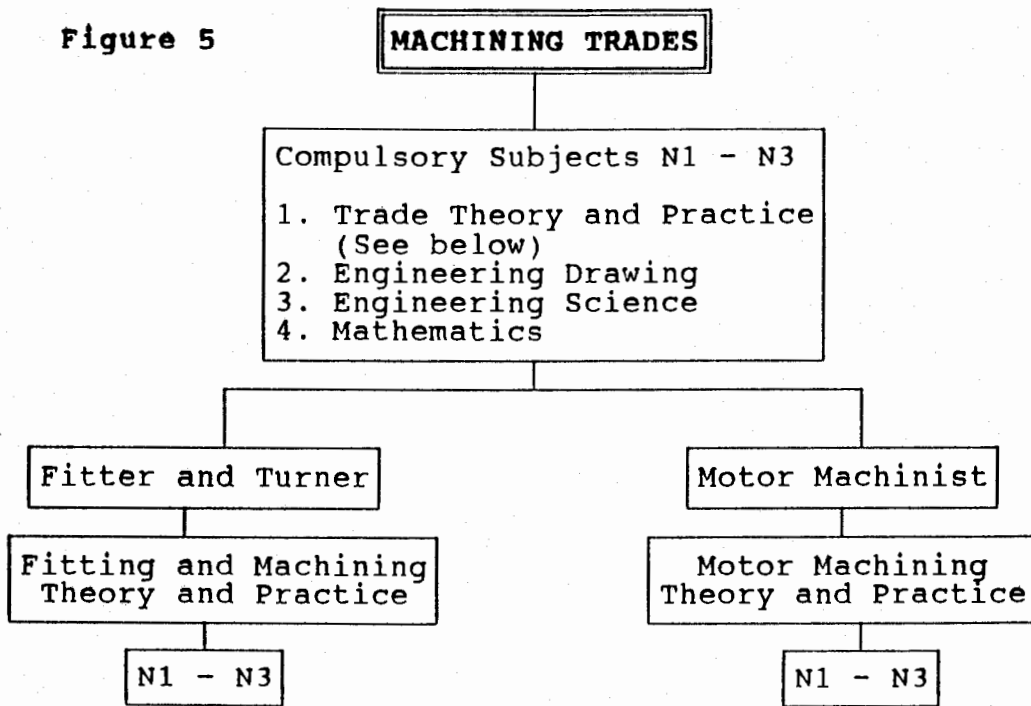


Figure 6

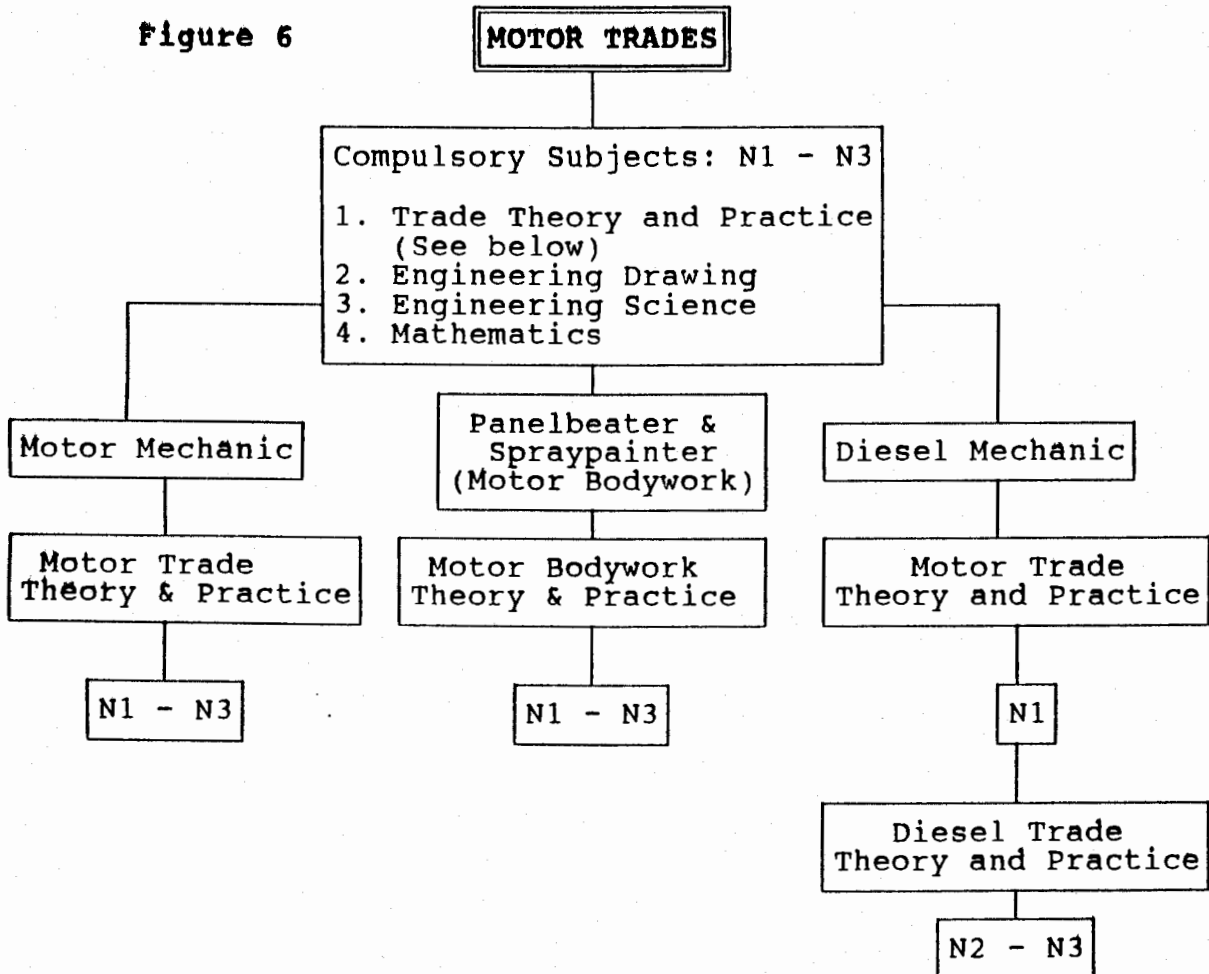


Figure 7

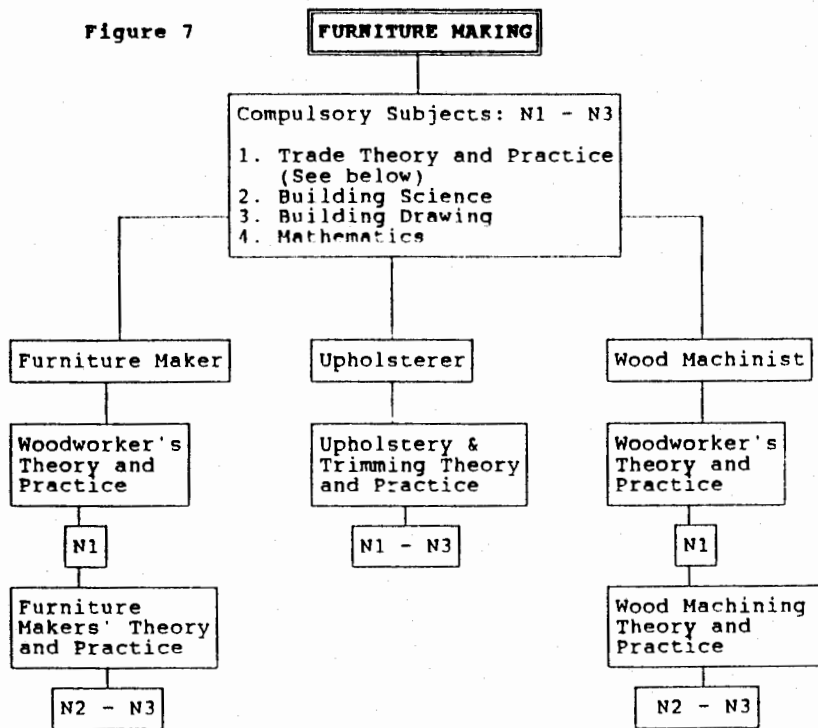


Figure 8

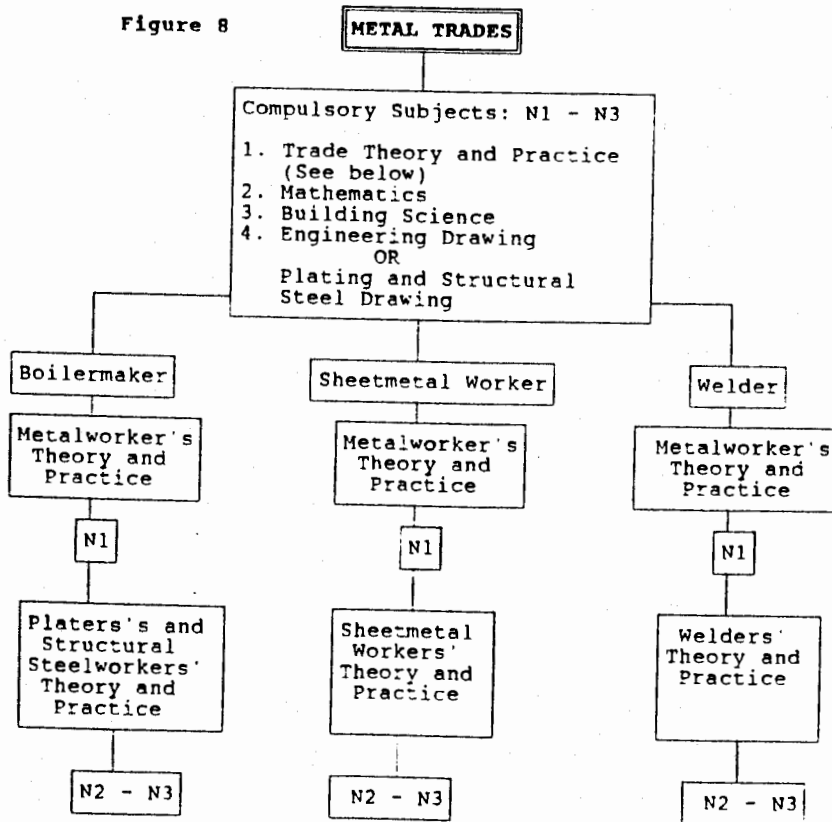


Figure 9

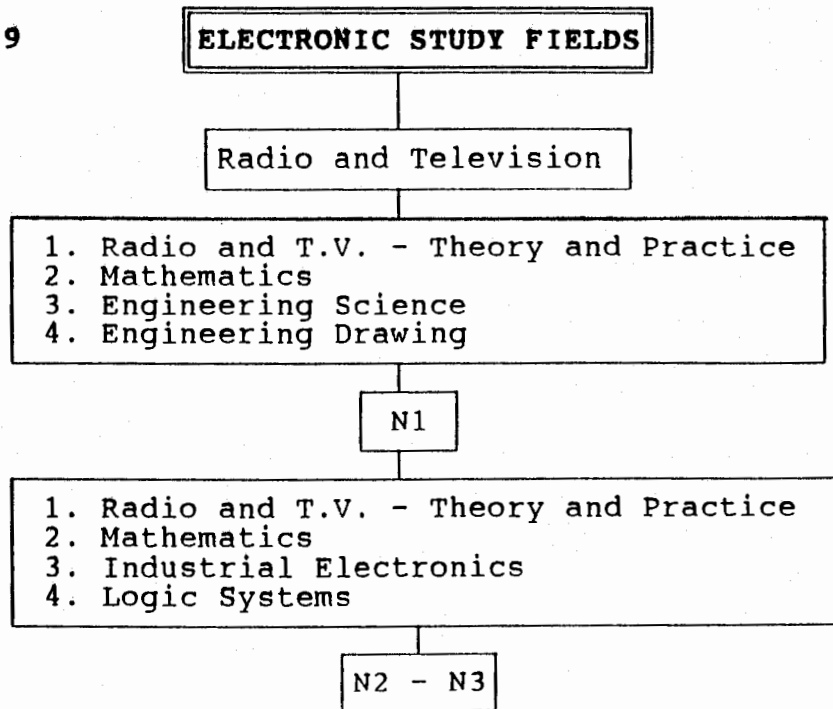


Figure 10

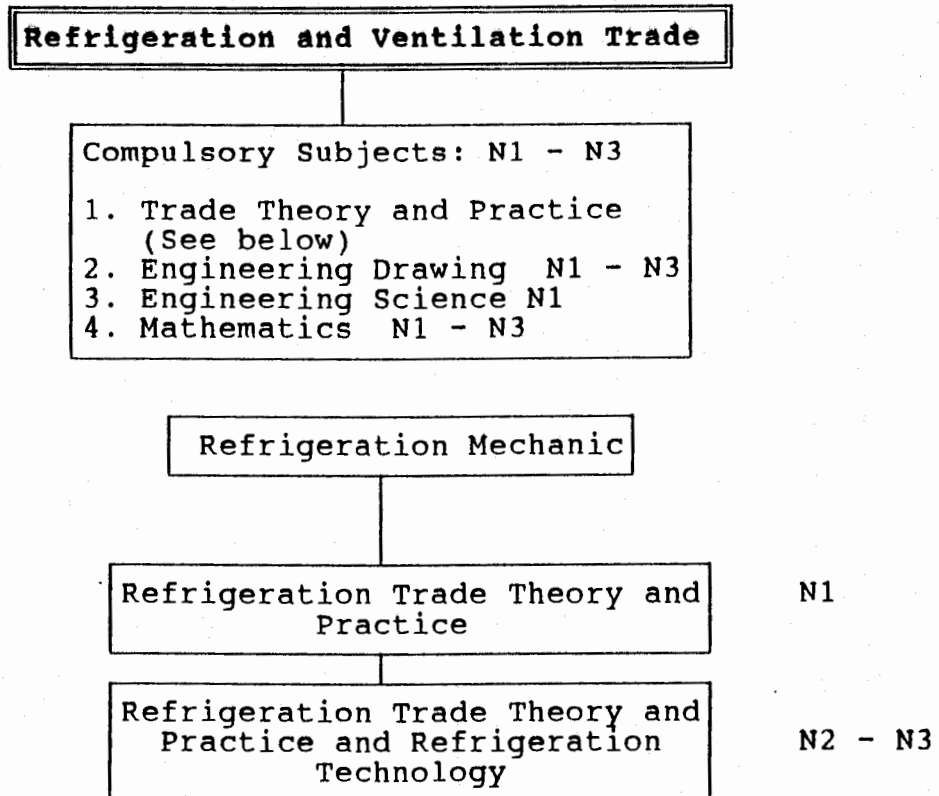


Figure 11

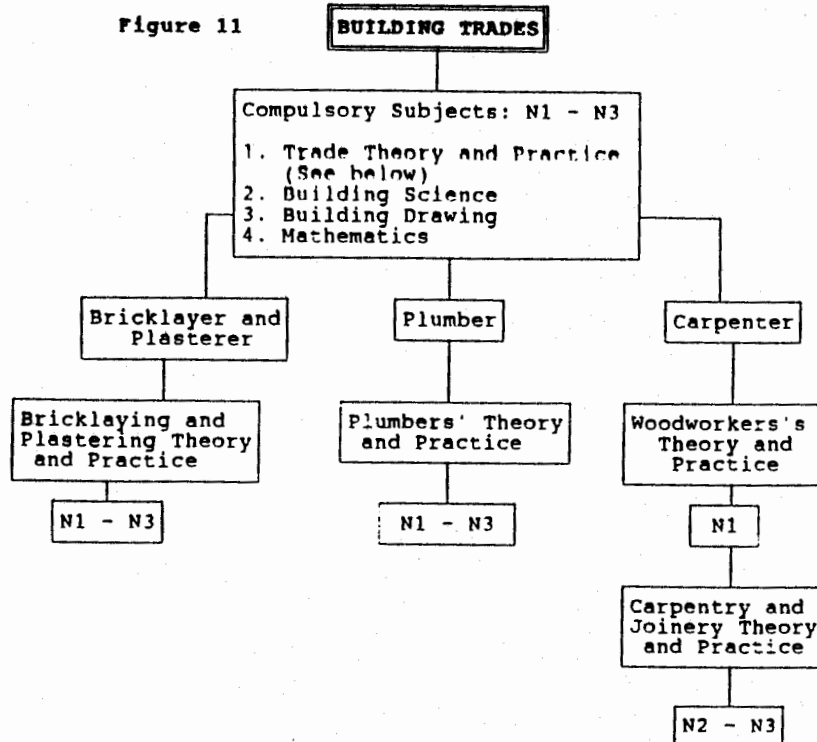
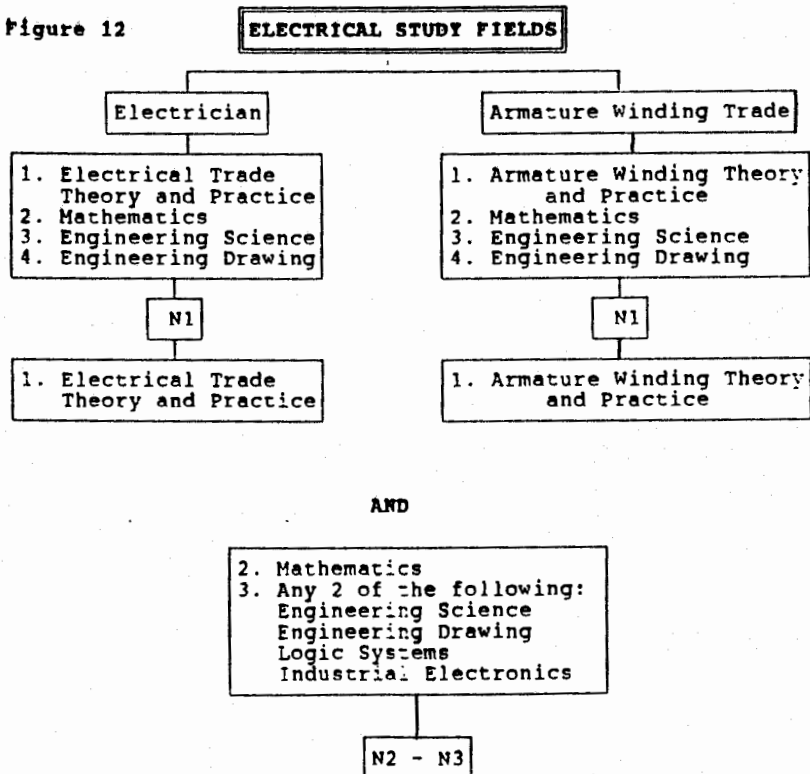


Figure 12



There are 13 directions of study offered for the National Certificate, namely:

- Commerce
- Clothing Production
- Hair Care
- Art
- Machining Trades [Fitter & Turner and Motor Machinist]
- Motor Trades [Motor Mechanic, Motor Bodywork and Diesel Mechanic]
- Furniture Making [Furniture Maker, Wood Machinist and Upholsterer]
- Metal Trades [Boilermaker, Sheetmetal Worker and Welder]
- Electronic Study Fields [Radio and Television]
- Refrigeration and Ventilation Trade [Refrigeration Mechanic]
- Building Trades [Brick-layer, Plumber and Carpenter]
- Electrical Study Fields [Electrician and Armature Winding Trade]
- Motor Electrician

#### **1.1.6 Objectives of the National Certificate Courses**

The objectives of the National Certificate courses in the curriculum of the ordinary secondary school can be summarised as follows:



- o To provide the pupils with the necessary theoretical education and practical training to enhance their opportunities of securing employment in the commercial and industrial sector;
- o To allow pupils to study 4 N-course subjects alongside the 2 official languages so that at the N3 level they may qualify for a Senior Certificate; and
- o To enable pupils, once they leave school, to further studies at:
  - a technical college for study towards a National Diploma [N4, N5 and N6]

OR

- a technikon if they satisfy the admission requirements.

(E.C. Circular Minute AS of 1991)

It is also a course structured specifically to cater for those pupils who intend seeking employment at the end of the course.

### **1.1.7 Description of the National Certificate Courses**

#### **1.1.7.1 Hair Care**

This course is aimed mainly at technical training to enable pupils to satisfy the requirements of a trade test. The scientific background provided to pupils serves as the basis for pupils to qualify as hairdressers, salon managers/manageresses and hair care representatives. On completion of this course, pupils can further their studies and become lecturers in hair care.

#### **1.1.7.2 Commerce**

This course has been designed for pupils who wish to be employed

as secretaries, computer operators, typists, clerks, receptionists, salespeople, etc. This course serves as a sound background to further studies, Eg. N4 - N6 Secretarial [Management, Accounting and Marketing Management] courses.

#### **1.1.7.3 Art**

This course has been designed for the pupil who wishes to specialise in Art in preparation for a career in Art. The commercial subjects in the course provide the necessary background for the business world. Pupils who complete this course will have the required background to qualify as layout artists, photographers, commercial artists, graphic designers, textile designers and creative artists [including pottery, sculpture, ceramics and jewellery making].

#### **1.1.7.4 Furniture Making**

Furniture Making is designed for pupils who wish either to be employed in the furniture making industry or to set up their own business. This course includes the design and manufacture of general household furniture, cabinets, built-in cupboards, panelling and moulding.

#### **1.1.7.5 Clothing Production**

This course is tailor-made for pupils wishing to enter the clothing manufacturing industry and for those wishing to set up boutiques and home industries [small business]. Training is provided for the design of garments and in all facets of production. The course also provides a sound understanding of the manufacturing requirements in the clothing industry.

#### **1.1.7.6 Motor Mechanics**

The primary skills gained in this subject entails identifying, repairing and or replacing mechanical components in a motor

vehicle. Pupils therefore study the complete functions of all mechanical components in various types of motor vehicles. Job opportunities range from semi-skilled operators to vehicle engineers and technologists.

#### **1.1.7.7 Plumbing**

The syllabus for this course involves sheetmetal work and plumbing. The sheetmetal work aspect involves soldering, various types of rivetting, developments for the manufacture of various types of sheetmetal items and the use of various tools in this aspect of practical work. The plumbing ranges from the identification of the many fittings and fixtures in this field to the installation of geysers, basins, baths, and the various types of sanitary systems. Pupils can find employment as plumbers with contracting companies, be self-employed or further their studies.

#### **1.1.7.8 Refrigeration**

Pupils who wish to follow a career path as a refrigeration mechanic, an engineer, designer of refrigeration systems or establish themselves in their own businesses choose this course. The operating principles of refrigeration and air conditioning systems is the basis of this course.

#### **1.1.7.9 Motorbody Work Repairs**

Skills in the use of panelbeating tools are developed. Pupils get to know the body parts of a motor vehicle by stripping and assembling body panels. Joining processes such as rivetting, welding, brazing, spot welding and soldering are taught. Pupils learn skills in oxy-acetylene welding, manual arc welding, metallic inert gas welding, body shaping and panelling, chassis straightening and preparation of vehicle bodies and panels for spraypainting. Job opportunities exist in the home industry and as a panelbeater.

#### **1.1.7.10 Fitting and Turning**

Students become skilled in the use of hand tools such as chisels, reamers, taps and dyes, micrometers and vernier clippers. Pupils learn to use machines such as the lathe, vertical boring machine, milling machine and surface grinders leading to skills in shaping, turning, cutting grooves and threading. Employment in fitting and machining vary from machine operators to design manufacturing and assemblers of precision components. Further development of skills can lead to tool jig and dye making.

#### **1.1.7.11 Radio and Television**

The theory aspect of this course deals with electronic principles, electronic systems, AM and FM radio, monochrome and colour TV, video cameras, test equipment and aerial systems. Practical work includes experiments, radio and TV alignment, fault finding and project building. Pupils who successfully complete this course will be in a position to carry out repairs as a home industry or with large manufacturing and repair companies.

#### **1.1.7.12 Motor Electrical**

This course deals with the electrical and electronic systems of motor vehicles. The theory deals with electrical and electronic principles, generators and alternators, distributors, ignition and fuel injection systems including modern electronic and computerised versions. The practical work involves repairs and experiments. When a pupil has completed this course he/she can start a home industry, seek employment in auto-electrical workshops or motor industries or further their studies.

#### **1.1.7.13 Electricians Work**

Emphasis is placed on practical work which involves experiments, the wiring of premises and appliances and project building. The

theory deals with electrical principles, single and three phase systems. Job opportunities exist in fields such as electricians, electrical technicians and domestic installations.

### 1.1.8 Period Allocation

The 45 periods allocated to the senior secondary phase is distributed as follows:

English	9 periods	] > 630 minutes
Afrikaans	7 periods	
Guidance	1 period	
Physical Education	1 period	
4 N-course subjects	27 periods	] > 945 minutes
Right Living	5 X 15 minutes	] > 75 minutes

57.27% of the total teaching time is devoted to vocational education subjects in the National Certificate Course.

### 1.1.9 Promotion Requirements

Pass in the 3 N-course subjects [trade subject being compulsory], with 40% being a pass. [It must be noted that marks achieved in the practical component of the examination is not included in the final promotion mark.]

(E.C. Circular Minute AY of 1991)

## 2. Technical Course [T-course] - Implemented in 1980

### 2.1 Admission Requirements

The pupil must have passed standard 7 to be admitted to the Technical course.

## 2.2. Duration of Course

The course is completed over three years of the senior secondary phase, standards 8 to 10.

## 2.3 Certification

The pupil who successfully completes the T-course becomes eligible for a Senior Certificate with or without exemption.

This course makes the pupil eligible for entrance to a University or Technikon.

## 2.4 Course Structure

The T-course consists of the following subjects:

Languages: English	] >	Compulsory Subjects
Afrikaans		
Mathematics		
Physical Science		
Technical Drawing		

AND

Trade subject: [ONE of the following]

Motor Mechanics  
Brickwork and Plastering  
Woodworking  
Radio and Television Trade Theory  
Electricians Work  
Fitting and Turning  
Metalworking and Welding  
Plumbing and Sheetmetalworking  
Motorbody Repairs  
Electronics  
Furniture Makers Theory

## 2.5 Period Allocation

English	9 periods
Afrikaans	8 periods
Mathematics	6 periods

Physical Science	6 periods
Technical Drawing	6 periods
Trade Subject [Theory & Practice]	7 periods
Physical Education	1 period
Guidance	1 period
Library	1 period
<b>TOTAL</b>	<b>45 periods [of 35 minutes]</b>

## **2.6 Promotion Requirements**

To qualify for a Matriculation exemption certificate the pupil must have both languages and two other subjects on the Higher Grade. The pass mark for the Trade Subject is 33.33% and, unlike the N-course, the practical component is added to the final promotion mark.

## **2.7 Objectives of the T-Course**

The following conclusions can be drawn from the study of the curriculum of the T-course:

- o The T-course provides the pupil with a general-formative type of education;
- o The objective of the course is to expose the pupil to technical-vocational education without restricting his/her options;
- o The pupil still has the choice of deviating completely from the technical field of study because he/she has the necessary subjects to move into the academic sphere; and
- o The pupil is exposed to practical work in a fully equipped workshop and becomes familiar with a workshop atmosphere.

### 3. Essential Differences Between the N-Courses and T-Courses

- The N-course is directed specifically at the job market whereas the T-course is a more general-formative type of education;
- The N-course restricts the individual in terms of career choices, in that the pupil is prepared for a specific career with no options. The T-course exposes the individual to the technical field, yet allows the pupil the choice of technical or academic career;
- The pupil in the N-course qualifies for a National Certificate, whereas the pupil in the T-course qualifies for a Matriculation Certificate;
- The N-course leads only to a Senior Certificate without Matriculation Exemption whereas in the T-course the pupil has the option of a Matriculation Certificate with or without Exemption;
- The N-course makes the pupil eligible for entry to a Technikon only, whereas the T-course offers the choice of University or Technikon [depending on the type of certificate obtained];
- The N-course offers the pupil more practical exposure; and
- The pass requirements for the N-course and T-course differ, with the most important being that in the N-course the pupil requires 40% to pass his/her N-course subjects and the practical component of the subject does not form part of the promotion mark. In the T-course the pupil requires 33.3% to pass and the practical component constitutes part of the promotion mark.

Both the N-course and the T-course have benefits and disadvantages for pupils [this aspect will be discussed in Chapter 5]. Besides the N-course and T-course, both of which are classified as vocationally orientated, there is a third course that is offered at secondary school level which is more academically biased but yet offers the pupil a glimpse into the



technical sphere of the world of work.

#### **4. Technika Subjects [Implemented 1990]**

Technika subjects enable the pupil to explore four engineering disciplines found in the technological environment, namely, Electronics, Electrical, Mechanical and Civil disciplines.

The teaching methodology includes work in the laboratory to reinforce concepts introduced in the classroom.

##### **4.1 Description of Disciplines**

###### **4.1.1 Technika Electronics**

This area of study covers the light current field of electrical engineering where one is concerned with communications, control and instrumentation. It provides pupils with an introduction to the world of computers, radio, television and electronic equipment.

###### **4.1.2 Technika Electrical**

This sphere of study covers the heavy current field of electrical engineering. It provides pupils with a basic understanding of electrical circuits in single and three phase alternating current systems, motors, transformers and operational amplifiers. Pupils are thus prepared to enter the world of power engineering - generation of electricity, its transmission from a power station through switchgear and overhead lines and its distribution into reticulation systems for the use in homes, factories and offices.

###### **4.1.3 Technika Mechanical**

This aspect provides an introduction to the field of mechanical engineering which is mainly concerned with machines - their design, manufacture, installation, performance and maintenance.

Pupils are introduced to the properties of metals, the use of tools and machines to shape and work these metals into finished products. They are also taught the basics of force, work, energy, the use of heat and the principles used in hydraulics and pneumatics.

#### **4.1.4 Technika Civil**

This direction of study introduces the pupil into the world of building and construction. It concerns itself with the preparation of site, the provision of services - water, electricity, drainage and sewage, the construction details relating to brickwork, woodwork, sheetwork and the roof. It also provides pupils with a basic introduction to planning, administering and organising a building project.

#### **4.2 Subjects Sets for the Technika Direction of Study**

The following structure constitutes a package for the Technika direction of study:

English  
Afrikaans  
Mathematics  
Physical Science

ONE of Technika:

Electronics, Electrical,  
Mechanical or Civil

AND ONE of :

Technical Drawing or Biology or  
Accounting or Computer Studies or  
another approved subject [as listed  
in the Principal's Handbook for  
Indian schools]

#### **4.3 Admission Requirements**

A pupil who has passed standard 7 will qualify for entrance to this course.

#### **4.4 Certification**

The pupil can qualify for a Senior Certificate with or without Matriculation Exemption.

#### **4.5 Promotion Requirement**

The promotion requirement is the same as the one presented in paragraph 2.6

#### **4.6 Scope for Further Studies**

- o Option of studying at a University or a Technikon [depending on the type of Matriculation Certificate obtained.
- o Option of pursuing studying in a technical direction or in the academic sphere.

### **5. Conclusion**

The vocational courses offered cater for the broad aims of pre-tertiary education. *"The inherent potential of each child is accounted for as well as education aimed at occupational competence and economic independence and education for responsible and useful citizenship."* (D.N.E. 88/06:xv)

The vocational curriculum can be described as being a general-formative curriculum but in many respects it also presents career preparatory education.

The N-course is structured in such a way that emphasis is placed on occupational competence and the economic independence of the individual. The T-course and Technika course offers the learner exposure to the world of work and yet provides him/her with a general-formative type of education. The curriculum, especially the T-course and the Technika course, increases pupils' options in respect of the technical and academic spheres of tertiary study and job opportunities that are available to him/her.

Society has entrusted the task and responsibility of increasing an individual's options to educational institutions. It therefore becomes the responsibility of education and educationists to present a curriculum that is effective and relevant to the pupil's lifeworld. A curriculum that is poorly planned and implemented in the hope that it will provide for the vocational educational needs of learners and society is a waste of vital dwindling resources. *"A screwdriver can be used as a hammer but if serious hammering is to be done, it should be done with a tool designed for this purpose."* (Evans 1971:31)

The vocational education curriculum implemented at the Indian secondary school will be evaluated in Chapter 5.

## BIBLIOGRAPHY

### Books and Thesis

1. Department of Indian Affairs. Division of Education: **Principals' Handbook for Secondary Schools.**
2. Department of National Education - **National Education Policy: Educational Programmes for Pre-tertiary Education in South Africa.** Nated 02-124 (88/06). Pretoria.
3. Draper, D.C. 1967. **Educating for Work.** Washington, D.C.: National Association of Secondary School Principals.
4. Evans R. N. 1971. **Foundations of Vocational Education.** Columbus, Ohio: Merrill Publishing Company
5. Naguran C.A. 1985. **A Critical Study of Aspects of the Political, Constitutional, Administrative and Professional Development of Teacher Education in South Africa with Practical Reference to the Period 1965 to 1984.** Pietermaritzburg: University of Natal.

### Periodicals

1. **Fiat Lux.** Volume 7 Number 8. 1972 (pages 10 - 11)
2. **Fiat Lux.** Volume 13 Number 3. 1978 (page 32)

### C. Circulars

1. E.C. Circular Number 45 of 1987
2. E.C. Circular Number 36 of 1988
3. E.C. Circular Minute A10/13/3/2 of 1990
4. E.C. Circular Minute A10/2/11/1 of 1991
5. E.C. Circular Minute AS of 1991
6. E.C. Circular Minute AY of 1991

Paper Based on Workshop on Vocational Education by the following members of the House of Delegates Education Department:

Jousha C.L.  
Singh G.  
Valjee R.  
Ramlall V.  
Singh B.U.  
Wishart S.  
Naidoo P. (Dr)

## CHAPTER 5

### EVALUATION

#### 1. Introduction

The overview of vocational education at the Indian secondary school provided in Chapter 4 makes it apparent that there was and still is an increasing awareness of the inherent possibilities contained in developing and effectively implementing a flexible and feasible vocational educational curriculum in secondary schools today. The vocational education programme implemented at the Indian secondary school has both its strengths and weaknesses.

Vocational education offered at the Indian secondary school will be analysed and evaluated because vocational education *"knowledge, what is learned and how it is learned, remain powerful tools in preparing young people for life."* (Mc Gregor's 1992:11) The relevance of any educational system or education programme should be evaluated on an ongoing basis because education prepares the young for a specific reality. In our technologically rich and ever changing environment, this "specific reality" is never constant, it is therefore imperative that education, especially vocational education be flexible in order to meet the demands of our contemporary society.

The following criteria will be used in the evaluation process:

- o Growth in respect of:
  - \* Technically biased/vocational secondary schools
  - \* Teacher population
  - \* Pupil population
- o Availability of resources:
  - \* Workshops and other facilities
  - \* Support services
- o Curriculum
  - \* Unique possibilities of the courses
  - \* Promotion requirements
  - \* Student work experience programme
- o Certification
- o Qualifications of educators
- o Status of vocational education
- o Guidance and counselling
- o Preplanning prior to the implementation of vocational education

The majority of the information contained in this chapter was obtained through interviews with Subject Advisers, Heads of Departments of Secondary schools and educational planners.

### **1.1 Vocationally/Technically Orientated Secondary Schools**

Six vocationally/technically orientated secondary schools were established (dating back to the period 1961) by the South African Indian Council and the House of Delegates to meet the needs of vocational education. Five of these schools are located in the province of KwaZulu-Natal and one in the province of Gauteng. (G. Singh - Principal Vocational Education Planner)

A brief description of each institution will now be provided [Tables 1 - 6]



TABLE 1

<b>Name of institution:</b> M.H. Joosab Secondary School						
<b>Established in</b> : 1974						
<b>Type of institution:</b> Technically Bias School						
<b>Standards</b> : 6 - 10						
<b>Personnel</b> :						
<b>Year</b>	91	92	93	94	95	96
<b>Total number of educators</b>	43	46	44	51	43	45
<b>Educators with Technical Qualifications</b>	91	92	93	94	95	96
	2	2	2	3	6	6
<b>Educators without Technical Qualifications</b>	91	92	93	94	95	96
	3	3	3	3	2	2
<b>Total pupil enrolment at the institution</b>	91	92	93	94	95	96
	883	854	842	873	944	1020
<b>Number of pupils pursuing a vocational courses</b>	92	93	94	95	96	
	168	152	190	129	144	

Source: Information Extracted from Questionnaire

TABLE 2

<b>Name of institution:</b> Clairwood Secondary School						
<b>Established in</b> : 1978 (Technical wing)						
<b>Type of institution:</b> Technically Bias School						
<b>Standards</b> : 6 - 10						
<b>Personnel</b> :						
<b>Year</b>	91	92	93	94	95	96
<b>Total number of educators</b>	116	115	107	97	95	90
<b>Educators with Technical Qualifications</b>	91	92	93	94	95	96
	26	26	26	25	24	22
<b>Educators without Technical Qualifications</b>	91	92	93	94	95	96
	0	0	0	0	0	0
<b>Total pupil enrolment at the institution</b>	91	92	93	94	95	96
	1920	1834	1557	1658	1705	1971
<b>Number of pupils pursuing a vocational courses</b>	91	92	93	94	95	96
	1427	1327	1208	1181	1203	1383

Source: Information Extracted from Questionnaire

TABLE 3

<b>Name of institution:</b> Meadowlands Secondary School <b>Established in :</b> * <b>Type of institution:</b> Technically Bias School <b>Standards :</b> 6 - 10 <b>Personnel :</b>		
<b>Year</b>	95	96
<b>Total number of educators</b>	60	61
<b>Educators with Technical Qualifications</b>	95	96
	19	19
<b>Educators without Technical Qualifications</b>	95	96
	0	0
<b>Total pupil enrolment at the institution</b>	95	96
	1050	1280
<b>Number of pupils pursuing a vocational courses</b>	95	96
	850	1083

Source: Information Extracted from Questionnaire

TABLE 4

<b>Name of institution:</b> M.L. Sultan Pietermaritzburg Sec. Sch. <b>Established in :</b> 1961 <b>Type of institution:</b> Technically Bias School <b>Standards :</b> 6 - 10 <b>Personnel :</b>						
<b>Year</b>	91	92	93	94	95	96
<b>Total number of educators</b>	34	33	33	37	37	36
<b>Educators with Technical Qualifications</b>	91	92	93	94	95	96
	7	7	7	7	6	6
<b>Educators without Technical Qualifications</b>	91	92	93	94	95	96
	0	0	0	0	0	0
<b>Total pupil enrolment at the institution</b>	91	92	93	94	95	96
	581	618	619	645	748	816
<b>Number of pupils pursuing a vocational courses</b>	93	94	95	96		
	181	171	309	256		

Source: Information Extracted from Questionnaire

TABLE 5

<b>Name of institution:</b> Stanger M.L. Sultan Secondary School					
<b>Established in</b> : 1961					
<b>Type of institution:</b> Technically Bias School					
<b>Standards</b> : 6 - 10					
<b>Personnel</b> :					
<b>Year</b>	92	93	94	95	96
<b>Total number of educators</b>	72	67	65	56	53
<b>Educators with Technical Qualifications</b>	92	93	94	95	96
	9	8	9	11	14
<b>Educators without Technical Qualifications</b>	92	93	94	95	96
	0	0	0	1	3
<b>Total pupil enrolment at the institution</b>	92	93	94	95	96
	970	1094	1096	1040	1217
<b>Number of pupils pursuing a vocational courses</b>	92	93	94	95	96
	314	289	260	297	911

Source: Information Extracted from Questionnaire

TABLE 6

<b>Name of institution:</b> Phoenix Technical Secondary School						
<b>Established in</b> : 1990						
<b>Type of institution:</b> Pure Technical School						
<b>Standards</b> : 7 - 10						
<b>Personnel</b> :						
<b>Year</b>	91	92	93	94	95	96
<b>Total number of educators</b>	60	60	60	60	60	60
<b>Educators with Technical Qualifications</b>	91	92	93	94	95	96
	20	20	20	20	20	20
<b>Educators without Technical Qualifications</b>	91	92	93	94	95	96
	0	0	0	0	0	0
<b>Total pupil enrolment at the institution</b>	91	92	93	94	95	96
	1100	1100	1100	1100	1100	1100
<b>Number of pupils pursuing a vocational courses</b>	91	92	93	94	95	96
	1100	1100	1100	1100	1100	1100

Source: Information Extracted from Questionnaire

### 1.1.1 Growth in the Number of Vocational/Technically Orientated Schools

The information in respect of secondary schools offering vocational education was obtained via interviews and questionnaires. As was stated in the introductory paragraph [para.1], of the six schools that offer vocational and technical subjects, only one is a purely technical school and the remainder are all technically biased schools.

However, the schools mentioned above are not the only secondary schools that offer vocational subjects. These are secondary schools that are classified by the Department [House of Delegates] as technically or vocationally biased secondary schools and the greatest number of vocational and technical courses are offered at these schools.

There are other secondary schools that offer vocational and technical courses on a limited scale. The number of secondary schools offering vocational subjects since 1991 is shown in Table 7.

TABLE 7

YEAR	NUMBER
1991	26
1992	66
1993	59
1994	*
1995	33

\* Statistics could not be obtained

Source: Department of Technical and Vocational Education - House of Delegates

It will be noted that the number of schools offering technical and vocational subjects fluctuated. The possible reasons [supported by G. Singh Principle Education Planner for Vocational Education - House of Delegates] for the fluctuation is:

- o The number of pupils opting for the courses offered decreased and this makes it uneconomical to offer the course[s];
- o Other secondary schools in the area offering greater options, in respect of courses;
- o Unavailability of or the loss of qualified teachers;
- o The infrastructure at schools not available or not adequate; and
- o Implementing a vocational education programme is expensive.

However, despite this fluctuation, the situation is a drastic improvement from that in 1977, when only 4 institutions offered secondary school level technical and vocational education. (Strydom 1980:5) This indicates that a concerted effort was made to provide vocational education for the Indian child.

### **1.1.2 Teacher Population**

In 1995 there were 86 qualified teachers [this figure excludes teachers at schools other than those listed in paragraph 1.1] teaching at the 6 technically biased schools, this is in comparison to the situation in 1977 when the total number of teachers was 23 and of this number only 14 possessed one form of teaching qualification or other. (Strydom 1980:92-93) Teacher qualifications and population will be further elaborated upon in paragraph 1.2.3.

### **1.1.3 Pupil Population**

the enrolment pattern at the 6 technically biased secondary schools is reflected in Table 8 below.

TABLE 8

YEAR	TOTAL POPULATION	TECH-VOC. POPULATION	%
1993	5 489	2 930	53
1994	5 271	2 902	55
1995	6 587	3 888	59
1996	7 458	4 877	65
TOTAL	24 805	14 597	59

Source: Information Extracted from Questionnaires

There is a steady increase in the pupil population at technically biased schools, and the following reasons can be advocated for the increasing demand for vocational education:

- o The great number of options [courses] available;
- o Greater awareness of the opportunities available to technically qualified people;
- o The promotion of vocational courses offered by the Department;
- o Greater number of schools offering vocational education; and
- o High cost of tertiary education.

#### 1.1.4 Workshops and other Facilities

Facilities, as reflected in Table 9, are available at the 6 technically biased secondary schools.

The workshops are fully equipped and all were operational. According to G. Singh [Principal Planner for Vocational Education] more workshops are in the process of being developed at other secondary schools.

Table 9

FACILITY	INSTITUTION					
	I	II	III	IV	V	VI
Motor Mechanics	X	X	X	X	X	X
Electrician	X	X	X		X	X
Woodwork	X	X	X	X	X	X
Metalwork	X	X			X	X
Welding	X	X	X			X
Fitting & Turning	X	X	X		X	X
Motorbody Repair		X	X		X	X
Electronic		X	X		X	X
Technika Electrical				X		
Technika Electronics			X	X		
Plumbing		X	X			
Refrigeration		X	X		X	
Brickwork		X				
Spraypainting		X				
Radio & TV			X			
Motor Electrical			X		X	
Technical Draw. Room	X	X	X	X	X	X
Hair Care Salon			X		X	
Cosmetology			X			
Beauty Parlour					X	

## KEY

I - M.H. Joosab Secondary School  
 III - Meadowlands Sec. School  
 V - M.L. Sultan (Stanger)

II - Clairwood Sec. School  
 IV - M.L. Sultan (Pmb)  
 VI - Phoenix Tech. Sec. Sch.

The vocational education curriculum at the Indian secondary schools endeavours to:

- o Give a sound, balanced education in accordance with the aptitude, interest and ability of the individual.
- o Prepare young people, across the ability range, to take their rightful places in the world of work, socially as well as vocationally.

and not to

- o Enrol young people as apprentices
- o Train young people to be artisans in a trade
- o Provide education and training at technical level

(Fiat Lux 1973 Vol. 8 No. 3:25)

However, as will be discussed later in the chapter, it will be realised that there are areas, in the implementation of vocational education in the Indian secondary school that can be improved upon in order to make the delivery and curriculum of the vocational education programme more effective.

## **1.2 The N-Course**

The N-course is the dominant direction of study offered as part of vocational education at the Indian secondary school, therefore the N-course will be discussed in detail.

### **1.2.1 Unique Opportunities of the N-Course**

The N-course presented the planners of Indian education with an unique opportunity to "rectify some of the most serious educational shortcomings in contemporary South Africa", by enriching and widening the existing curriculum in such a way that it initiates the process of preparing the young person for the



world of work and to live a fuller life and be able to make a meaningful contribution to the community. (Mc Gregor's 1992:369)

A few of the possibilities [advantages] of vocational education as outlined in Mc Gregor's (1992:370) will be discussed. This is also applicable to Indian education.

- o The approximation of real-life situations in course content [practical and workshop experiences] helps to motivate the pupils to master the skills;
- o Direct contact with the world of work, SWEP [student work experience programme], allows the student to develop an understanding of the world of work and its values and to develop effective work habits; and
- o The fact that vocational education leads directly to further training or employment makes it relatively easy to obtain community support, especially from, communities which hitherto have been living on the fringes of the industrial system and can benefit from the growth of quality education.

The N-course as implemented in the Indian education system, does not satisfy, as will be gathered from subsequent evaluation, all the possibilities discussed above.

### **1.2.2 Lack of Preplanning**

There was lack of research prior to the implementation of the N-courses and this is clearly reflected in the problems encountered presently:

- o The course is designed for apprentices and not school pupils. [para. 1.2.3 - (i)]
- o Theory dominates the course content and the practical component was "added on" by the Department. [para. 1.2.3 - (ii)]

- o Availability of adequately qualified teachers was not addressed prior to implementation. [para. 1.2.3 (v)]
- o Teachers [with academic qualifications] cannot cope with specialised subjects such as Engineering Science, and Engineering Maths.
- o The course was sold to schools as "easy" options and "it is apparent that many Principal's perceive the N-course to be easy courses for the underachievers and deviant pupils. some Principals liken technical schools to reform schools." (S. Wishart - Subject Adviser).
- o Subject advisers are qualified in only one field and they have to provide support outside their area[s] of expertise.
- o Qualifications of prospective vocational education teachers was not properly researched. [para. 1.2.3 (iv)]
- o Certification and examination at N3 level disadvantaged pupils. [para. 1.2.3 (iii)]
- o Student work experience Programme [SWEP] was optional [para. 1.2.3 (iv)]

### **1.2.3 Course Content**

#### **(i) Curriculum**

The N-course is suitable for apprentices and not for secondary school pupils. The curriculum tends to overemphasise technical or trade related skills. When a pupil enters the senior secondary stage of schooling he/she usually falls into the 15-18 year old age group. The pupil, at this age, will have to fulfil the same demands made of an apprentice who has already been assimilated into industry. This youngster does not have the option, without wasting a year, of moving from one course to another.

Essential skills such as:

- Problem solving skills
- Decision making skills
- Team work and Flexibility
- Interpersonal skills [communication and negotiation]
- Creativity and Innovation
- Understanding of Basic Processes of an Industrial Society and Economy

are not adequately reinforced within the course content of the N-course curriculum.

The curriculum is prescriptive resulting in the course being inflexible because of external demands, such as examinations, existing school infrastructure [time-tables, resources, economic class units, etc] and the demands of the syllabus. But it needs to be stated that the structure of the curriculum does not allow the teacher to determine the pace of delivery.

#### (ii) Practical Component

The Department of National Education provides the curriculum content for the N-courses and the course only comprised of theory. The practical component was added to the theory component by the Department [House of Delegates]. This was done in order to compensate for pupils not being able to serve apprenticeships. This prejudiced the employment opportunities of those pupils who completed the N3 level of education because the South African Certification Council does not recognise the certificates issued by the House of Delegates. [para. (iii)]

#### (iii) Certification

The South African Certification Council does not endorse the N-course certificates issued by the House of Delegates for the following reasons:

- o The examinations section of the House of Delegates purchases the question papers and model answers from the National Education Department.
- o This examination [N3] is conducted at individual schools [without the supervision of the NED].
- o The marking of answer scripts is done by teachers from the House of Delegates and not by the NED.

Therefore, the NED does not certify certificates issued by the House of Delegates [HOD]. The HOD issues its own certificates and prospective employers and industry generally are reluctant to employ youngsters with this type of certificate because:

- \* Only the theory aspect of the course is credited.
- \* The certificate does not credit the pupil with all the workshop experience that he/she has gained at school.
- \* Work experience gained in the Student Work Experience Programme [SWEP] is not reflected.
- \* The certificate does not have the the seal of the South African Certification Council.

Essentially the N-course at the Indian secondary school is based upon the teaching of theory and this leads to the fact that *"practical instruction and theory not forming the unity which is essential for these fields of education. This often leads to rote learning of theory ..."* (Mc Gregor's 1992:162)

Students neither understand the theory nor its applications in relation to the workplace. This frustrates young people who expect to find work but realise that their certificates are basically worthless. This also casts a shadow over vocational education in the eyes of the community, industry and prospective

vocational education pupils. (Interview: S. Wishart and R. Valjee - Subject Advisers]

The only N3 course that has external accreditation is the Hairdressing course, which receives accreditation from the Hairdressing and Cosmetology Industry Training Board. [See Appendix 1]

Pupils who complete standard 8 or 9 [the equivalent of N1 and N2 respectively] do not receive certificates. A pupil can for instance fail standard 8 or 9 and yet not have the option of leaving school because he/she will not receive a certificate. This restricts the pupil's options in that this indicates that he/she will only be competent at N3 level. The pupil should have option of gaining credits for the subjects passed and continuing his/her education elsewhere. (Interview: Head of Department - Stanger M.L. Sultan school)

(iv) Student Work Experience Programme [SWEP]

The SWEP programme was launched in 1991. Pupils, on a voluntary basis were placed in industry to gain insight into the workplace. This is carried out during the school vacation once a year and it is monitored by teachers. This programme initially enjoyed great support from parents, pupils and teachers, but this novelty gradually began to wane. Currently of the six schools discussed in paragraph 1.1, only three are participating in the programme. The following factors can be attributed for the SWEP not enjoying the success that is essential for vocational education:

- The programme is not compulsory and as a result pupils and teachers lose interest.
- Pupils are not credited with the work experience gained.

- Expenses incurred are borne by parents and this eventually becomes a burden.
- In many instances industry is not willing to accommodate pupils

*"Work experience was often a tack onto the curriculum" whereas this should form "an integral part of the curriculum." (le Roux 1987:27)*

(v) Availability of Qualified Teachers

The number of qualified teachers increased steadily over the years [para. 1.1.2] but initially there was a great shortage of qualified teachers. Many artisans and apprentices joined the teaching profession in the 1970's as a result of being disillusioned in industry because of job reservation and the lack of upward mobility within the economy. (Interview: Head of Department - M.L. Sultan Stanger)

The teacher core was/is basically poached from industry because the Department [HOD] did not put mechanisms in place to train teachers. A prospective teacher in the technical or vocational field of education was employed on the following conditions:

- o A three-year National Technical Certificate III which must include Trade Theory as a subject,

PLUS

- o Two official languages with a pass in at least one on the Higher Grade.

OR

- o An equivalent qualification.

PLUS

- o A completed apprenticeship contract, and a pass in the trade test followed by two years appropriate trade experience

OR

- o An approved Degree for technical training;
- o A National Certificate [or Diploma] for technicians, which includes training in an appropriate technical subject;

OR

- o A qualification approved by the Committee Heads of Education.

If a prospective teacher fulfilled the above requirement he/she was placed on Category "C" special. A teacher with a three year Teacher's Diploma was placed on Category "C", and many vocational teachers felt that their status and qualifications were not adequately recognised. This prompted any of them to return to the private sector. (Interviews: R. Valjee and S. Wishart - Subject Advisers; S. Dayaram, S.R. Naidoo and O. Khan - Heads of Department)

The technically qualified teacher also faced a "dead end" in his/her profession, because he/she was not eligible for promotion unless he/she possessed a degree. A teacher had to obtain a degree in the academic sphere in order to meet requirements to be promoted in the technical field. As a result many teachers became frustrated in the profession. (Interview: R. Baitchu and S. Dayaram - Heads of Department)

Industrial Arts teachers were given "crash courses" in technical subjects and placed in classrooms to become textbook based teachers. Teachers of Technical Drawing, Science and Mathematics are expected to teach highly technical and specialised subjects such as Engineering Mathematics, Engineering Science and Engineering Drawing. These teachers experience great difficulty and this is reflected in the results of the Matriculation examination.

It can clearly be noted that there is a great failure rate [Table 10] in subjects that require specialist teachers, and this represents a symptom of teachers not having the ability nor the expertise to teach highly technical subjects.

TABLE 10

SUBJECTS	Y E A R S								TOTAL
	1992		1993		1994		1995		%
	TOT	FAIL	TOT	FAIL	TOT	FAIL	TOT	FAIL	PASS
Build. Draw.	47	9	36	23	54	42	33	22	44
Eng. Draw.	117	27	113	72	192	118	206	113	48
Build. Sc.	49	25	85	63	192	97	118	55	46
Eng Sc.	171	33	182	73	378	229	369	223	49
Maths.	220	61	267	121	572	427	487	353	38

Source: House of Delegates - Examination Board Statistics Booklet

This results in pupils failing and becoming frustrated when it is realised that they neither have a Matriculation Certificate nor a N3 Certificate. *"Teachers play a vital role in the*



success of schooling, and can promote or hamper the success" of the best designed curriculum or educational programme. (Mc Gregor's 1992:70) This has a ripple effect in that other pupils shy away from vocationally orientated courses for the fear of failure.

(vi) Support Services

The views of subject advisers and teachers is summarised below:

- o Teachers felt that subject advisers provided a less than adequate support service that was sorely needed In view of the fact that many vocational education teachers were novices and ill-equipped to promote the relatively new vocational educational programme.
- o Teachers also felt that subject advisers lacked the expertise required for specialised subjects and that the frequency of visits by subject advisers was lacking.
- o Support services such as in-service training was not readily forthcoming
- o The subject advisers felt that although they made every effort to provide a service that was based on sound educational principles, the service that they rendered was hampered in the following respects:
  - \* They were expected to be a "Jack of all Trades", in that they were expected to provide support in areas outside their realm of expertise.
  - \* No individual attention could be provided due to the variety of needs of different schools. The needs varied from didactics, practical assessment, resource requirements to teacher appraisals. The subject advisers were swamped with administrative duties and as a result the support aspect of their duties was virtually non-existent.
  - \* There was a lack of inter-departmental co-operation and the total burden of the success

or failure of the vocational programme was shouldered by the subject advisers.

Teachers felt that they were left in a "jungle" without any support and this was reflected in the results of pupils who reached the Matriculation stage of their schooling. Many teachers and subject advisers alike felt that this is due to the lack of planning prior to the implementation of the vocational education programme.

(vii) Promotion Requirements and its Consequences [N-Course]

One of the major contributing reasons for the N-course not enjoying the success that it deserves, is the promotion requirements.

At N3 level the requirements for promotion are as follows:

Pass in English	40%
Afrikaans [2nd Language]	33.3%
AND	
Pass in N-course subjects	40%

A pupil, in order to qualify for a N3 certificate had to pass a minimum of 3 of his/her N-course subjects with a minimum of 40%. It must also be stressed here that the Practical mark obtained by the pupil [assessments in workshops, etc] in no way contributes to his/her final promotion mark. This results in a high failure rate.

Pupils in turn began opting out of the N-course for a parallel T-course for the following reason: the requirements for promotion in the T-course is far less stringent than the N-course.

A pupil needs only 33.3% to pass his/her Trade related courses and the practical mark obtained by the pupil contributes to

his/her final promotion mark. This prompted many pupils to review their course selections.

This in turn resulted in the Department [HOD] phasing out N-courses that have equivalent T-courses.

(viii) Status of Vocational Education

Academic Bias

The Indian community still places emphasis on academic education and this is particularly reflected if one compares the growth of the number of pupils participating in the vocational education programme. The following statistics have been extrapolated from the Examination Board Statistics Booklet of the HOD:

TABLE 11

YEAR	TOTAL N-COURSE	TOTAL ACADEMIC	TOTAL YEAR
1992	396	14 089 (97%)	14 485
1993	1 058	14 145 (93%)	15 203
1994	1 901	13 450 (88%)	15 351
1995	996	14 861 (94%)	15 857
TOTAL	4 351	56 545 (93%)	60 896

Source: HOD: Examination Board Statistics Booklet

Table 11 [Matriculation candidates] gives a clear indication of the number of pupils pursuing a vocational course at Matriculation level in comparison to the number of pupils enrolled for the academic direction of study. It can be noted that with the exception of 1994 the percentage of pupils enrolled for the vocational education programme did not exceed 5% and this point is further emphasised by the fact that only 7% of 60 896

[4 351] pupils participated the vocational education programme.

Table 11 also highlights the fact that secondary school education is still academically biased and that *"South Africa was now paying the price of too many years of overemphasis on academic education and insufficient attention to technical education."* (Bot 1990:28)

#### Stigma Attached to Vocationally Orientated Education

The negative stigma attached to vocational education is further perpetuated by the fact that many teachers perceive the vocationally orientated course to cater for pupils who *"have little or no aptitude for a purely academic type of subject."* (Fiat Lux 1973:25) Many teachers, who participated in the interview sample, felt that vocational education was a dumping ground for the academically less inclined and that the *"academic curriculum [is reserved] for the motivated, the bright, and the blessed. The remainder of the students, generally working-class youth or those with problems were steered towards vocational education."* (Barth 1989:2)

It is also a fact that teacher plays a great role in the psychological moulding of the youngster in respect of career choices. In many cases the teacher is biased towards an academic type of education. McCallum (1981:64) provides the following argument to support the assumption:

Teachers are drawn from predominantly middle-class homes and socio-economic groups other than those in the technical domain and this fact makes it highly unlikely that they will have knowledge or understanding of the type of careers offered in technical sector of the economy.

Pupils, teachers and parents are presented with or have a distorted view of vocational education and this needs to be addressed if vocational education is to prosper.

(ix) Cost of Vocational Education

Vocational education generally costs more than academic education and Foster (1979:130) cites the following reasons for vocational education costing more:

- o The cost of specialised equipment
- o The need for specialised workshops or laboratories
- o Constant need for updating and modernisation of equipment as wears out and becomes obsolete
- o Limit on the number of pupils that can be accommodated at any one time [usually 15] due to safety requirements and the fact that workshops and the fact that workshops need to simulate the real world of work
- o Consumable resources

This has limited the efforts of the Department to make the option of vocational education available to every pupil at secondary school level.

(x) Guidance and Counselling

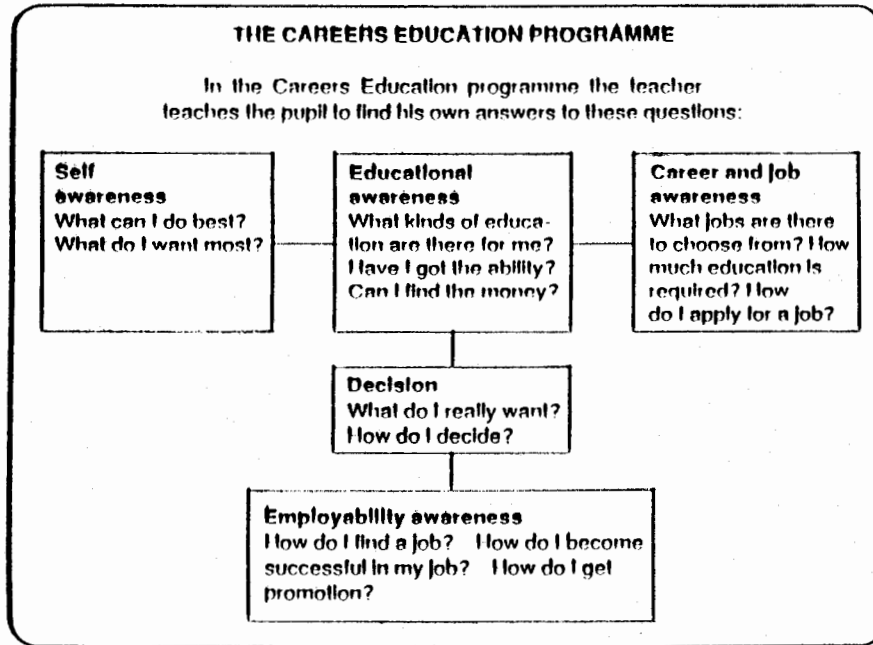
Of the 6 technically orientated Indian secondary schools, none of them have career guidance counsellors that possess the necessary qualifications or skills to provide adequate assistance to youngsters in respect of career development and choices that face them. [Information obtained from Questionnaire]. Some of these choices are aptly depicted in Figure 1.

*"The career guidance counsellor, already an important figure in education will have the increased responsibility of assisting students in their lifelong career development."* (Gillie and Wilcox 1981:352)

Secondly, Indian schools that offer vocational subjects do not institute a "strict" selection policy for pupils who wish to pursue vocational courses and as a result, in many instances,

pupils who fail to meet the criteria for entrance into the academic stream are placed in the vocational direction of study. (Interview: G. Singh - Principal Vocational Education Planner)

FIGURE 1



Source: Lindhard 1983:182

The world of work is often a foreign and new environment for the pupil [potential worker], it is therefore imperative that the young person be prepared for entry into the world of work.

## 2. Conclusion

The success of vocational education in the Indian secondary school is dependent upon a number of factors working harmoniously to provide an effective vocational education programme. It must also be realised that *"the ultimate success of a vocational and technical curriculum is not measured merely through student educational achievement but through the results of that achievement - the results that take the form of performance in the world of work."* (Crukilton 1979:9) Therefore another important aspect in the evaluation of vocational education is to

determine how the youngster copes in the reality of the world of work.

The secondary school cannot prepare an individual fully for the ever changing world of work and at best the vocational education curriculum can expose the youngster to the possibilities that exist and equip him/her with the basic skills needed for further training at tertiary level, on the job learning or non-formal education.

Chapter 6 provides recommendations for an improved vocational education dispensation in general and for the historically Indian secondary school in particular.

## BIBLIOGRAPHY

### Books and Thesis

1. Bot M. 1990. **The Blackboard Debate**. Cape Town: Gavin & Sales Town
2. Crukilton 1979. **Curriculum Development in Vocational and Technical Education**. Boston: Allyn and Bacon Inc.
3. Foster P.V 1979. **Handbook in Vocational Education Evaluation**. Columbus, Ohio: Ohio State University
4. Le Roux A.L 1987. **Education and the World of Work: A Personal Perspective**. University of New York.
5. Lindhard N. 1983. **Guidance in the Classroom**. Cape Town: Longman
6. McGregor's R & A. 1992. **Education Alternatives**. Kenwy: Juta & Co.
7. Strydom G.S. 1980. **Technical Education For Indians**. Pretoria: HSRC

### Periodicals

1. Barth P. 1989. **Basic Education** (page 5)
2. **Fiat Lux** Vol 8 No. 3 1973 (page 25)
3. Gilli A.C. & Wilcox L.M. 1981. **Journal of Studies in Technical Careers**. Vol. 3 No. 4. (page 347)
4. Mc Callum I. 1981. **Education for a Technical Society** (page 64)

### Circulars

1. Handbook for Principals : Department of Indian Affairs - 1982
2. Examination Board Statistics Booklet - Ex-House of Delegates Interviews



### Interviews

1. G. Singh - Principal Vocational Education Planner
2. S. Wishart and R. Valjee - Subject Advisers
3. Heads of Department of Vocational Education of the Vocationally/Technically Orientated Schools

# HAIRDRESSING AND COSMETOLOGY INDUSTRY TRAINING BOARD

(Accredited in terms of the Manpower Training Act, 1981  
and Government Gazette No. 13193 dated 3/5/1991)

Fax: (011) 760-1274  
P O Box 1967  
ROODEPOORT  
1725

Tel: (011) 760-3609  
15 EDWARD STREET  
ROODEPOORT  
1724

---

17th August 1995

Our Ref: itb/colleges/95techs/17

To: All Technical Colleges  
All private colleges

From: The Executive Director

## Quality Assurance in hairdressing: renewal of accreditation

1. The main object of the accreditation process is to ensure the quality of training outcomes in hairdressing by ensuring that:
  - 1.1 a place, be it a technical college, a school, or any other organisation, has adequate facilities for carrying on hairdressing training. The accreditation of the college etc. applies, in other words, only to the **SITE** or **PREMISES**;
  - 1.2 teachers, or trainers, are adequately qualified in hairdressing, and most important of all, themselves have adequate practical experience of hairdressing in a commercial hairdressing salon. So, for example, a teacher will only be accredited to do ladies hairdressing on caucasian hair if that is all that teacher knows. He or she will not be accredited to train in black hair unless they have been on courses regarded as sufficient. The same applies in the case of gents hair.
2. It follows that an accredited institution may only use accredited staff to provide accredited hairdressing training. This means that if an accredited institution has no accredited teacher it cannot provide accredited training and its accreditation certificate must be withdrawn. Similarly, an accredited trainer may only provide accredited training in an accredited institution and not, for example, at home, if that home has not been accredited.
3. The proposed NQF Act will place a heavy burden of responsibility on trainers, because it is likely that they will not merely train, but in due course will become accredited with the evaluation of training outcomes right up to trade test stage. Clearly it will be the responsibility of every quality assurance body (and this Board will be one such body) to ensure that those who carry out evaluations are trainers of high quality and able to do evaluations to a high standard.

4. In 1993 training institutions who applied for accreditation did so for the three year period which ends on 31 December 1995. They paid an accreditation fee of R1 500 and were told that renewal of their accreditation would have to be sought in September 1995 and would cost R1 000. We enclose an application for the renewal of your accreditation. Please be kind enough to complete it and return it to us as soon as conveniently possible together with your cheque in the sum of R1 000.
5. It is clear to us that some colleges will not reapply for accreditation. It is also clear that some will not again be accredited even if they do apply. Their standards have not been acceptable, or they were originally accredited on the basis of undertakings to do certain remedial work which has never been done. We would like to make it clear, therefore, that **ALL** existing accreditations will lapse on 31 December 1995 unless they have been renewed by then.
6. The large number of queries referred to the Board by members of the public show that accreditation has become an important consideration in the minds of the public. Accordingly, the Board proposes to publish a list of accredited hairdressing training institutions in national newspapers during December 1995 and January 1996 in order to assist school leavers wishing to apply to a college to do hairdressing training in 1996.
7. In this round of accreditation top priority will be given to the accreditation of trainers. Colleges **MUST, PLEASE,** supply:
  - 7.1 the full names of all persons who will be used as trainers in their establishment;
  - 7.2 provide a c.v. of the people referred to in 7.1;
  - 7.3 provide **FULL** details of all practical hairdressing done in a salon by such persons specifying in detail the length of time spent in commercial hairdressing salons;
  - 7.4 provide details, supported by documentary proof, of all qualifications held by persons referred to in 7.1
8. Colleges are asked to note that every new lecturer appointed must be accredited by the Board. Students trained by lecturers not accredited by the Board will not be credited with having passed ITB approved examinations. It follows, of course, that no one not accredited by the Board can be used as an assessor/verifier under the proposed NQF Act.
9. The Board would like to position itself to award assessor/verifier status to college lecturers as soon as possible after the coming into effect of the NQF Act. To do that, it will be imperative that colleges and their staff follow the accreditation procedure outlined in para 7.

Republic of South Africa  
Republiek van Suid-Afrika



ADMINISTRATION: HOUSE OF DELEGATES  
ADMINISTRASIE: RAAD VAN AFGEVAARDIGDES

Department of Education and Culture  
Departement van Onderwys en Kultuur

(031) 3606911

Fax: (031) 374261

Truro House  
Trurohuis  
17 Victoria Embankment  
Victoria Embankment 17  
Private Bag X54323  
Privaatsak X54323  
DURBAN  
4000  
22 May 1991

Ref. No. A 10/18/5/P  
Verw. No.

Enquiries  
Navrae Mr G. Naidu

E.C. CIRCULAR MINUTE AY OF 1991

TO PRINCIPALS OF ALL SECONDARY SCHOOLS

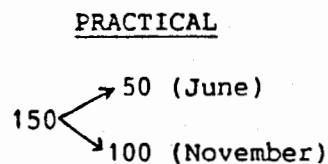
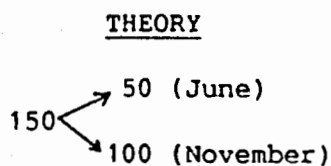
EXAMINATION REQUIREMENTS FOR VOCATIONAL EDUCATION N COURSES IN STANDARDS 8, 9 AND 10

1. E.C. Circular Minute AS of 1991 has reference.

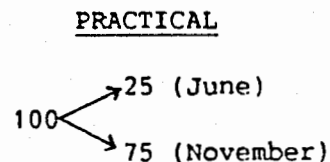
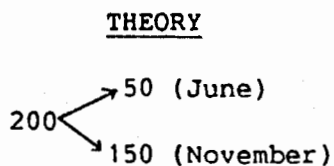
2. MARK ALLOCATION

The examination marks are to be apportioned on the basis of one-third for the June Examination and two-thirds for the November Examination (except where indicated otherwise). The details are as follows :

2.1 All subjects with a practical component (excluding Office Practice N1 to N3 and Communication and Department N1 to N3).



In the case of Office Practice N1 to N3 and Communication and Department N1 to N3 the following will apply :



2.2 Subjects without a practical component.

June : 100 marks  
November : 200 marks

3. Kindly note that:
  - 3.1 in 1992 only one unit may be established for each of the abovementioned courses.
  - 3.2 parental consent must be obtained for each pupil offering the course.
  - 3.3 no additional electronic typewriters and computers will be provided.
  - 3.4 room loading with special reference to the Typing and Computer Rooms must be taken into account when offering Clothing Production and Commerce Courses.
4. One set of the relevant syllabuses is enclosed.
5. The examination requirements are as per EC Circular Minute AY of 1991. Also note the contents of EC Circular Minute DL of 1991.
6. The period allocation for each of the N-course subjects is as per annexure A.
7. Textbooks will be purchased by this office in consultation with you and debited against your allocation.
8. Superintendents for the relevant subjects will liaise with you in due course.
9. Kindly confirm the offer of the subjects and the pupil numbers on or before 17 January 1992. Please mark the envelope "For attention: of Mr G. Singh - Technical, Vocational and Community Education".

  
^ CHIEF EXECUTIVE DIRECTOR

ANNEXURE A

N - NATIONAL CERTIFICATE COURSES  
PERIOD ALLOCATION

1. COMMERCE

	N1	N2	N3
English	9	9	9
Afrikaans	8	8	8
Office Practice	6	6	6
Accounting	6	6	6
Typing	6	6	-
Computer Practice	-	-	8
Communication and Department	6	6	6
Guidance	1	1	1
Physical Education	1	1	1
Computer Literacy	2	2	-

2. CLOTHING PROMOTION

	N1	N2	N3
English	9	9	9
Afrikaans	8	8	8
Guidance	1	1	1
Physical Education	1	1	1
Typing	6	6	6
Factory Administration and Communication	6	6	6
Pattern Construction and Grading	7	7	7
Applied Clothing Production	7	7	7

3. TECHNICAL SUBJECTS

	N1	N2	N3
English	9	9	9
Afrikaans	8	8	8
Mathematics	6	6	6
Engineering/Building/Furniture Drawing	6	6	6
Engineering/Building Science	6	6	6
Trade Subject	8	8	8
Guidance	1	1	1
Physical Education	1	1	1

ART

	N1	N2	N3
English	9	9	9
Afrikaans	8	8	8
Communication and Department	6	6	6
Typing	6	6	6
Computer Graphics	-	-	6
Art of Drawing	7	7	7
Basic Design	7	-	-
Applied Design	-	7	7
Guidance	1	1	1
Physical Education	1	1	1

HAIR CARE

	N1	N2	N3
Salon Practice	8	8	8
Theory of Hair Care	8	8	8
Art of Hair Care	6	6	6
Salon Service and Department	4	-	-
Salon Science	-	4	4
English	9	9	9
Afrikaans	8	8	8
Guidance	1	1	1
Physical Education	1	1	1

ADMINISTRATION: HOUSE OF DELEGATES  
ADMINISTRASIE: RAAD VAN AFGEVAARDIGDES



Department of Education and Culture  
Departement van Onderwys en Kultuur

(031) 3606911

Fax: (031) 374261

Ref. No. A 10/2/11/1  
Verw. No.

Enquiries G. Singh  
Navrae

Truro House  
Trurohuis  
17 Victoria Embankment  
Victoria Embankment 17  
Private Bag x54323  
Privaatsak  
DURBAN  
4000

1991-11-22

The Principal

Secondary School

NATIONAL CERTIFICATE COURSES

Your application to introduce the National Certificate Courses has reference.

1. Permission is granted for the introduction of :

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. The abovementioned course/s may be introduced with effect from January 1992 on the strict understanding that :

2.1 there is a viable class unit :

In the case of Commerce	20 pupils
Art	15 pupils
Sheetmetalwork	15 pupils
Furniture Making	15 pupils
Haircare	15 pupils
Clothing Production	15 pupils

2.2 teachers are available from within your staff complement.

2.3 facilities are available at your school.



### 3. REQUIREMENTS FOR PASSING

#### 3.1 INDIVIDUAL SUBJECTS

- \* Higher Grade Subjects (excluding Afrikaans 2nd Language HG) - 40%
- \* Standard Grade subjects, Afrikaans 2nd Language HG and Lower Grade subjects - 33 1/3%
- \* N subjects - 40%

N.B. With regard to Office Practice N1 to N3 and Communication and Department N1 to N3 both practical and theory examinations must be passed in order to gain credits i.e. at least 40% must be obtained in each of the components.

#### 3.2 PASS IN THE EXAMINATION AS A WHOLE

- \* Pass in English and Afrikaans on either HG, SG or LG
- \* Pass in three other subjects on either HG, SG, LG or N.
- \* Obtain an aggregate of 720 marks.

### 4. SENIOR CERTIFICATE EXAMINATION

Candidates who sit the Senior Certificate Examination will be issued with a Senior Certificate once they fulfil the passing requirements outlined in paragraph 3. The following symbols for N3 subjects will apply :

<u>MARKS</u>	<u>SYMBOL</u>
240 +	A
210 - 239	B
180 - 209	C
150 - 179	D
120 - 149	E
100 - 119	F
90 - 99	FF
60 - 89	G
0 - 59	H

(N.B Vocational Education N courses do not lead to Matriculation Exemption)

### 5. N CERTIFICATES

N certificates for standards 8 and 9 will be issued upon request at the successful completion of the course.

### 6. TIME TABLE

## RESEARCH QUESTIONNAIRE

### SECTION A - RESEARCH DETAILS

1. **Name of researcher:** R. Dayanand (Mr)
2. **Institution** : University of South Africa
3. **Topic under study** : The Teaching of Vocational Subjects at the Indian Secondary School - A Historical Educational Survey and Evaluation.

### SECTION B - DETAILS OF INSTITUTION

1. Name of institution: \_\_\_\_\_

2. Established in : \_\_\_\_\_

3.  Pure Technical School  Technically Bias School

4. Standards  6-7 Only  8-10 Only  6-10

5. Personnel

5.1 Total number of educators:

91	92	93	94	95	96

5.2 Total number of educators with a Technical qualification:

91	92	93	94	95	96

5.3 Number of teachers, teaching a technical subject without the appropriate qualification:

91	92	93	94	95	96

5.4 ONLY APPLICABLE TO SCHOOLS WITH A TECHNICAL BIAS.

5.4.2 Total number of educators teaching an academic subjects only:

91	92	93	94	95	96

### SECTION C - PUPIL ENROLMENT

1. Total number of pupils enrolled at the institution:

91	92	93	94	95	96

2. Number of pupils pursuing the following directions of study:

STD 8								
	93		94		95		96	
	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS
NTC								
NSC								
NIC								

STD 9								
	93		94		95		96	
	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS
NTC								
NSC								
NIC								

STD 10								
	93		94		95		96	
	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS	TOT	GIRLS
NTC								
NSC								
NIC								

3. ONLY APPLICABLE TO TECHNICALLY BIAS SCHOOLS:

Number of pupils pursuing an academic direction of study:

91	92	93	94	95	96

**SECTION D - SUBJECTS OFFERED**

1. List the subjects offered at standard 6 and 7 levels at your school:

---



---



---

2.

2.1.1 Do girls and boys, at std. 6 level, pursue the same directions of study?      Yes                      No

2.1.2 If, the answer to 2.1.1 is No then please state what subjects are provided for girls:

---



---

3. Are the following subjects offered at your school:

SUBJECTS	8	9	10	SUBJECTS	8	9	10
Factory Admin. & Comm.				Refrigeration Trade Theory			
Office Practice				Plumber's Theory			
Communication Deport.				Bricklaying & Plastering Th.			
Pattern Const. & Grad.				Metalworker's Theory			
Accounting				Furniture Makers Theory			
Typing				Furniture Design			
Applied Clothing Prod.				Motor Bodywork Theory			
Computer Practice				Motor Electrical Theory			
Mercantile Law				Motor Trade Theory			
Art of Entertainment				Fitting & Machining Theory			
Computer Graphics				Plating & Structural Steelworker's Theory			
Building Drawing				Plating & Structural Steel Drawing			
Building Science				Welder's Theory			
Electrical Trade Theory				Carpentry & Joinery Theory			
Woodworker's Theory				Mathematics			
Industrial Electronics				Diesel Trade Theory			
Engineering Drawing				Radio & Television Theory			
Engineering Science							

SUBJECTS	8	9	10
Armature Winding Theory			
Sheetmetal Worker's Theory			
Business Afrikaans			
Business English			
Hair Care: Practical			
Hair Care: Theory			
Cosmetics: Practical			
Cosmetics: Theory			
Retailing (Principles & Practice)			
Art of Drawing			
Applied Design			
Economic & Legal Environment			
Applied Accounting			
Public Administration			
Small Business Management & Entertainment			
Information Processing			
Fitting and Turning			
Motor Mechanics			
Technika Electronics			
Electronics			
Technika Electrical			
Electrician's Work			
Technical Drawing			

**SECTION E - FACILITIES AND RESOURCES**

1. List the facilities available at your school to accomplish the aim of technical education:

---

---

---

---

---

---

---

**SECTION F - SUPPORT SERVICES**

1. Do/Did you receive adequate support from subject advisers? YES NO

Justify \_\_\_\_\_

---

---

---

---

2.  
2.1 Total number of guidance personnel at your school: \_\_\_\_\_  
2.2 Does the guidance officer have specific vocational guidance skills? YES NO  
2.3 Does your school have a specialised vocational guidance programme for students? YES NO  
2.4 Did/Does the offer the programme mentioned in 2.3? YES NO

**SECTION F - PLANNING PROCESS**

1. Are you actively involved in the planning of content for vocational courses? YES NO  
2. Do you actively participate in the selection of courses that are offered at your school or school level? YES NO  
3. Do you have any input i.r.o. the budget allocation for your school? YES NO  
4. Does your school employ any criteria for selection of pupils who wish to pursue a technical course?

Justify \_\_\_\_\_

---

---

---

---

---

**5. Work-Study Programmes**

5.1 Does your school participate in a work-study type of programme?  
YES NO

---

---

---

---

5.2 Does the school/department provide you with the time to co-ordinate and supervise students in work-study programmes?  
YES NO

5.3 Does the school/department provide you with the time to visit appropriate business or industrial operations to make placement contacts? YES NO  
and to learn current skill requirements? YES NO

5.4 Do you think that a work-study type of programme will be of benefit to students? YES NO

---

---

---

---

---

---

**SECTION G - GENERAL**

1. Is your school used as a community college outside school hours?  
YES NO

2. If your answer to 1 is No, please explain why.

---

---

---

---

---





## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

#### 1. Introduction

Concrete efforts must be made to make vocational education accessible to the majority of learners. The concept of vocational education has long been the object of struggle between those that support the idea of a curriculum dominated by academic subjects and those that favour vocational education. Up to this point in time, vocational education has taken root and this beginning needs to be nourished to bear fruit. Hard and educationally sound choices must be made in the present circumstances that will bring quality into the vocational education programme of the future.

However, vocational education cannot be seen in isolation - the entire education system as it is presently structured [1996] needs to be revamped in order to increase efficiency and thereby enable the youngster, who spends 12 years of his/her life within the education system, to leave with an education that allows him/her to be assimilated within society immediately.

The great challenge in South Africa, is to find approaches that will provide a better quality of education for all children. *"In order for education to be effective in such a situation, an urgent revision is needed of the system of provision and its contents, in order to align education and training policies more closely with economic and social policies."* (Mc Gregor's 1992:75)

#### 2. Conclusions in Respect of Vocational Education in the Historically Indian Secondary School

The introduction of vocational education in the Indian secondary school was characterised by a lack of preplanning and expertise.

[Chapter 5 para. 1.2.2]

This resulted in problems such as: certification for the N-course, curriculum contents not meeting the demands of the world of work, decline in the status of vocational education, availability of qualified teachers and the criteria used to determine the category in which the teacher would be employed in respect of qualifications. [Chapter 5 para. 1.2.3]

Support services such as guidance and counselling and subject advisory services lacked the necessary resources in order to provide effective and adequate assistance.

The following problems as outlined by Berkhout (1989:15-16) are applicable to vocational education in the secondary school for Indians:

- o The provision of vocational education requires special facilities, curricula and teachers. This adds to the cost of this type of education.
- o The Indian education system also required a minimum number of pupils to make providing vocationally/technically biased schools economically viable. Thus the House of Delegates established 6 vocationally/technically biased secondary schools to serve large areas in order to provide every possible variation to the curriculum.
- o The problem of providing teachers can be attributed to the education system being unable to meet its own manpower demands. Owing to factors such as a high drop-out rate, inadequate pay, poaching by the private sector, chronic shortages of skilled personnel is experienced. Teacher salaries compare unfavourably with the private sector and many teachers leave for more lucrative careers in the private sector.
- o It is usually not possible to [re]structure personnel remuneration on a differentiated basis as this causes internal friction among various categories of teachers.

Taking into account the problems listed above, a bold step was

taken when it was decided to introduce vocational education at the Indian secondary school. With the introduction of vocational education the Indian child, for the first time, was accorded the opportunity to choose between vocational and an academic type of education. This exposure to career preparatory education was welcomed in many quarters - from educationists, the parent community and pupils alike.

The support for vocational education is reflected in the steady increase in the pupil population pursuing the vocational direction of study at secondary schools. The teacher population also showed an increase, rising from 23 in 1977 to 86 in 1996. A significant change in mindset was brought about with the introduction of vocational education. The Indian community began to realise that the academic direction of study was not the only option available, and that the vocational sphere offered varied opportunities for the youngster. The increase in pupil population in vocational education courses [Chapter 5 - Table 8] at the Indian secondary school is reflective of the change in mindset of the Indian community. The idea of a school curriculum dominated by academic subjects is being questioned because it is becoming increasingly clear that *"children leave school at the end of the compulsory period without a single diploma or occupational qualification and, at times, with a level of education that is lower than what is considered necessary today. The employers' professional organisations have also been criticising the educational system for teaching knowledge that is abstract, for being out of touch with the economic and technical realities of the day, and even for discouraging young people from going into manual labour and industrial work."* (Tanguy 1985:21)

Vocational education as it is implemented at the historically Indian school has the potential to grow and flourish with the restructuring that is taking place within the education system in South Africa. Therefore the recommendations and discussions that will be presented in subsequent paragraphs will be done in

light of the historically Indian system of education and contemporary education in South Africa today.

### **3. Recommendations**

The South African education system reinforced the distinction between the intellectual [academic sphere] and the physical [vocational aspect] of education. The future education system of South Africa must be an integrated system which endeavours to forge a closer link between the academic sphere of schooling and the working mode of life. Intellectual and physical skills need to be developed simultaneously. The present education system would have to be completely restructured so that:

- o intellectual development is directed towards the development of whole human beings who understand the social meaning of education, and in which the development of the intellect is not separated from ideas about useful social work;
- o training is not separated from education, with the latter seen as largely intellectual activity; and
- o the development of skills is not seen as purely a technical issue but related to the wider social aims of education in the development and restructuring of society.

(Mc Gregor's 1992:117)

#### **3.1 Vocational Educators**

The following steps need to be implemented, according to Evans (1971:256-259), in order to improve the quality of vocational education personnel:

- \* Base pay on merit and on supply and demand, rather than on hours of education and seniority.
- \* In-service training must become a priority in order to increase teacher effectiveness

### **3.1.1 Supply and Demand of Teachers**

teachers who constantly complete courses, diplomas or degrees are rewarded with salary increments. This, presently, is irrespective of whether the additional qualifications are related to his/her "teaching subject area" or not. In addition the salary increment is automatic, once the qualification is obtained, and teacher effectiveness is not a criteria for eligibility. Teachers on the other hand should be granted salary increases for additional qualifications obtained within their 'specialist" areas in conjunction with performance related increases. In other words the teacher needs to be acknowledged for attending in-service training, taking the initiative for upgrading his/her qualification and for being an "effective" educator.

Subject areas that require personnel that are in short supply need to be enticed to join the education department. One such incentive is a differentiated salary scale based on demand. This might seem unfair on the academic educators, but if quality vocational education is to be delivered then this is one avenue that needs to be explored further.

### **3.1.2 In-service Training**

In-service training must be carried out constantly in order to keep the educator abreast of changes within his/her area of expertise. This type of training can be effected in various ways. The school vacation can be used to conduct this type of training in order to build strengths and eliminate weaknesses.

Teachers must have the opportunity to visit other schools to compare approaches and teaching methods. An exchange option with industry, where teachers are afforded the opportunity to spend time in industry to absorb new technological changes and trends in the world of work. This also allows industrialists and key people in the work place to "see" what is going on in

schools.

### **3.1.3 Public Relations Function**

Vocational education needs to be promoted and in this respect vocational and technical educators need to serve as public relations officers. This necessitates vocational counselling, job placement and follow up activities. Educators can promote the education offered at secondary school level to industry and thereby receive feedback in respect of curriculum development, changes in the work place and employment opportunities for the pupil. (Kraska 1981:61-62)

The public relations exercise will also enable the teacher:

- o Keep vocational education equipment current with the new level of technology used in business and industry;
- o Develop and procure new curriculum and instructional materials;
- o Make input in order to update and upgrade the vocational education curriculum;
- o Support the National Education Department's efforts to make decisions regarding vocational education all inclusive - involving educators, members of the community, industry and curriculum planners; and
- o Provide a greater articulation between secondary and post-secondary vocational education.

### **3.1.4 Personnel Design**

The following principles as identified by Barlow (1974:61-64) will enable the education department to bring quality back to the teaching of vocational education subjects:

The teachers of a vocational subject should not be required to have significantly more formal education than the average person who has been successfully employed in the occupational areas in which they teach.

Unrealistic and unnecessary restriction placed on the job market for vocational personnel when qualifications are over-stressed.

A vocational teacher should not be required to take an undue number of formal pedagogical courses. These courses must be kept to a minimum.

It is more important for vocational educators to be competent and up to date in their occupations [areas of expertise], than acquiring, sometimes further certificates, diplomas, etc [not related to their area of expertise], for the sake of promotion.

The educational pay structure must reward occupational experience outside the educational system.

This encourages educators to keep abreast of developments in his/her area of expertise. Educators who are committed make pupils enthusiastic about their futures and in this way the community benefits from adequately trained manpower.

### **3.2 The Curriculum**

The South African education curriculum offers the child, including Indian education, a broad general education - aimed at the provision of a liberal school curriculum. (le Roux 1987:107) Vocational education, although offered does not enjoy the same status as academic education. Education is still primarily subject based and this has led to teachers and pupils becoming frustrated as a result of being "*obliged to work with educationally flawed, content loaded syllabi, in an examination driven form.*" (D. Hindle - SADTU President) The quest is to make the curriculum content relevant to the youngster's lifeworld.

The proposed new curriculum to be implemented in 1998 will centre around the following "eight areas of learning":

- Communication;
- Literacy and Languages;
- Numeracy and Mathematics;
- Human and Social Sciences;
- Physical and Natural Sciences;
- Culture, Arts and Artistic Crafts;
- Technology;
- Economics and Management Sciences; and
- Life Orientation

(SADTU News 09/96:2-3)

Although, as it can be noted, vocational education is not listed as one of the eight areas of learning, the proposed curriculum [Figure 2] revolves around making education more relevant to the real world and the new curriculum content will prepare the child to take his/her rightful place in society. This revised *"education system [which] puts equal emphasis on academic subjects and practical training."* (The Star 01/03/96)

A National Curriculum Development Committee [NCDC] has been established to complete work on: the National Qualifications Framework [NQF], Structures for the Development of National Policy regarding Curriculum and related issues and curriculum frameworks for General and Further Education and Training.

### **3.2.1 Prescriptive Approach**

One of the problems faced by curriculum planners is to design a curriculum that accommodates the needs of industry that churns out new and emerging occupations almost everyday. Skills become outdated as quickly as more emerge. The *"traditional philosophy behind technical [vocational] education has been to prepare people for job entry which is then followed by a search for a job that fits the training."* (Gillie and Wilcox 1981:350-351)



Vocational education programmes at school should withhold from pupils training that is specific for a particular job and rather equip youngsters with a wide range of skills. The youngster then seeks out a job that relates to his/her range of skills and then his/her employer specifies the specific skills that are needed and the youngster returns to the skill centre to gain the specific skills required for the job [prescriptive approach]. *"This approach could also reduce, if not eliminate, the unemployment time between jobs for displaced workers. Once businesses, industries, and public agencies knew about the skill centre that was available for such tasks, perhaps they could assign workers [who might otherwise be laid off] to the centre and have them return to prescribed new jobs with no period of unemployment."* (Gillie 1973:100-101)

The prescriptive approach requires unprecedented levels of co-operation between institutions of learning and industry in general.

Teachers involved in vocational educational programmes will have to be much more than dispensers of knowledge. They will have to address and realise the diverse implications of their calling. One of the most important aspects that vocational educators will have to become involved in, is the social implications of vocational education.

An educationally sound vocational education curriculum needs to:

- Keep curricula and courses of study up-to-date;
- Provide effective instructional media and methods;
- Motivate alienated, disadvantaged youth toward work;
- Constantly evaluate effectiveness of the curriculum;
- Provide a counselling service;

- o Obtain and develop qualified teachers and leaders [curriculum planners, subject advisers, etc];
- o Achieve effective communication and co-operation among; and
  - General education and vocational education teachers and administrators
  - Different groups and levels vocational educators
- o Achieve a better public understanding of the purpose and place of vocational education.

(Draper 1967:39)

### **3.3 Certification**

Presently the aim of schooling is to prepare the youngster for the successful completion of the Matriculation examination. The vocational education programme offered at the historically Indian secondary school also prepares the child for the Matriculation certificate. Although it might be argued that the pupils who successfully complete the N-course are awarded with a "National" certificate. However, as discussed in Chapter 5 [para. 1.2.3 (iii)], this certificate is not a national certificate as it is not sanctioned by the National Certification Council.

le Roux (1987: 109-110) makes the following suggestions in respect of certification as discussed in paragraphs 3.3.1 and 3.3.2: [CPVE and Modularisation]

#### **3.3.1 Certificate of Pre-vocational Education [CPVE]**

The General Certificate of Secondary Education [GCSE] is written in Britain by pupils who are 16 years of age. This allows pupils to follow two different directions of study, namely:

- Two years of "A" levels or to complete the CPVE

This could be applied to the South African education system at the beginning of the senior secondary phase of schooling [standard 8]. The pupil completes two years of vocational education up to and including standard 9. The pupil is then granted the option of leaving school or completing standard 10 thereby acquiring further credits in addition to those already obtained. The pupil is awarded with a pre-vocational certificate listing his/her credits.

### **3.3.2 Modularisation**

Pupils at the historically Indian school do not have option of changing courses [directions of study] once they have made a choice at standard 8 level. Change is only permitted if the pupil is prepared to repeat the year.

#### **Example:**

A pupil who chooses the N-course in Motor Mechanics at standard 8 realises in standard 9 that he/she is not cut out to be a motor mechanic and he/she wishes to change to an academic direction of study. This pupil has no option but to repeat standard 8, because the credits obtained in the N-course [besides the languages] cannot be transferred to the academic stream.

Therefore, it is vital that a pupil has the option of changing from one direction of study to another.

Maximum mobility must be built into the educational system ensuring that pupils are not condemned to specific subjects and career paths without the possibility of change.

The Scottish Action Plan allows a pupil to change from one course to another. A pupil leaves school [Formal education] and participates in on-the-job training [Non-Formal education] and by means of modules [credits] achieved in Non-formal education the pupil is allowed back into Formal education to complete

his/her education. This is an especially workable method in vocational education. (Le Roux 1987:110)

### **3.4 Work Study Programme**

The work study programme implemented at the historically Indian secondary school was left to the discretion of individual schools [was optional] and not prescribed by the Education Department. [Chapter 5 para. 1.2.3 (iv)] This resulted only 3 secondary schools participating. The success of any vocational education programme is highly reliant on an effective work study programme being in place as this allows youngsters involved in the programme to experience the real world of work.

Serious mismatches occur when students [as in the case of Indian schools] concentrate on theory and only experience a workshop atmosphere when they work in "artificially simulated work environments" in workshops at school. A work study programme offers the pupil and vocational education the following advantages:

- o The approximation of real-life situations in training helps to motivate the student to master the skills required;
- o Direct contact with the world of work makes it relatively easy for students to develop an understanding of the industrial system and its values and to develop effective work habits;
- o The demand for technically and vocationally educated people makes it possible to combine educational and training resources [equipment, buildings, manpower] from both the public and private sectors, thus optimising the use of scarce and expensive resources for training; and
- o The fact that technical and vocational education leads directly to further training or employment makes it relatively easy to obtain community support.

(Mc Gregor's 1992:370-371)

ALSO

- Such programmes provide an avenue for functional school-community relations; and
- This process can serve as a recruiting device and as a way of influencing pre-employment training.

(Draper 1967:65)

Advantages for Teachers and Policy Makers:

- Attachments to industry;
- Attending company training courses;
- Attending education based courses with industrial contributions;
- Expert assistance from business for policy making, resource allocation and planning;
- Information about needs of the workplace that will enable educational institutions to develop their programmes; and
- Use of experts from business as part-time or temporary full time teachers and trainers.

Advantages for the Business World and Industry are:

- Educated and well-prepared workers;
- Use of the facilities, equipment and other resources of educational institutions;
- Direct economic benefits from institutions that buy goods and services in their local communities;
- Help in applying technology to improve business operations; and
- Up-to-date information of developments and new innovations in education.

Advantages for the Government and Society as a whole:

- o Reduction in the costs of services such as welfare through the employment of citizens;
- o An increased tax base from a stable and expanding economy;
- o More jobs and income for citizens;
- o Good public relations; and
- o Reduction in the cost of provision of educational facilities and services.

(Dekker and Lemmer 1993:131)

Business/Industry can be encouraged to participate in the work study programme by:

- Offering them significant tax incentives
- Participation in the decision making process

The world of work towards which vocational education is orientated is an invaluable partner in the educational process and the work study programme offers an excellent opportunity to forge closer links between the world of work and education.

### **3.5 Cluster Schools**

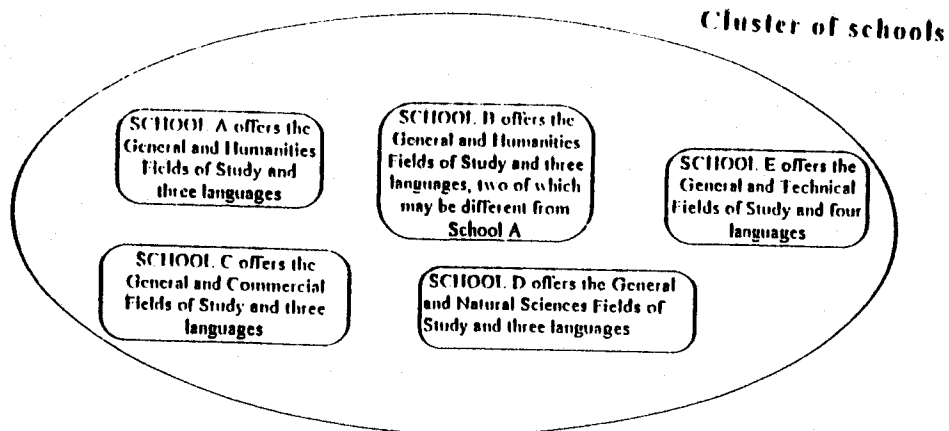
The provision of vocational education is expensive and one method of overcoming this is to use the method of cluster schools as proposed by the Gauteng Education Department.

Schools within a demarcated area offer differentiated fields of study [Figure 1] in order to maximise diversification of the curriculum. This will rationalise the use of :

- \* physical amenities;
- \* technical equipment; and
- \* staff expertise.

(Le Roux 1987:108)

FIGURE 1



Source: Circular from Gauteng Education Department

Cluster schooling has the following advantages:

- Highly differentiated curriculum;
- Maximum use of resources and educational facilities;
- Reduces the cost of provision of education; and
- Serves a particular community.

In urban areas cluster schooling will be of great benefit.

#### **4. Administrators of Vocational Education**

Experienced and highly qualified administrators are needed in order to manage and deliver an efficient system of vocational education. This requires that administrators have experience outside the educational system. Administrative experience will also be an added advantage. Subject advisers who form an integral part of the administrative component should be able to:

- Promote in-service improvement of educators;
- Be competent in analysing curriculum content, technical information and other subject matter;
- Prepare activities designed to improve educator competence and efficiency;

- o Possess the necessary expertise to assist in the selection of facilities, equipment and instructional materials;
- o Evaluate teaching and identify strengths and limitations; and
- o Realise the role and importance of vocational/ technical education in economic development and community growth.

(Barlow 1974:76)

## **5. Contemporary Education Development in South Africa**

One of the major proposals for education in South Africa is the National Qualifications Framework [NQF] which has far reaching implications for education as a whole and will have a significant impact on vocational education.

The NQF seeks to find an integrated approach to education and training in South Africa. This system aspires to:

- o Create a flexible education and training system which will promote a process of lifelong learning for all South Africans;
- o Integrate education and training systems into one unified framework comprising three bands - General Education and Training, Further Education and Training and Higher Education and Training; [Figure 2]
- o Aims to shift South Africa's education system from an "objectives-based" to an "outcome-based" model. The outcome based model establishes what learners should be able to do at the end of the learning process. The new education model will therefore be more performance and skills oriented;



- o The NQF differentiates between "essential" and "specific" outcomes. Essential outcomes refer to the general ideals of education and training. They form all areas of learning and provide the foundation for specific outcomes. Specific outcomes are the knowledge skills and values demonstrated by a learner in a particular context. A specific outcome plus its performance criteria is classified as a "unit standard". Particular combination of unit standards create qualifications for each level of the NQF;
- o The NQF creates flexibility in terms of pathways and time periods. Because credit is awarded for each unit standard, people can follow their own pathways to attain qualifications. Also, there is no specific time period in which a qualification must be completed; and
- o The NQF aims to promote recognition of prior learning [RPL]. If learners exhibit the required specific outcome, they can attain credit for the unit standard without having learnt the skill formally. RPL is intended to provide South Africans, who have been denied access to education and training, entry into the education system.

(SADTU News 08/96:2-3)

The South African Qualifications Authority [SAQA] Board was established in May 1996 to oversee the development of the NQF and to establish structures and processes to develop standards and qualifications. (Greenstein 1995:8)

The NQF has the following eight qualification levels:

#### Level 1

Comprises of ten years of compulsory schooling from Grade 0 up to and including Grade 9 [the present standard 7].

The General Education Certificate [GEC] will be awarded on completion of this level.

Levels 2 - 4

The Further Education Certificate [FEC] will encompass either one or a combination of secondary school programmes up to Grade 12 [the present Matric], general and career-specific programmes offered at various colleges and apprenticeships.

Levels 5 - 8

The Higher Education diploma and degrees, may be undertaken at professional colleges, universities and other institutes.

(The Star 01/03/95:1)

This is a progressive development which integrates education and training and places equal emphasis on formal and informal education. Vocational education comes to the fore in the NQF. Traces of the CPVE and modularisation [Chapter 6 para. 3.3] can be found in the proposed NQF.

FIGURE 2

NQF level	Learning Band	Types of Qualifications and Certificates		Locations of Learning for Units and Qualifications		
8	Higher Education	Doctorates	Further Research Degrees	Technikons / Universities Tertiary / Research / Professional Institutions		
7	and Training Band	Higher Degrees Professional Qualifications		Technikons / Universities Tertiary / Research / Professional Institutions		
6		First Degrees Higher Diplomas		Universities / Technikons / Colleges / Private / Professional Institutions / Workplaces / etc.		
5		Diplomas Occupational Certificates		Universities / Technikons / Colleges / Private / Professional Institutions / Workplaces / etc.		
<b>Further Education and Training Certificate (Equivalent Std. 10)</b>						
4	Further Education and Training Band	School / College / Training Certificates		Formal high schools / Private schools	Technical / Community / Police / Nursing / Private colleges, etc.	RDP and Labour market Schemes / Industry Training Boards / Unions / Workplace centres etc.
3		Mix of unit credits from all				
2		School / College / Training Certificates				
1		Mix of unit credits from all				
<b>General Education and Training Certificate (end of compulsory schooling / ABET 4)</b>						
10 years of Compulsory Schooling	General Education and Training Band	Senior Phase	ABET level 3	Formal schools (Urban / Rural / Farm / Special)	Work-based Training / Occupation Training / RDP /	NQOs / Churches / Adult Centres / Private Providers /
		Intermediate Phase				
		Foundation Phase	ABET level 2	Early Childhood Development Centres	Labour Market Schemes / Upliftment Programmes / Development Schemes	Industry Training Boards / Unions / Workplace Training / etc.
		Pre-school				

Source: SADTU News 08/96:3

## 6. Areas for Future Research

The following areas need to be researched in the future to allow planners of education and curricula and other stakeholders in vocational education to make progressive judgements:

- o Performance related increases for teachers
- o Salary scales based on supply and demand of vocational educators
- o Certificate of Pre-Vocational Education [CPVE]
- o Modularisation of the Curriculum
- o Cluster schools
- o Scholars/People that have completed the vocational education programme (offered by the historically Indian secondary school), need to interviewed to determine the merits/demerits of the programme

## 7. Conclusion

Today a youth is considered to be disadvantaged if he/she possesses a Matriculation certificate, with no vocationally orientated courses. It will be almost impossible for this youngster to be absorbed into the labour market. Therefore the Indian Education Department introduced vocational education at secondary school level, because *"employability is seen as marketability. Employability includes not only just the technical skills required to effectively perform occupational work activity. Also significant is the discipline, the commitment and the knowledge required to choose a preferred occupation, to locate potential employers and to engage in this type of job search and interview behaviour which will lead to an appropriate job placement."* (Christian [Ed] 1982:86)

Vocational education should take into account the needs of the individual, society and the economy. The vocational education programme introduced at historically Indian secondary school failed in this respect, in that it is skills oriented and is inflexible. The curriculum at the historically Indian secondary school, as is proven in this study, is academically biased.

In the reconstruction and development of a new educational system in South Africa, vocational education will play a significant role in preparing the youth of today for tomorrow's demands.

"Vocational education establishes its basic position on the point of view that the greatest asset of a nation is not its tremendous wealth, but its ability to deal with its human resources wisely. A personal quality pervades all of vocational education - is based on a belief in the worth of an individual." (Barlow 1974:279)

## BIBLIOGRAPHY

### Books and Thesis

1. Barlow M.L. 1974. **The Philosophy for Quality Vocational Education Programs**. Washington: The American Vocational Association Inc.:
2. Christian N.K. 1982. **Education in the 80's**. Washington: National Vocational Association
3. Dekker E. & Lemmer E.M. 1993. **Critical Issues in Modern Education**. Durban: Butterworths
4. Draper D.C. 1967. **Educating for Work**. Washington, D.C.: National Association of Secondary School Principals
5. Evans R.N. 1971. **Foundations of Vocational Education**. Columbus, Ohio: Charles E. Merrill Publishing Company
6. Gillie A.C. (Sr). 1973. **Principles of Post Secondary Vocational Education**. Columbus, Ohio: Merrill
7. Le Roux A.L. 1987. **Education and the World of Work - a Personal Perspective**. University of York
8. McGregor's R. & A. 1992. **Education Alternatives**. Kenwyn: Juta & Co.

### PERIODICALS

1. Berkhout S.J. 1989. Manpower Approach to the Provision of Education: A New Educational Route to Utopia? **South African Journal on Education**. Vol. 9 No. 1
2. Gillie A.C. (Sr) & Wilcox L.M. 1981. Technology and Technical Education: The Time for Choices. **Journal of Studies in Technical Careers**.
3. Greenstein R. 1995. **Quarterly Review of Education and Training in South Africa**. Vol. 3 No. 1 (page 8)
4. Hindle D. SADTU News 09/96
5. Kraska M.F. 1981. Teenage Unemployment: A Challenge for Vocational and Technical Educators. **Journal of Studies in Technical Careers**.

6. Tanguy L. 1985. Academic Studies and Technical Education: New Dimensions of an Old Struggle in the Division of Knowledge. **Sociology of Education**.

#### NEWSPAPERS

1. **SADTU News** 08/96 & 09/96
2. **The Star** 01/03/96 & 01/03/95

#### CIRCULARS

1. Gauteng Education Department