A model for inservice teacher training in the Caribbean: curriculum development for teaching the educationally handicapped in the regular classroom.

Esla V. Lynch-Richards
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A MODEL FOR INSERVICE TEACHER TRAINING IN THE CARIBBEAN: CURRICULUM DEVELOPMENT FOR TEACHING THE EDUCATIONALLY HANDICAPPED IN THE REGULAR CLASSROOM

A Dissertation for the Doctoral Degree in Education
Presented
By
Esla V. Lynch-Richards

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

January 1976
Teacher Education
DEDICATION

To the youth of the West Indies - May the governments in power find value in the contents, and therefore use it to develop our children to their fullest potential, thereby developing our greatest resource.
A MODEL FOR INSERVICE TEACHER TRAINING
IN THE CARIBBEAN: CURRICULUM DEVELOPMENT
FOR TEACHING THE EDUCATIONALLY HANDICAPPED IN
THE REGULAR CLASSROOM

A Dissertation
By
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A Model for Inservice Teacher Training in the Caribbean:
Curriculum Development for Teaching the Educationally
Handicapped in the Regular Classroom
(January 1976)
Esla V. Lynch-Richards
B.A., M.Ed., Howard University
Ed.D., University of Massachusetts
Directed by: Dr. David R. Evans
ABSTRACT

The islands of the Caribbean all share some aspects of a
historical and geographical bond. Because the area was ravished by
European colonialism, European languages are today spoken in the area.
In most instances the language spoken is indicative of past and present
colonial administrators. Regardless of the language spoken, the people
of the area are West Indians. The term West Indian, however, is gener-
ally utilized to refer mainly to the people from the islands and Guyana
that were formerly or are still colonized by the British. It is therefore
the English speaking territories, excluding the United States Virgin
Islands and including Guyana, with which this document is concerned.

The Caribbean area, confronted with limited economic resources,
a high birth rate, and an increasing demand for education, is faced
with a severe shortage of trained teachers. As a result, when teachers
do receive training, minimum attention is provided to meet the needs
of the special child. Teachers, both experienced and inexperienced,
often find themselves inadequately prepared to meet the challenge of

educationally handicapped children, whose needs differ significantly from the majority of children. This document develops an inservice teacher training model geared to teaching specific methods and techniques for working with the educationally handicapped. The educationally handicapped, as defined within this study, may be classified as the slow developer, the partially handicapped, and/or the emotionally and socially disturbed.

The document presents in its review of literature an analysis of educational trends in the West Indies, and then pays specific attention to the development of education in Trinidad and Tobago - site of the field test. It examines the reasons why and how education first emerged in the area, developments in the twentieth century and recent innovations. It describes the content of the teacher training curriculum as found in Trinidad and Tobago, the educational background of primary school teachers and demonstrates why the need for inservice teacher training exists.

As the curriculum model is presented, the writer explains how decisions were made as to the selection of topics, and provides a rationale for the curriculum and a list of objectives stated in behavioral terms. Subsequent to this, the writer provides ideas for activities whereby the objectives can be achieved and criteria that can be utilized for evaluation purposes. A description of the field test follows, including the activities, outcomes, and a chapter on evaluation. The final curriculum is then discussed in detail. In so doing the writer explains why the original curriculum was expanded, proposes plans for
implementation and discusses the supplementary materials. The curri-
culum content, along with teaching specific skills and techniques
for teaching educationally handicapped children, also includes a sub-
unit that focuses on teachers, their self-concept, and the importance
of their role in society. The writer feels that this challenges the
present view of teachers and will result in more positive contributions
by teachers to the benefit of all children and society.

The document ends with a number of appendices which provide
the original and final curriculum, the pre- and post-evaluation materials,
supplementary reading materials and a recommended reading list for
teachers. From evaluation of this study, the writer feels that the
results give positive reinforcement to continuing this type of training
process and recommends that similar programs be developed to minimize
other problem areas found in the total educational spectrum.
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Paulo Freire in his book *Pedagogy of the Oppressed* stressed the importance of "liberation education". This type of education focuses on the individual as a potentially conscious and critical being who if allowed to develop his qualities would change the structure of society for the benefit of mankind. The concept of "liberation education" has among its objectives to encompass in education at all levels a merging of social concerns, political awareness, and economic development. Unfortunately, this type of education has been absent from the curricula provided by colonial administrators. As new nations emerge in the Caribbean, it is imperative that the people of the area overthrow the shackles of colonialism and liberate themselves. To accomplish this goal - "liberation education" - redirection is necessary and will require that all people be educated and re-educated beyond the three R's - reading, writing and arithmetic - and functionary skills to participate in liberating the territories and in developing the area. If development - social, political, and economical - is an important goal, all education provided for the society must be examined to ensure the prerequisites to success. Attention must be paid to the kind of education provided, the methods used, the curriculum and the use of limited resources.

The Caribbean area confronted with limited economic resources, a high birth rate and an increasing demand for education is faced with a severe shortage of trained teachers. As a result,
When teachers do receive training, minimum attention is provided to meet the needs of the educationally handicapped child. Thus the potential of these children is left undeveloped. An area whose resources are limited, however, can least afford to not develop its most valuable resource. Human wastage must cease to occur.

This research document, therefore proposes an inservice teacher training model for Caribbean teachers to meet the needs of the educationally handicapped in the regular classroom. It proposes specific methods and techniques for working with children. Along with equipping teachers with skills to meet the needs of special children, it seeks to help teachers develop a positive self-concept and realize the importance of their role to society. The writer believes that this challenges the present view of teaching. The writer also believes that this new awareness would result in more positive contributions to the benefit of all children and to society.

The writer, a citizen of the Caribbean area, wishes to express her appreciation to the people of the area who, through their investments in public education, provided her with the foundation upon which she was able to build. To teachers everywhere in whose classes she sat, she wishes to say "thanks".

The author also wishes to thank the following people for their contributions without which this work could not have been accomplished: To my mother Mrs. Esmee Lynch who in spite of numerous ups and downs committed herself to educate her children by providing all she had emotionally, spiritually and economically to liberate
them from the shackles of poverty and exploitation; to my husband
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success, the future is theirs, they can do better.

To Czerni Brasuell, a sister and friend who worked with me
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Special mention must also go to the following: the staff
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Officer of Grenada, who arranged the original site for the field test;
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Peace, Plenty and Power

Esla V. Lynch-Richards
CHAPTER I
Introduction

The Region and Nation

The islands of the Caribbean Sea all share some aspects of a historical and geographical bond. The islands in the north divide the Caribbean Sea from the Gulf of Mexico and in the east the Caribbean Sea from the Atlantic Ocean. All of the islands in the early days prior to and immediately after the arrival of the Europeans were inhabited by two major Amerindian tribes - the Caribs and the Arawaks. These two groups of people in some of the islands have been totally destroyed by the Europeans.

Following the seizure of the land by the Europeans they brought African slaves to the area. After emancipation, indentured servants were brought to some of the islands from other countries. Because the land provided colonial rulers with additional economic resources, several battles occurred that resulted in some territories being governed at one time or another by different colonial exploiters. Consequently, most European languages are presently spoken in the area - English, French, Spanish and Dutch. In most instances, the European languages spoken are indicative of past or present colonial administrators. Regardless of the language spoken the inhabitants live in the West Indies and are West Indians. The term West Indian is generally utilized to refer mainly to the people from the islands and Guyana that were formerly, or are still colonized by the British. It is the English speaking territories of the area excluding the United States Virgin Islands that will be referred to in this document. The territories included are:
Anguilla, Antigua, Barbados, Bahamas, Dominica, Grenada, Jamaica, St. Kitts and Nevis, St. Lucia, Montserrat, St. Vincent, Trinidad and Tobago, the British Virgin Islands and Guyana. (See Map on following page).

The territories, although spread over a thousand-mile stretch, have many common characteristics that continue to affect their growth. Some of these are:

1. Climatic conditions which fostered the growing of sugar cane and today encourage tourism.

2. The slave trade and the plantation system which developed and now influence the social institutions and the socioeconomic system.

3. Inadequate communication system resulting from miseducation and/or lack of information, that emerged through techniques used by colonial rulers which resulted in some alienation among the people of various territories, in the region.

4. Parallel social experiences resulting in similar behaviors as reflected in common love for sports; display of hospitality; and participation in similar institutions.

5. Social, political and economic events of the last twenty five years which show parallels occurring throughout the area.

In spite of the fact that each territory has some cultural patterns peculiar to its people, a sense of area identity exists and is
being fostered. This is evidenced when West Indians respond to things West Indian, at home and abroad, such as music, food, support groups, old and new economic ties. An even greater sense of area identity needs to be fostered. The future of the area is dependent on the progress of every single territory. Through increased mass communication of an educational nature and by increasing the amount of political, economic, social and cultural ties, the dream of West Indian unity can be realized.

Since the field testing for this study was done in Trinidad, some attention will at this juncture be paid to this specific territory. At the time the first Europeans landed in Trinidad and Tobago the islands were, in the main, inhabited principally by two Amerindian tribes, the Caribs and Arawaks. On July 31, 1492, Christopher Columbus, on his third voyage, landed in Trinidad and gave it its present name. Some writers claim that Columbus sighted Tobago on this trip, but this fact is uncertain. However, it is certain that he did not land. Thus Trinidad in 1492 was colonized by Spain while Tobago then called "Tabaco" remained an Amerindian island untouched by Europeans.

Trinidad remained a Spanish colony until February 18, 1797 before it was surrendered to the British. During the Spanish colonial rule, the people and the island's resources existed only for the benefit of the Spanish monarchy. The lack of effective government by the Spaniards led the country to experience a series of problems. Discovering that the island did not have a city of gold, attempts were made at building an economy first based on tobacco and later on cocoa. The harsh rule of the Spaniards led to the decimation of the Amerindian population, and to a severe labor shortage. Thus substitute labor was
introduced to the island. Africans were bought, stolen, tricked away from their home land and shipped to Trinidad to work as cheap labor.

Since the Spaniards viewed Africans as people without a culture they were treated as less than human and without rights. The bulk of previous misinformation on this subject has, however, been corrected over the last few years by researchers such as Mr. Basil Davidson, author of Old Africa Rediscovered and Black Mother, Dr. Gertrude Caton-Thompson and others. Europeans found it convenient to define Africans the way they did in order to justify their behavior, that is, exploitation of a people.

The fact that the wealth anticipated by the Spaniards from the islands was not forthcoming led to a decline in the number of Spanish settlers. On March 20, 1777, a memorandum was sent by a French citizen, Roume de St. Laurent, to the King of France proposing that white French settlers be allowed to migrate to Trinidad. On November 20, 1783, Laurent's proposal was finally accepted, after an agreement between the kings of Spain and France. French immigrants were allowed to live in Trinidad under stated conditions. With time, however, Trinidad although still a colony under the Spanish crown, was governed by French settlers. Dr. Eric Williams in his book The History of the People of Trinidad and Tobago described the early history of the two islands in the following manner:

"If there was one West Indian colony with a sadder history than that of Trinidad in the first 300 years after discovery by the Spaniards that colony was Tobago.

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Trinidad suffered from the ineptitude and inefficiency of Spanish colonialism. Tobago suffered rather from the competition of rival colonialism. In Trinidad the metropolitan government saw to it that nothing was done. In Tobago the conflict of the rival metropolitan governments made it impossible for anything to be done. If Trinidad remained a Spanish colony subject to occasional attacks by Spain's enemies, Tobago was no man's land. Whilst the Spanish flag, however tattered, continued to fly over Trinidad, Tobago changed flags almost as regularly as it changed seasons and the people of Tobago lived ... did not know where they were going from day to day, in a state of betweenity.3

In 1797, Britain annexed Trinidad from Spain and was immediately faced with two internal problems. The first problem was to determine the type and composition of internal governing bodies. The presence of three nationalities of whites created a major problem since each of the three groups had strong national ties. Added to this, the French and Spanish did not have an indepth grasp of the English form of government. The second problem was related to the issue of slavery which was being questioned by members of the abolitionist movement in Britain and elsewhere.4

The shortage of labor and the emancipation of the slaves in 1833 brought people of other nationalities to the island of Trinidad. Cheap labor was brought into the country under another name. Indentured servants were brought in from India, China, Syria, and Lebanon. In 1889 Tobago was made a ward of Trinidad with little attention paid to the feelings of the people of either island. The amalgamation of Trinidad and Tobago suited the convenience of the British government, and reduced the overall administrative expenditure on the two islands.

3 Ibid., p. 51.

4 Ibid., pp. 65-68.
Thus the peoples of Trinidad and Tobago, cosmopolitan in nature, reflect their historical past. Populated mainly by people of African and Indian descent, Europeans, Chinese, and Syrians are among the minority groups. The culture of the islands reflect the people, thus one can find aspects of the people's various cultural backgrounds as can be seen in religion, music, and food. The people today thus have an ancestry that is African, Indian, Chinese, Lebanese, English, French, Irish, and Spanish.

Trinidad and Tobago also known as Land of the Calypso, gained its independence on August 31, 1962. Its strategic geographic location continues to give it an important role in West Indian development. Trinidad and Tobago are the most southerly of the Caribbean islands and lie about sixteen miles from the South American mainland east of Venezuela. The second most populated of the English speaking West Indies, it actively participates politically, socially, and economically, in the improvement of the area.

The political system is bicameral and reflects a pattern much like the British. In 1925 the first general elections were held in the islands; however, all adults, male and female were not allowed to vote until 1946. Among the early fighters for the poor was Captain Arthur Andrew Cipriani, a Trinidadian of French descent. Captain Cipriani came to be known as champion of the "barefoot man". Nine times Mayor of Port of Spain, he struggled to get the workers an eight hour day; abolish child labor; develop trade union legislation; and

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legalize compensation for the working man. Another person who tried to educate the people politically and champion their cause was Tubal Uriah Butler - a man of African descent. Butler actively struggled to help the people overcome problems of the world depression of the 1930's as it affected the people of these two small islands in their everyday life. He worked to form unions to represent the workers and seek their rights. Later he became a member of the Legislative Council. Unfortunately, it was only in 1956 that the vast majority of the people became involved in politics. This involvement occurred with the birth of the People's National Movement, under the leadership of Dr. Eric Williams. Dr. Williams in that year went into the streets and parks of the towns and villages, to speak to the people. This era saw the birth of active political participation by many who before had little or no interest in politics or government. Today, the People's National Movement continues to be in power, but does not appear to have the solid support of the masses as it had in previous years. 1970 saw the beginnings of a generation questioning the actions of government. During 1970, there were outbursts of civil disobedience, and a clamour by youth for government to become more accountable to the people. The riots have stopped and new names have appeared on the national scene as a result, for example, Geddes Granger and Raffique Shah, to name a few. New organizations with varying political positions have also emerged, for example, the National Joint Action Committee. The

Black consciousness that has emerged in recent years in various parts of the African diaspora is also having its effects on the people as they grapple with the question of identity. The events of the 70's reflect a wave of concern by some, however, satisfactory mass involvement in politics has still not been reached.

The economy of Trinidad and Tobago was for a long time based mainly on sugar. Several times the British government was advised to examine other avenues for building the economy of the two sister islands. The scientific and technological advancements of countries outside the British Caribbean were too far developed for the Trinidad and Tobago market to compete. "Cuban cane and German beet and the selfish policy of the British Government brought the West Indies to the verge of total collapse in 1897. In 1910 the first discovery of oil in commercial quantities was made and since sugar was no longer of interest to the British the islands became an oil colony of great importance to Britain.

The nation had an average rate of growth of 9.7% between 1951 and 1961. Expanding not only in the oil industry, the nation is developing in the field of heavy manufacturing industries, such as, motor car assembly and fertilizer plants. There is also rapid growth in the manufacture of building materials, consumer products, and textiles. This growth is not limited to Trinidad and Tobago, but is a reflection of what is happening in the area. The nation is benefiting

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7 Ibid., p. 151.
immensely from the Caribbean Free Trade Area - CARICOM.

Well known for calypso and carnival, the social life of the people incorporates far more. Among the many religious occasions still observed in the islands are:

The Muslim festival - Hosein
The Shango feast
The Hindu Holy Festival in honour of the Spring
The procession of the Black Virgin of Siparia
De-pa-val (Divali) the Hindu Festival of Lights
The Christmas Crib

Not having received television until recently, the people actively participated, and still do, in outdoor sports - swimming, cricket, soccer, hockey, athletics and others. The sound of the steel band and a good "fete" know no ethnic barriers. This social behavior is a reflection of the country's aspirations, appropriately summarized on the Coat of Arms - Together We Aspire; Together We Achieve.

The Problem

The Caribbean area at present is faced with severe shortage of trained teachers. As a result, when teachers do receive training, minimum attention is provided to meet the needs of the special child. This unfortunate situation, is not based on neglect, but on limited resources. Teachers, both experienced and inexperienced, often find

9Ibid., p. 179.
themselves inadequately prepared and at times unable to meet the challenge of students whose learning process and needs differ significantly from that of the majority of their students. This document envisions the development of a training model that could be used in teacher training colleges and in inservice training sessions. The content of such a model would be geared to teaching specific methods and techniques for working with the educationally handicapped.

**Purpose**

The purpose of this study was to design an inservice teacher training model for Caribbean teachers to meet the needs of the educationally handicapped. In this document children classified as educationally handicapped include the slow learner, the partially handicapped, and the emotionally and socially disturbed. The training model was field tested with a group of selected classroom teachers; evaluated for its usefulness; and recommendations made for its implementation on an on-going basis.

The training model will not solve all the problems that teachers encounter with educationally handicapped children, but will expose teachers to new skills that can improve the quality of their instruction. This will result in additional assistance to children classified as educationally handicapped. This training will provide teachers with new techniques to help such children achieve a more positive self concept; experience more success in classes; enable teachers to be more understanding; and thereby help teachers perform their task more efficiently. This document addresses itself to the
educational needs of the Caribbean and to the specific issue of teacher education. It will report and put into perspective the curriculum designed and implemented. The major focus of the curriculum will be on the elementary teacher in the regular class. The major objectives are:

1. To maximize the development of the educationally handicapped in the learning process.
2. To help teachers learn new techniques for teaching the educationally handicapped.
3. To help teachers learn new approaches to developing materials for use in their classes.

Major Premise

1. Knowledge and skills about the educationally handicapped can improve the quality of teaching/learning.
2. Specific content that deals with teacher's self-awareness and the importance of the teacher's role in society has implications beyond special education that can help all children while improving and enhancing education in society.

Minor Premises

1. Specific content that deals with teacher awareness and attitudes towards educationally handicapped children can improve teaching/learning of all children.
2. This model when developed can be used to train
teachers in the Caribbean area as defined by this document.

Limitations

1. Although the model is intended for the Caribbean area, it was only field tested in one island due to economic limitations. Additional attention should be paid to testing, if this model is to be utilized on a large scale.

2. If the educationally handicapped is to be given maximum help, attention must be paid not only to the teachers, but also to parents and the community. The study did not focus upon these aspects.

3. The design of this was not experimental in nature but structured to provide feedback as to the appropriateness of the curriculum content and procedures utilized.

Assumptions

1. This model can be implemented with minimum assistance from the writer.

2. The model is so developed that it can and does permit flexibility for its implementation in a school district.
Definition of Terms

The Educationally Handicapped: The child who may be classified as the slow developer, the partially handicapped, and/or emotionally and socially disturbed.

The Slow Developer: The child who may demonstrate delayed physical, emotional, and intellectual growth and or behavior, and whose educational needs are therefore very different from the majority of children.

The Partially Handicapped: The child who because of some partial physical handicap suffers varying degrees of impairments which dramatically affect his education and development. Such handicaps may be seeing, hearing, and speaking.

The Emotionally and Socially Disturbed: The child whose personal problems prevent him from adjusting to regular classroom situations. Such a child's overt behavior may cover the gamut of extremes, ranging from aggressive destruction to morbid withdrawal.

The characteristics of children described as educationally handicapped in this document are:

1. Some may differ significantly from average in physical and psychological characteristics.
2. Some may not be able to achieve maximum development and optimum progress in the school program as designed for the majority of children.
3. Some may need varying degrees of special instruction to achieve at a level commensurate with their respective abilities.
4. Some may be slightly inferior in physical development, motor skills, and coordination, with a higher incidence of illness and disability.

5. Some may be described as disciplinary problems, truant, inattentive, and lazy.

6. The intellectual development of some may be slower, therefore they may have acute problems where equality of educational opportunities has been equated with identical educational experience for all children.

Instructional Materials: The development of concrete materials used to facilitate and enhance learning.

Inservice Teacher Training: A series of learning experiences provided for elementary classroom teachers who may or may not have received professional training. Learning experiences will provide cognitive knowledge, teaching techniques, and effective learning. These are teachers who will not be participants of the inservice teachers' training college, but teachers who at the time they participate in this program are active teachers with classes in schools.

Caribbean or West Indian: The territories in the Caribbean Sea and Guyana that are or were colonies of Britain. They include Anguilla, Antigua, Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, Montserrat, St. Vincent, Trinidad and Tobago, and the British Virgin Islands.

In the subsequent chapters the writer will report on the structure of education in the West Indies from its conception to the present. The reasons why and how education emerged in the area will
be analyzed. After examining the region, specific attention will be paid to Trinidad and Tobago. This nation will receive special focus since the field testing was done in its capital. The structure of the system, the curriculum content for children and teachers will be reviewed as well as the present position of the educationally handicapped in the schools as defined by this document.

Chapter four which follows deals with the design and implementation of the curriculum developed and tested by the writer. It explains how the objectives were selected, the curriculum content, the activities, the reading materials and the participants. Chapter five focuses entirely on the evaluation of the field test. It explains how the evaluation questionnaires were developed, the responses of the participants, and the facilitators' observations. Included in this chapter are the evaluation comments made by the participants. The last chapter examines the final curriculum. It discusses the content, possible plans for implementation, supplementary reading materials and makes recommendations for the use of the curriculum as well as recommendations for improving education at all levels in the West Indies. The document closes with a number of appendices which supplement the content and will be discussed in greater detail.
CHAPTER II

Education in the West Indies

In order to understand the present systems of education found in the Caribbean a look at educational trends in the area is absolutely necessary. How did education in these territories emerge? What were the goals of the early educators? Why does the education system in spite of limited resources continue to reflect the British system? Why do the most recent innovations reflect patterns of the large metropolitan countries? In this chapter some of the historical background that led to the development of education in the area, and the factors that continue to influence the systems will be discussed.

The idea of public education in the West Indies emerged around 1833 and was presented in the fifth resolution of the House of Commons which dealt with the emancipated British slave. This was the time when the British government first began subsidizing school societies in Britain and the idea of universal education in the West became a major goal.¹

What gave birth to the idea of education for the ex-slave? The idea was imported by religious bodies and government officials. The influential people, amongst whom were government officials, saw little hope for social and economic advancement with emancipation and the colonies of ex-slaves. The religious bodies, on the other hand, felt the need to educate the people with missionary zeal and purpose. Thus

though differences of opinion continued to exist from the pre-emancipation period, the idea of education became a reality.

During the pre-emancipation period, slave masters felt that if slaves were to be taught, it should only be the things necessary to perform their task. The feeling was that if all the slave knew was his situation in life, he would be unable to think of alternatives. Christopher Codrington was one of the early slave masters in the area who ignored opposition and allowed his slaves to receive religious instructions. Later in his will he left money for a school to train ministers - Codrington College, Barbados. This school is still in existence today, though the curriculum has broadened.

Outside the unusual circumstance of some slaves receiving religious training, the main education received by this class was taught by elderly slave women. Slave children were taken care of by older women who taught them African songs, stories, dances and games. Even this meagre education ended by six years of age as children joined the third gang comprising women and children, weeding and collecting food for animals. The objective of this early training from six years was to keep the children from idleness and train them for their task.\(^2\)

The Post Emancipation Period

On August 1, 1834, by an Act of the British Parliament, slaves were declared free. Unfortunately many writers seldom present other important facts that were written into the Act. The Act of 1834 made

\(^2\)Ibid., p. 10.
provisions that would lead to the eventual freedom of the African
slaves, though it was referred to as the Emancipation Act. The writer
holds this position since in reality the act converted the African
slaves from the status of a slave to that of an apprentice to their
regular owners. Slaves who had been engaged in cultivation or in the
manufacture of sugar, including tradesmen, were under the new law
required to serve their masters for six years ending August 1, 1840.
Domestic slaves were to serve their masters for four years ending
August 1, 1838. The reason for this clause in the Act was to compensate
slave owners and transform the society smoothly. Though the change in
status of the African slave had some advantages in other areas, he
benefited little. The wages received were not sufficient to maintain
a family. Planters expected that parents would apprentice their
children to their plantations and resorted to severe measures to compel
them to do so. The new law made provisions for apprentices to secure
their total freedom at a cost; however when it was noticed that many
were saving their money and purchasing their freedom, the law was
changed three times for the worse. Free Blacks desired to learn trades
and those things that would have provided an improved situation in life.\(^3\)

During the first decade after emancipation there continued
to be much conflict over the education of the ex-slaves. Religious
teachers made the teaching of religion their goal. Land owners,

\(^3\)Augier, F.R. and S.C. Gordon. Sources of West Indian History
however, felt that education would spoil agricultural workers. The missionaries said that practical or agricultural education would at best maintain Blacks in a position closely related to slavery. Unfortunately, both groups failed to evaluate the goals of education realistically.

Education, had it been handled realistically, would have developed the area economically and raised the standard of living. Because educators aimed only at religious instruction, many of the masses, wanting a better material life, kept their children away from school. This greatly pleased the land owners. Had education produced some people capable of improving their social and economic conditions, it would have gained more grassroot support. Unfortunately, discussions on education usually omitted references to social realities - poverty, unemployment, malnutrition, infant mortality, inter-racial misunderstanding, or emigration.

Education for the white planter class at this time was clearly different from that provided for Blacks. Many of them considered England home and sent their children there, or to private schools in the area to be educated. Barbados alone had a superior grammar school before 1833, from the funds left by Codrington's will. The college provided West Indian youth with an adequate education to prepare them for the Christian ministry in their native islands. The school provided general education such as is usually cultivated in grammar schools in England. The course of study included Theology, Classical Learning - Greek and Latin, Logic and Mathematics, and lectures from a Professor of Medicine in Anatomy, Chemistry,
and Physiology. During this period many injustices were done to the Blacks. In most instances he was either mis-educated or received no education. One outstanding example of a mis-educated person was Francis Williams. The Duke of Montague, curious as to whether Blacks could attain the same educational standards as Whites sent Williams to an English Grammar school and later to Cambridge University. The experiment having been completed, Williams returned to the West Indies a graduate of Cambridge, but an educated misfit. Contemptuous of other Blacks, he entertained the highest opinion of his own knowledge. He treated his parents with disdain and behaved towards his own children and slaves with a severity bordering on cruelty.

The Negro Education Grant 1835-45 was a part of the Act of Emancipation which included money to promote Negro education in ex-slave colonies - £30,000 for five years and then decreasing until 1845. At this time the colonial office urged compulsory education. The grant was given to religious bodies and governors to administer. The goals of the schools were to provide constant and systematic tuition in reading, writing, and arithmetic and to the catechetical and other instructions in the principles of religion. Buildings were to be provided and used as infant schools, and noon and night schools

5 Ibid., p. 18.
6 Ibid., p. 19.
for adults. They were also to be used as Sunday Schools on the Sabbath.  

By 1841, some members of the British government felt that the education of Blacks in the colonies had reached a level beyond that of laborers in Britain. The grant to support education was therefore cut off. These people claimed that Blacks were better able to pay for their education than some English laborers. This act brought much debate to local legislatures; should public money be utilized for education? Finally, some money was reserved for education. At this time, the curriculum was re-evaluated. Attempts were made to relate education to the livelihood of students which was agriculture. Reform however was met with great resistance and failure. Schooling was confined to the 4R's - reading, writing, arithmetic, and religion. An evaluation of the program showed that it was conducted with varying degrees of efficiency and poor success since it did not create a literate population. In 1846, the West Indies faced another crisis which directly influenced attempts at education. West Indian sugar started facing difficulty in the British market. The local legislature (the white planter class) immediately started questioning the appropriateness of spending money to educate labourers in the bad years. In Jamaica, no money was allocated to education while in the other colonies there were severe cutbacks. Despite the lack of financial support from Britain for education in the West Indies, the

7 Ibid., pp. 24-25.
following dispatch was sent to the colonial areas in 1847.

Curriculum in Primary Schools

(a) Religious Education

To inculcate the principles and promote the influence of Christianity.

(b) The English Language

To diffuse a grammatical knowledge of the English Language as the most important agent of civilization for the colored population of the colonies.

(c) Requirements of small farmers

To communicate such knowledge of writing and arithmetic, and of their application to his wants and duties, as may enable a peasant to economize his means, and give the small farmer the power to enter into calculations.

An improved agriculture is required in certain of the colonies to replace the system of exhausting virgin soils ...

(d) Relationship with authority

The lesson books of the colonial schools should teach the mutual interest of the mother-country and her dependencies; the rational basis of their connections; and the domestic and social duties of the colored races. 8

By the 1880's, it was obvious that the Caribbean area would not be wealthy. Competition from beet sugar and foreign cane sugar was great. Unemployment and a steadily growing population became a menace to the economy. Despite the inadequacies in the schools, the demand for education continued to increase. The local government attempted to help the situation and paid specific attention to two areas.

8 Ibid., p. 58.
The first area was the shortage of teachers, and the lack of teacher training facilities was considered a major hurdle. Thus a plan was introduced whereby primary school graduates would become teachers. These primary school graduates theoretically were to practice teaching under supervision, but in fact were given the work and responsibility of a regular teacher. This came to be called the pupil teacher system. In time, in some territories, there were more pupil teachers than regular teachers. The second area to which attention was given was the curriculum. It was considered to be too bookish and unrelated to the community needs. This led to the British government re-introducing funds for the opening of the Imperial College of Tropical Agriculture. This school, and a few training schools for teachers, (normal schools), provided courses designed to improve the quality of education, especially in agriculture. Contrary to expectations, good teaching in practical agriculture seldom occurred. Attacks on the education system continued.

In 1892, critics were saying that the education was still not preparing the people for life, but instead making them discontented members of society. One-third of the education budget went to support secondary education for five to six hundred students while the remainder supported upwards of twenty three thousand primary level pupils. The education

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9 Williams, Eric E. Education in the British West Indies, (Port-of-Spain, Trinidad: Guardian Commercial Printery, 1945), pp. 36-37.


11 Ibid., p. 126.
did not deal with community problems or with West Indian culture or life. In fact, the vital link between education and the community was non-existent. The primary school curriculum now included Geography, History, Grammar, Literature, Arithmetic, Singing and so forth. This type of curriculum was further expanded at the secondary level. The curriculum totally neglected studies that would teach the rising generation about the dignity of manual labor or studies that would equip them to perform available jobs at all levels of the society. Instead, the education impregnated the children of the laboring class with the idea that they were better than their parents and made them look upon manual labor with disdain. Field labor, in particular, was regarded with disgust. Rather than work in the fields, the young people gravitated to the towns where they were faced with mass unemployment.¹²

The Twentieth Century

The onset of the twentieth century saw more variety in the West Indian society. The arrival of people of other ethnic groups during the post-emancipation period was a major contributing factor. The majority of the people continued to be the unmixed descendants of Africans, while miscegenation between Blacks and Whites gave rise to a substantial mulatto element. At that time there was also the many newcomers - East Indians, Chinese and other Europeans. With the new status - emancipation - of the Africans and the increasing population, the need for more resources to expand education facilities increased.

The twentieth century began with a multiplicity of problems.

The criticism of the nineteenth century still continued. Patterns of education were copied from the metropolitan countries for use in the territories. These patterns were mainly those designed for urban communities despite the fact that those of the area were for the most part rural. This fact however received no attention. The curriculum continued to be dominated by linguistics and mathematics.

The increased population and increased demand for education put additional strain on the economy. Unfortunately, the education continued not to improve the productivity of the majority of people. During this period attempts were made to once again encourage agricultural education. The type of agricultural education being provided even though needed, did not help students improve their way of life. Among the reasons why agricultural education failed were:

(1) teachers were not sufficiently knowledgeable to teach the subject in a way that would have had positive results in the field. (2) Neither teachers nor society valued this type of education. Thus an academic education continued to be more attractive to students.  

The number of schools built and the number of people who desired education constantly increased. The problem of increasing demands and strains on the economy was further aggravated when Captain Andrew Arthur Ciparini's goal (Mayor of Port of Spain, 1929-1940) was accomplished - abolishment of child labor. The schools of this

\[13\] Ibid., pp. 91-92.
period were severely criticised. It is significant to note however, that the criticisms of that period are still valid today.\textsuperscript{14}

**The Last Twenty-five Years**

Much has been said by educators, politicians, professionals, and others about education during the last quarter century. Innovations have been written into well worded plans, but the criticisms of the nineteenth century continue to be valid. Secondary school education continues to receive priority over primary school education. Secondary school graduates continue to aspire to white collar jobs, while rural youth migrate to the towns. The recent movie "Harder They Come" accurately portrayed the plight of a rural young man and the human wastage that occurs in the West Indies. Its portrayal - entertaining as it may have been - was a sociological study of Jamaican society, that is also reflective of other territories. Francisco Slinger also known as Sparrow, the famous calypsonian from Trinidad, expressed his view of the school situation in the song "Dan is the Man in the Van". He points out very accurately the absence of a connection between education and environment. "The cow jumped over the moon. Dan is the man in the van." Of what value are these meaningless words to the child whose years in school are limited? Can he not learn something more beneficial, as he learns to read? Other West Indian writers have commented about the system in their various works at

different points in recent history. Among these are V.S. Naipaul and George Lamming.  

In 1915 the head master of Queen's Royal College - secondary school - wrote:

The defects of the present system are that every boy from his first entry into college is treated as a possible scholarship winner. The present curriculum is drawn up mainly to meet the needs of a small number of clever boys and not the great majority of the pupils, and every boy whatever his individual taste may be, is taught on almost exactly the same terms.  

Even though the afore-mentioned was written in 1915 the writer will demonstrate that this has not changed. Primary school curricula today are geared to prepare pupils to pass the Eleven-Plus Examination. Schools are evaluated according to the number of passes they get in this examination. The secondary school curriculum is geared for the small number who will pass the General Certificate of Education Examination at the ordinary and advanced levels. No attention is paid to those who will fail to complete this segment of their education. The large majority therefore leaves school unable to live as effective contributors to the society. The following are some comments made in 1973 by citizens of the area.


-- William Demas, Secretary General,
Caribbean Community Secretariat:

My basic premise is that the educational systems of the Caribbean which, admittedly is deficient in most respects of quantity in some, if not most countries of the Region is much more deficient in terms of quality, i.e., content, orientation and appropriateness. 17

-- The Principal, Independence College, Roxborough, Tobago:

Against the background of the clamor of vociferous secondary school children for curriculum geared to the need of West Indian society, it is appalling ... to note yearly failure of much more than 50 per cent of the Common Entrance scholarship winners in Trinidad and Tobago to obtain a minimum of five subjects including English Language in the General Certificate of Education examination Ordinary Level.

-- An article entitled "Get Rid of the GCE Exam"

by Elma Reyes,

... The teenager who wants to have a career in broadcasting said: "I know that I would be better off getting some practical training in this type of work while at school. In fact, as a developing country we can only absorb a given number of B.A. and Ph.D. holders. I think we should be trained in practical skills for which we have an aptitude.

... Teenage library assistant ... Look at the people who are considered a success in Trinidad and Tobago, Ram Kirpalani, Edwin Lee Lum, the older members of the Sabga family, the Mighty Sparrow. The only intellectual whose name would be mentioned alongside theirs is the Prime Minister, Dr. Williams. 18

The preceding quotations put into perspective the education system


of the West Indies. The governments of all the territories are struggling to improve the situation. They recognize teacher training and curriculum development as major handicaps. How can this problem be overcome or minimized? A prerequisite to overcoming this hurdle is to make teachers recognize the need for change. This will only occur when teachers and teacher educators are introduced to more professional training so that they will evaluate the content of their knowledge and in an intelligent manner apply the content of their knowledge to the changing West Indian setting.

The goal of education as stated by most governments is to provide the best education for all children. It is important however, that in attempting to accomplish this goal, equal educational opportunities be not equated with identical educational opportunities.

Dr. L.E.F. Lewis, former superintendent medical officer of the St. Anns Hospital, Trinidad, expressed the need for attention to be paid to various forms of special education. He stated that there was an urgent need for psychologists and vocational guidance counsellors for children.

Thousands of mentally retarded children are admitted into normal schools each year because of lack of proper facilities, and of adequately trained staff to deal with such children. ... What we need is to get the public more involved with the problems of children both normal and retarded in our society. ... The problem of mental retardation needs to be tackled more vigorously. In the country today there is a large percentage of children who are in various stages of mental retardation.

These children, Dr. Lewis said, are sent to ordinary schools by parents who are either not aware or are unable to do better. Thus
these children are taught by teachers who are not trained to meet their specific needs and must at the same time teach thirty or forty other children with other needs. According to Dr. Lewis, the situation calls for an immediate survey to ascertain the need and to see what places are needed for both the retarded and borderline cases.19

Dr. Lewis' description of the situation in Trinidad and Tobago was correct. However, the writer would choose to call the children to whom he refers not mentally retarded but educationally handicapped. The reason for this is that many members of the society translate the term "mentally retarded" in an extremely negative manner. To many, such a child is one who should be in a special institution and whose chances of accomplishing success in any situation are virtually impossible. The new term, if properly explained, can probably produce higher expectations, and therefore better results.

The writer agrees with Dr. Lewis' recommendation that special schools or classes be started for children with special needs. Although this may appear to contradict some of the research in the area of special education, the writer will explain her position. The present training given to teachers at the teachers' training colleges does not equip trained teachers to adequately work with educationally handicapped children. The picture gets even worse when one looks at the number of untrained teachers in schools. The existing one-year and two-year teacher training programs in the region which attempt to prepare teachers - content and methods - for teaching normal children

are already inadequate. Therefore to expand the course of study without additional time would only further dilute the overall program. Present economic conditions and other limitations obstruct expansion at the present time. Recognizing the limitations of the present program, two things must be done in the interim period. Teachers capable of teaching children with special needs should be assigned to such classes, and an inservice program must be implemented to provide teachers with the necessary skills. This inservice training can minimize the limitations and should become a requirement for all teachers so that children with special needs may be appropriately helped in regular classrooms.

The small economic budget and the vast needs of the people place severe restrictions on area development. However, if a mechanism is developed to increase the knowledge and skills of the people, wealth in the area would in all probability increase. If social, political, and economic development is our goal, we must incorporate them when answering the question, "What is the purpose of education?"

West Indian societies for more than a century utilized a system of education alien to the area. Hence it is imperative now that any direction the system takes, give priority to the needs of the area. Program-planning must be evaluated to determine the appropriateness for the area. Imported models must be adapted by every territory to meet its own special circumstance. The criticism made by Carter G. Woodson, in 1933 on the education of Blacks in the United States can be applied
to education of West Indians today. Arguments concerning the kind of education provided should not be the major concerns, but of greater importance should be the methods used, the curriculum and available resources. School graduates at every level of the system must be equipped to perform efficiently at whatever level they graduate. Every student must fulfill his/her potential. Julius Nyerere in describing the situation in his country wrote:

Although only about 13 per cent of our primary school children will get a place in a secondary school, the basis of our primary school education is the preparation of pupils for secondary school. Thus 87 per cent of the children who finish school ... do so with a sense of failure, ... Indeed, we all speak in these terms, by referring to them as those who failed to enter secondary schools, instead of simply as those who have finished the primary education. 20

The figures may be changed, but the reality is the same in the West Indies. This attitude must therefore be analyzed and the education system adapted so that all of the people will be equipped to contribute to society.

Where do the education systems of the West Indies go from here? The goals of the territories, though in some instances worded differently, can be summed up in common.

1. Free education for all citizens at all levels.

2. Training for all teachers - methods in organization, curriculum development, and techniques for teaching while recognizing individual differences and special needs.

3. Emphasis of the West Indian environment at all levels.
4. Revision of all syllabi.
5. More in-depth knowledge of subject areas.
6. Development of examinations that could be utilized to identify innate abilities and select students for various types of schools and vocations.
7. Development of a completely integrated system of education - academic and practical.  

The preceding paragraphs have provided a look at education trends in the Caribbean from a historical perspective. It is the writer's belief that this background is necessary so that the current events in the area can be viewed in totality. Education emerged in the West Indies with much controversy. At no time were the interest and practical needs of the masses considered. Despite the fact that education failed to improve the life-style of most people, they continued to desire learning. Education was viewed then, and still is, as the key to improvement and progress. The system which at its conception was based on the British model still reflects that of Britain, in spite of innovations even today. One can only conclude that since the model was utilized to educate the politicians, administrators, and educators the people continue to have faith in it and therefore use it. Talks on the need for change continue, as aspects of history repeat themselves and the schools of the area fail to prepare youth for available jobs while they aspire to become white collar workers. The system of education in the West Indies cannot

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be totally condemned, since under severe odds, it has been able to prepare a small number of students to complete higher education successfully and to enter the professions. Since those in decision-making positions continue to look at Western metropolitan countries for innovations, they should look and note that Britain who educated her talented tenth was surpassed by one of her former colonies who educated its masses - the United States of America. They should also note the existence of non-Western models that ought to be examined. The model used by China has contributed to that nation gaining world respect. In the area, much can be gained from Cuba, who in spite of limited economic resources, and isolation from the West, is acknowledged today by educators around the world as a result of the tremendous progress made in recent years. Education is, as it has always been to the people, one of the keys that will free them from the grips of poverty. Politicians and planners must therefore examine models from the East and West, and intelligently utilize the good ideas to create appropriate models that will aid in meeting the practical needs of the people and developing the region.
CHAPTER III
Education in Trinidad and Tobago

In the previous chapter the history of education in the West Indies was presented. This chapter will therefore look specifically at Trinidad and Tobago's system of education, since it was in this country that the field test was conducted. The chapter provides a more indepth analysis of these two sister islands, paying particular attention to its present situation.

Trinidad and Tobago, the most southerly of the Caribbean islands gained independence from Britain on August 31, 1962. The population growth of the nation during the twentieth century has been considerable. Between 1901 and 1960 the population trebled. In 1967 the million mark was reached, but since then, the growth rate has slowed down. The decrease in growth rate thus far has been the result of a consistent drop in the birth-rate and negative migration. The population in 1980 is not expected to exceed 1,200,000.1

The nation's birth-rate has been higher than that of many more developed countries. As a result of the high birth-rate, children under 15 years of age comprise a larger portion of the population. (See the table on page 39)

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The population is very dense in the two main urban centers - Port of Spain (the nation's capital) and San Fernando (the only major town in the southern part of Trinidad). Other areas of relatively high density can be found in the main oil and sugar areas. The western part of Trinidad is more populated than the eastern part. For example, in Blanchisseuse or Matura, there are less than fifty people per square mile, while in Port of Spain and San Fernando there are more than ten thousand people per square mile. The population of Tobago is more evenly distributed than that of Trinidad.\(^3\)

The economy of the nation has undergone major changes since independence. The economy at one time was based mainly on oil, petroleum, asphalt, and agriculture. Today, however, while sugar, oil and its by-products continue to be major contributors, manufacturing, distribution, and transportation, have more than doubled in the last decade. Sugar and oil continue to be major commodities for export and sources of foreign capital. In recent years with the formation of CARIFTA and more recently CARICOM, trade within the region has increased.

In 1968, the government received $340,302,200 in revenue and its expenditure in that same year amounted to $309,853,600 of which $75,576,300 was spent on development programs. Also in that year, education and culture received 15.1% of the national budget - $46,639,400, the largest portion of the economic pie. Health and

\(^3\)Ibid., p. 15.
Population Projections Trinidad and Tobago: 1960, 1970 and 1980
Age Pyramids - Trinidad and Tobago (1960) and United Kingdom (1961)

The birth rate in Trinidad and Tobago is higher than in more developed countries, as a result children under 15 years comprise a large proportion of the population.
Housing received the second largest amount, 9.8%, while local government and social welfare followed with 9.4%.\(^4\)

As stated before, young people in Trinidad and Tobago comprise the larger portion of the population. The disproportionate percentage of young people has placed a strain on the national economy and is the reason for the great demand for more schools. Education is a commodity that all desire, but on the secondary school level only a few places are available. (See page 41).\(^5\) Today, more young people than before are having the opportunity to stay in school; however, not enough are having this opportunity. The result is that the largest percentage of unemployed in the nation is its youth. This fact could be expanded if the unemployed and underemployed are analyzed as a group together. The table on page 42 shows that the highest percentage of the labor force is in the middle years, and the largest percentage of unemployed is among the nation's youth.\(^6\)

The changing structure of the economy and the birth of new industries require a more diversified labor force. This means that the school curriculum ought to be re-evaluated, so that the youth, upon graduation, will be equipped to contribute to the national development. Unfortunately, the changes are occurring at far too slow a rate. Thus, high school graduates continue to write British overseas examinations. Since, on completion, these students have always only

\(^4\)Ibid., pp. 26-27.

\(^5\)Ibid., p. 46.

\(^6\)Ibid., p. 33.
Trinidad and Tobago confronted with a high birth rate and increasing demands for education, invest the largest portion of its economic budget into education.
The largest percentage of unemployed in the society is among the nation's youth. Serious social consequences are likely to be felt if graduates of the post-primary and junior secondary schools are forced to join this group at fifteen years.
An Outline of the Public Education System in Trinidad and Tobago
been equipped to function as clerks, the curriculum is grossly out of place. In spite of this realization, it continues to be in use. Although more children are attending secondary school, they are not being trained to meet the growing demands of the present and emerging labor needs. This matter will be expanded in greater detail at another stage.

If one were to examine the structure of the school system in Trinidad and Tobago, one would notice that for the most part the system resembles that of Britain. One would also notice that all of the so-called recent innovations have been copied from large metropolitan countries. The most recent innovation in the system has been the introduction of the "junior secondary school". A pilot nursery school program is also being tried by the government. The preceding diagram illustrates the structure of the education system. It points out that government is becoming involved in educating children from an earlier age than ever before. It is uncertain if this will continue after the pilot project, since the funds now being utilized were made available by an overseas grant. "The Draft Plan for Education and Development of Trinidad and Tobago 1968-1983" has as one of its goals to provide primary education for 90% of all the nation's children between five and eleven years. The remainder of the children, it calculates, will attend private schools on grounds of mental and physical abnormalities. When one looks at this projection and compares it with the statement of Dr. L.F.E. Lewis - former superintendent medical officer of St. Anns, one wonders if the
educational planners are aware of the number of children with special needs. Dr. Lewis in an interview said:

Thousands of mentally retarded children are admitted into normal schools each year because of lack of special school places and a lack of adequately trained staff to deal with such children. ... In the country, today, there is a large percentage of children who are in various stages of mental retardation.7

Because the writer was told repeatedly by top level personnel in the Ministry of Education, and by persons involved in planning and curriculum development at the university, that less than one per cent of the nation's children in regular schools had learning problems, and learned to the contrary from contact with classes and teachers, the writer wonders if the planners took this important fact into consideration. At present, the law requires children from six to twelve years to attend school. Free schooling is available from five to fifteen years. The goal of the plan is to provide compulsory education from six to fifteen years. Should this compulsory education be identical for all children, or should individual needs be considered? The present system makes no provisions for children who are educationally handicapped as defined within this document. These children sit in classes of thirty, forty, or more children. The teachers may or may not have received any professional training, and treat them exactly as all their other classmates. As the facilitators (those who facilitate the learning experiences) observed classes, rarely did they observe

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individualized instruction, which diminishes to a greater level outside the infant school. Test results from the previous academic year are used as a criterion to place children in classes. Children with the highest marks go to the "A class", the next group to the "B class" and, in some instances, the remainder to the "C class".

A look at a C class reveals that although these children all scored among the lowest level in a specific class, they do not all have the same strengths and weaknesses. What happens to the child whose mathematics ability is beyond that of a C class? Should that child not work in mathematics at his own level? These questions seemed to have gone unasked. The class for the most part is taught as a group and the most an observer will notice is that there may be a bright section, still doing the same work. These children - the so-called bright ones - may sit together and soon begin to look down on their other classmates. The following example was seen in a class by the writer. In one class a child was described by the teacher as mentally retarded. This teacher had very low expectations for the child. The child, a ten-year-old, was in a first standard class. Her abilities, however, reflected those of a child in the infant department. When the writer first observed the child she was working on an exercise that was beyond her reach. Her unintelligent scribble showed that her fine motor co-ordination had not been developed. After observing her on a few occasions the writer was convinced that the child was only physically present in the class. She needed help that was not being provided. Unfortunately, the future of this child is very limited. She will in all probability be passed on from one class to the next
until she reaches fifteen years of age and leaves school, unless she is fortunate enough to get some extra help. Is the education meeting this child's needs? Will it, as it is presently provided, prepare this child to contribute to the society?

The Draft Plan in commenting on curriculum plans considers all changes in the light of major developments. The following outlines some of its major ideas:

1. Changing assumptions and ideas in education as a result of international research on methods, and content of syllabi.

2. Basic requirements to meet the needs of the nation.

3. Overall national plans which involve education at all levels, especially secondary education.

Some specifics mentioned to get top priority are:

a. New mathematics and the importance of early scientific orientation.

b. Exposure to agriculture.

c. Meaningful social studies, centered around the local scene.

d. Introduction of a foreign language. (This is being considered to facilitate better communication in the region and with other members of the Organization of American States - OAS).

e. Increased active learning, individualized instruction, observation, experimentation and use of libraries.
f. Proper physical education program.
g. Importance of cultural arts.
h. New language development program, utilizing the local cultural scene as a base.
i. Introduction of the metric and decimal systems.\(^8\)

Although six years have passed since the launching of this plan, very little was apparent to the facilitators. Any implementation at present must be on a very small scale in primary schools. The major drawback of the implementation of such a plan is the shortage of trained teachers. An example of this is that most teachers in the schools have not been trained in new mathematics nor do they have a scientific background. Even though the goals of the plan are most desirable, a pre-implementation program should have been initiated to prepare teachers. Other major set-backs to this program are the present state of over-crowding in the schools and the lack of teaching aids and suitable teaching materials. The problem of teaching aids and suitable teaching materials could be minimized if teachers utilized their creative potential and committed themselves to assist with material development. The nation has a rich culture, and culturally relevant materials could be developed at minimum cost if some initiative were used. Unfortunately, too many teachers view teaching as an 8:30 AM. to 3:00 P.M. job, and have no desire to put in

anything extra. In part, the community must accept some responsibility for this attitude of teachers, who feel not respected and not adequately compensated for performing their duties. This unfortunate situation, in the writer's opinion, is not a sign of progress, but a step backwards. The society, therefore, needs to ask itself why members of a once very dedicated profession are today very apathetic. The ideas stated in "e" above can be of immense help to the educationally handicapped child. However, that these two ideas - active learning and individualized instruction - will be implemented in the near future seems most unlikely. Implementation of such a program is urgently needed, so that children will have a better chance of developing to their fullest potential.

The latest innovation in education - the Junior Secondary School - has brought a great deal of controversy to the society. At the time the idea was first introduced, parents and the public were reluctant in accepting it because it was untried. In the Draft Plan, the first paragraph on Junior Secondary School stated that the schools would provide a three year course for the age group from twelve to fifteen years, after which a national examination would be given to determine whether and where students would continue full-time public education. This led parents to believe that the Junior Secondary Schools were an interim step, before their children attended another school to complete their education. Little did they realize that for the vast majority this was going to be the end for their children.

Today, the government secondary schools and church
assisted schools provide education for over 5,000 children selected on the basis of the Common Entrance Examination. The remainder, about 20,000, stay on for post-primary education if their parents are unable to afford an expensive private secondary education. The plan states that the Common Entrance Examination will be re-named and postponed to fourteen plus. Thus the Junior Secondary School that started two years ago, is due to provide some children from twelve to fifteen years with a broad-based education, and in the future is to be extended to all children. At present there are about sixteen of these schools. The goals of the new schools are to afford children a broad base education over three years; provide an opportunity for developing natural talents and aptitude; and at the end of the three years select them for the area of education best suited to each child's talents. In other words, there will be no streaming in the schools, but at the end some children will go to the senior secondary schools, some to vocational schools, others to technical establishments, and still others to farm schools. The curriculum of these schools includes industrial arts, arts and crafts, agriculture, etc. Unfortunately, sixty per cent of the children who have entered these schools and their parents have been sold short. The first class will graduate from school this academic year; however, no provisions have been made thus far for 4,200 children. (Higher figures have been put out by non-government sources.)

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Prior to the above information being made public, the facilitators realized that no plan had been developed to determine the type of schools to which children were best suited. Unable to get answers as to how the evaluation process was to eventuate, they discussed the matter with several people in the field of education at various levels. They also mentioned that for the plan to be successful several ingredients were necessary:

1. Parents, children, and the public would have to be educated to realize that the best form of education for children was not necessarily the classical secondary type.

2. School guidance counselors would be needed in schools.

3. Incentives would have to be provided by the society to attract youth away from white collar jobs, and the entire public would have to be educated around the concept of "Dignity of Labor".

4. Some criteria would have to be developed to select students for different types of schools. To re-name and postpone the Common Entrance Examination, would not solve the problem. To say that the child who scores the highest marks on a paper and pencil test goes to the senior secondary school and the one with lower marks goes to technical or farm school is to perpetuate the old system. Is technical education better than, and more suited to students with higher marks than farm education?
Less answers became available as more publicity was given to the subject. From informal conversations with members of the public in and out of the educational system, there was a great deal of dissatisfaction with the system. Unfortunately, the end result of this educational catastrophe will result in more dissatisfied youth and more unemployed young people. As many are aware, the nation is faced with a rising tide of mental illness, drug abuse and unemployment. The social effects of such a situation are very negative. In 1970, the nation faced uprisings by sectors of the community demonstrating against the government for failing to meet the needs of the people. Among their complaints was the fact that the government had failed to provide meaningful and useful education, to provide jobs and the overall hope for a better future. Certainly, the termination of formal education for over four thousand students from Junior Secondary Schools, and a larger number from post primary classes at fourteen with no skills demonstrates that some of the reasons for the uprisings were justified. What will happen to these young people remains to be seen, but if these students do complete school at fourteen, the social and psychological problems of unemployment and dissatisfaction will be multiplied.

No senior secondary school thus far has been built, and in the interim years the regular secondary schools have been receiving their full quotas. These schools continue to prepare children for the General Certificate of Education examination, and do not believe that children transferred from the junior schools will be able to
successfully do the examination after two years in their new schools. Although there may have been some changes in the curriculum of these schools, for example, the opportunity to study West Indian History, the curriculum is still controlled by external authorities - the British examiners. Historically, this process has provided the society with clerks and today those who succeed in passing, for the most part continue to fill the few positions in the public and private sectors of the labor market. Since jobs are at a premium, getting a job becomes a part of the competitive process. Thus, some with certificates, and many without, also join the ranks of the unemployed. These people are educated to perform no particular task, with no skills and few opportunities for technical, vocational, or an alternative type of education.

The fifteen-year draft plan encompasses not only the education of children, but also the education of teachers. At present there are five teacher-training colleges - Mausica Training College - the only pre-service college, Government Training College, Port of Spain Teachers College, San Fernando Teachers Training College, and the Roman Catholic Women's Training College. The plan suggests that three colleges replace the present five. Thus Mausica would be college one, San Fernando - college two and Chaguaramas - college three. College one and two are now completed, but college three has not been started.

The curriculum for primary school pre-service and in-service teachers is identical. The overall curriculum can be sub-divided into four sections: Group A, professional studies; Group B, school curriculum
studies; Group C, elective studies; and Group D, additional studies.

The content areas of these groups are as follows:

Group A - Professional Studies

Psychology, Philosophy, and Principles of Education
Organization and Practices of Education (Methods)
Sociology of Education with specific reference to Trinidad and Tobago

The objectives of this segment are:

a. To develop an appreciation for teaching and a familiarity with the thoughts of distinguished educators.
b. To provide knowledge of theories and practices of education.
c. To provide insight into child development and the process of learning.
d. To provide a liberal background to aid in understanding the social situation.
e. To develop professional skills.
f. To provide opportunities for self-development and confidence

Group B - School Curricular Studies

This section includes:

English Language Mathematics
Literature Arts and Crafts
General Studies Social Studies
Physical Education Health Education
Nutrition Education
The objectives of this segment are:

a. To increase knowledge and/or fill gaps in five school subjects.

b. To develop skills necessary for teaching and learning.

Group C - Elective Studies

Teachers are required to choose a subject and study it in depth to the level of the General Certificate of Education - ordinary level.

The possible subjects are:

- Arts and Crafts
- Music
- Woodwork
- Technical Education
- French
- Literature
- Sociology
- Agriculture
- Biology
- Geography
- Mathematics
- Metal Work
- Needle Work
- Physical Education
- Education
- History
- Psychology
- Spanish
- Science
- Chemistry
- Home Economics
- Physics

Group D - Additional Studies

This section provides opportunities to study additional subjects of their choice. ¹⁰

Strange as it may seem, both pre-service and in-service

¹⁰Draft Plan for Educational Development Trinidad and Tobago 1968-1983, Government of Trinidad and Tobago, pp. 57-62.
colleges utilize the same curriculum. When one considers the background of these two types of student teachers, one can realize that to give both sets of student teachers the same curriculum is to fail to recognize the obvious differences. Pre-service student teachers are in the main recent high school graduates. They have recently completed secondary school and have no teaching experience. In-service student teachers, on the other hand, have as many as five to ten years of teaching experience. This means that these student teachers have been out of school an equivalent number of years. One can therefore conclude that many of the things that these teachers learned in high school have been forgotten as a result of lack of use. This results in pre-service student teachers having a stronger academic background, and in-service student teachers having a stronger background in knowledge of children and schools.

Staff members from two of the colleges who shared their views with facilitators felt that giving the same curriculum to both sets of students was not the best method of approach. Most staff members with whom communication was established felt that pre-service student teachers needed more contact with schools and children; while in-service student teachers needed more subject matter content. Unfortunately, according to these staff members, every year trainers from all the colleges met and evaluated the programs, but the evaluation was given no attention after the meeting. This acceptance of the situation in spite of individual and group dissatisfaction seems to be a reflection of the general pattern. As a result, young bright
minds, capable of thinking, analysing and creating, now seem to exist in a dormant state. For the new draft plan to achieve its goals, there must be some follow-up to the annual conference of teacher educators. Teacher educators must be able to participate in the process whereby teachers are trained in a meaningful manner. Until all educators, teachers, teacher educators, principals, supervisors, and others are able to provide meaningful input into education, then no plan will achieve maximum effectiveness. Success of a plan depends on the acceptance, understanding, and actions of the people.

Having presented an overall picture of the state of education at levels relevant to this document, the writer intends to demonstrate how some built-in flexibility could be put into the system to aid the present conditions. The ministry of education has many talented and creative people. Many older teachers and supervisors, given assistance to do less demanding parts of their jobs, could be utilized to implement in-service and in-school programs to improve the performance of teachers. Young and old people, with skills that could be used to enhance teaching and learning, should be utilized for this purpose. Another type of talent not being used effectively is that of the creative people who can write and paint. Thus, most supplementary reading materials in schools are imported. The high cost of importing books makes them remarkably absent in many schools. Books are very expensive in the nation, and this is one of the reasons why a large portion of the society does not read to a greater extent. One can visit many homes and see only very few books or magazines that are used by people for
pleasure. However, if some more of the country's talent were harnessed, more materials could be made available in classes. A stencilled book of a dozen pages is far superior to no books for a child whose home has no books and whose class only has text books. In one instance, the writer was sitting with a thirteen year old boy who came into contact with a book called Famous West Indians. Of the fourteen people listed in the book, the boy had only heard of one. He was pleasantly surprised to know that there were many West Indians who had done many outstanding things and many who had been written about and had written books.

Many children need to be exposed to a pre-school learning environment. To achieve this, attempts must be made to educate parents. This can be done by making use of television (with its large viewing public) pre-natal clinics and any other organizations. If parents can have some knowledge of how children learn and what affects learning, some of the schools' present problems can be minimized.

All teachers need to be exposed to some training to meet the needs of the special child in the regular class. The situation in Trinidad and Tobago as it now stands, provides special schools for the blind, deaf and dumb, mentally retarded, and physically handicapped. But many children with serious vision problems are not blind, and need help. The same is true of other handicapped children. It is unfair that children who are educationally handicapped should not have their needs met. More knowledgeable teachers will be better able to perform the task of assisting children to develop to their fullest potential.
The following are some examples of cripplers which may affect children without teachers being aware of the true effects.

1. Retaining a child for two or three years, so that the child is chronologically out of place and looks physically more advanced in development to the casual observer. The child quickly becomes the overgrown dummy, the big bully, or that big one - quiet and withdrawn.

2. Keeping a thirteen year old in a fourth standard class in which the goals are meaningless for him. His chances of passing common entrance examination are non-existent.

3. Labelling a child in-front of adults or his peers so that his self-image is gradually destroyed.

4. Teaching children information that will be of little or no assistance to them a year or two later when their education will be untimely terminated.

5. Failing to recognize children's feelings and needs. It appears that some teachers fail to realize that children like themselves need to be respected and treated as people.

In this chapter the writer has described conditions as they exist in Trinidad and Tobago today. The writer has described the settings in which many educationally handicapped children sit every day. Facts surrounding the type of training that teachers receive,
and the goals of the nation as stated in the latest education plan have been presented. It is the writer's feeling that having done so, readers will realize the need to train teachers to meet the needs of the educationally handicapped child. No nation can afford not to develop its youth, for the youth of a nation are its most valuable resources.
CHAPTER IV
The Curriculum Model

In the previous chapters the writer presented some background information on the education systems in the West Indies in general and Trinidad and Tobago in particular. Why did an education system first evolve in the islands? What did those who were first involved in the decision-making process see as the purpose of education? What do governments see as the purpose of education today? Not much has changed over the years with regard to the specific purpose of education. Although the systems have grown tremendously over the years and some systems have developed more than others, more improvements are needed.

In all of the West Indian islands, the field of teacher education still needs to be improved. Much is taking place in the field of education throughout the world. Therefore, teachers need to be introduced to the new ideas, new theories, new teaching techniques, expanded knowledge in content areas, new information in the area of child development, and new ways of meeting the needs of individual children. It is the last two in which the writer is particularly interested and to which this document is addressed. In this chapter, the writer discusses in detail the content of the curriculum developed and field-tested for West Indian teachers. Since the curriculum was for the West Indies, it was only fitting that the field testing be conducted in a territory of the region. Therefore, the major components, the supplementary materials and the procedure utilized will be discussed.
Financial limitations prohibited the testing of the model in more than one territory. For about a year prior to testing, permission of several governments to test the model was sought. Financial assistance was also sought from agencies in and out of the region. It was finally agreed that the model would be tested in St. Georges, Grenada. No financial assistance was provided for the project. At that time the testing was scheduled to begin in March 1974, with the facilitators arriving in Grenada in late February. Because of the political unrest in Grenada, the testing had to be postponed indefinitely. Since the facilitators were at the time in Trinidad, attempts were made to conduct the test there.

While trying to gain permission to start work, the facilitators visited schools and other educational institutions. When permission was granted, testing was scheduled with seven schools within Port of Spain, the nation's capital. After meeting with the principals, explaining the goals of the program and describing the procedure, twenty-seven teachers were assigned to attend the training.

Recognizing the significant number of untrained teachers in the schools, attempts were made to include as many of these teachers in the training program as possible. Thus more than half of the teachers who participated were untrained.

The seven schools which participated in the project were:

1. Tranquility Primary School - the only school without a church affiliation.
2. Sacred Heart Girls Roman Catholic School
3. Western Boys Roman Catholic School
4. Newtown Girls Roman Catholic School
5. Newtown Boys Roman Catholic School
6. All Saints English Catholic School
7. Gaines Normal African Methodist Episcopal School

The children who attended these schools came from various socio-economic groups. With the exception of Tranquillity, all of these schools were built at least twenty years ago and were either one or two stories high with small screens dividing some classes. At Tranquillity, the large room of the old building was sub-divided into smaller rooms; however, in many rooms there were two classes. The teachers who participated in the field test came from classes which resembled in many ways those of most schools. The educational backgrounds of the teachers were representative of those of the majority of teachers in the nation.

Most teachers in Trinidad and Tobago now have at least a secondary school education as did all of our participants. Although this fact is true of Trinidad and Tobago, the same is not true of all the other West Indian territories. In some systems, many primary school teachers are primary school graduates. A higher level of education for all teachers is however the goal of all the territories.

The teachers were divided into two groups which met one day each week - Tuesday or Thursday. One group of teachers, the Tuesday group, for the most part taught infant classes to first standard. The second group, with a few exceptions, the Thursday group, taught second standard to fourth standard. At this point, it is appropriate to explain why standards five through seven were excluded.
The first three weeks of the program came immediately before the Eleven-Plus examination and since this is a crucial event in a child's life, principals refrained from taking teachers from standard five classes. Standards six and seven were excluded because the program focused on the child below twelve. Children do not enter standard six or seven until after their twelfth birthday. These are children who did not succeed in passing the Eleven-Plus Examination and are promoted to standard six. A similar program covering a higher age range is however needed.

The major goal of the program was to expose teachers to basic skills that would make them better prepared to teach educationally handicapped children. To accomplish this goal, it was necessary to evaluate the background of teachers and to determine what specific skills they needed. This required a listing of all the skills that teachers should have to teach the educationally handicapped and the determination of priorities necessary, considering time limitations.

Curriculum Design

In choosing topics for the six week curriculum that was to be field tested, the writer first analyzed the West Indian situation through research and through personal knowledge of the area. The writer then determined what topics were most important. The first decision was to include normal child development and child psychology in order to provide a base for comparison with deviants. The rationale for this decision was that many teachers began teaching upon graduation from post primary or secondary school, and yet there
is no place in the school curriculum where these subjects are taught. Cognizant of time limitations a decision had to be taken as to the types of educationally handicapped children that would be included. Lloyd Dunn, in his book *Exceptional Children in Schools*, writes about eleven types of children who have special needs and therefore need special attention. It became necessary therefore to determine which of the many types of children were most prevalent in the schools and which ones regular teachers could reasonably be expected to help most, with a minimum amount of training. Unable to find any statistics as to how many children fell into each sub-category, the writer drafted a curriculum and solicited responses as to its appropriateness from former West Indian teachers and graduates of the school systems. The outcome of this process led to the writer choosing to work with children who in the language of special education are often categorized as "slow learners", "partially handicapped" in sight and hearing, and "socially and emotionally disturbed".

Having decided upon the types of children for which the curriculum was intended, a specific program of studies had to be developed. In doing so, every idea had to be evaluated for its appropriateness in the West Indian setting. A major limitation is that governments do not have money available in significant amounts to provide teaching assistants or audio visual materials. Thus the teacher and her class always have to be considered as the single individual with thirty to forty children. Finally, the curriculum that was field tested had the following sub-units: Psychology,
Child Development, the Educationally Handicapped (The Slow Learner, the Partially Handicapped, and the Emotionally and Socially Disturbed) Minimum Resource Teaching, Non-Traditional Approaches to Teaching, and Teachers and their Self Concepts. (Appendix I)

Resource Materials

In addition to developing the curriculum the writer developed three papers for teachers. (Appendix III). The writer did take into the field a number of books and articles; however, the basic readings for the course were the three papers written by the author. The three papers were developed so that the program would be able to help alleviate the financial limitation that prohibited buying every teacher the necessary reading materials. The papers were:

"The Cycle of Human Development and Deviations from the Norm"

"Helping the Educationally Handicapped"

"Suggestions for Minimum Resource Teaching"

As a result of this approach, every participant was able to have copies. Furthermore, the papers directly related to the goals and objectives. There was also opportunity to utilize the other reading materials.

The first paper "The Cycle of Human Development and Deviations from the Norm" presented the ages and stages of development. The paper included factual data on what might be expected of a child at every stage between birth and twelve years, and the importance of the first six years of a child's life, emphasizing such things as
sucking, bed wetting, toilet training, self-identification and play. The paper also focused on the child as he enters school and the world that expands beyond his home circle. What is meant by the average child and normal behavior is explained. Since the child is studied until the age of twelve, attention is paid to the onset of puberty, the differences between boys and girls, and the things that reflect the behavior of this age. The purpose of the paper was to present background information on how children develop and point out some of the deviations. (Appendix III).

"Helping the Educationally Handicapped" is the second paper, which described the handicapped child so that the reader would have some knowledge which would aid in identifying such children. Different types of children with special needs were described and focus was centered on three specific types of educationally handicapped children - the slow learner, the partially handicapped and the emotionally and socially disturbed. Successful methods used to help these children in the West Indian setting are then taken into consideration. For example, the paper does not recommend any method that requires the use of expensive machinery not available in the area. (Appendix IIIB).

The final paper, "Suggestions for Minimum Resource Teaching", is a catalogue of ideas that have been adapted from many places for the West Indian setting or created by the writer for the area. All of the ideas included in this catalogue can be made by teachers or their students at little or no cost. Recommending materials that cost much is unrealistic, since the money is not available. (Appendix IIIC).
These three pieces of materials proved satisfactory in the testing situation. The final set of materials developed for the field testing were evaluation materials. These however will be discussed in more detail in the chapter dealing specifically with evaluation.

**Curriculum Content**

At this point, a more detailed discussion of the curriculum content is necessary. The main purpose of the curriculum was to focus on the elementary teacher in the regular class. The major objectives were:

1. To maximize the development of the educationally handicapped in the learning process.
2. To help teachers learn new techniques for teaching the educationally handicapped.
3. To help teachers learn new approaches to developing materials for use in their classes.

The following is a discussion of each of the sub-units.

**Teachers and Their Self Concept**

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<th>Objectives</th>
<th>Content</th>
<th>Procedure</th>
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<tr>
<td>1. To recognize the importance of the role of teachers in the nation building process.</td>
<td>Topics in this sub-unit ranged from &quot;The teachers' role in the nation building process&quot;, &quot;The teacher as a change agent&quot;, &quot;Teachers can teach teachers&quot;, &quot;The teacher and the community&quot;, and &quot;Who am I?&quot;</td>
<td>The procedure utilized in this sub-unit included debates, an exercise in self analysis, and presentations and discussions led by participants.</td>
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<tr>
<td>2. To help teachers realize that teachers can improve themselves as teachers.</td>
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This sub-unit of the program took place at the beginning of each day. Although teachers, at first, were less open to some ideas as the theme progressed, they referred back to this sub-unit. It is the writer's belief that this sub-unit has benefits that reach beyond the classroom or school.

Psychology

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<th>Objectives</th>
<th>Content</th>
<th>Procedure</th>
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<tr>
<td>1. To become familiar with the ages and stages of development.</td>
<td>The following themes were included: ages and stages of development, motivation, the effects of success and failure on learning, the effects of labeling on children and the relationship of the home environment to the school environment.</td>
<td>Lectures followed by question and answer periods on the topics discussed.</td>
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<tr>
<td>2. To become familiar with the importance of Psychology in education.</td>
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<tr>
<td>3. To develop an awareness of various theories of learning.</td>
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Because there are many untrained teachers in the system, this sub-unit is vital. It's importance is emphasized when one considers that many teachers enter the profession without any training or previous exposure to this subject. The backgrounds of both trained and untrained teachers were inadequate according to the opinions of the facilitators.

Child Development

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<th>Objectives</th>
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<th>Procedure</th>
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<tbody>
<tr>
<td>1. To develop an awareness of the ages and stages of child development.</td>
<td>Ages and stages of development - 0-12 years.</td>
<td>Lectures followed by question and answer periods.</td>
</tr>
<tr>
<td>2. To develop an understanding of the relationship between stages of development and the development of skills.</td>
<td>What can be expected of children at each age.</td>
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0-12 years,
Like the sub-unit on Psychology, this sub-unit provided teachers with a much needed background. It provided them with a base for comparison that would be needed for the next sub-unit.

The Educationally Handicapped

Objectives

1. To provide a better understanding of educationally handicapped children.

2. To gain necessary skills for working with educationally handicapped children.

Content

Observing children and making case studies.

Characteristics of educationally handicapped children.

Five types of under-achievers.

Techniques for minimizing the defects of the educationally handicapped child.

Procedure

Lectures on content topics. Utilization of experiential learning process, including use of role plays.

This sub-unit was given a great deal of attention. Emphasis was needed since it was the main focus of the program and because none of the teachers who participated had any previous exposure to this subject.

Minimum Resource Teaching

Objectives

1. To learn ways to develop classroom aids.

2. To understand the value of utilizing aids in the classroom.

Content

Teaching aids in all subject areas.

Procedure

Discussion followed by demonstrations.

The importance of this sub-unit of the curriculum cannot be overestimated. The financial resources of the systems put severe restrictions on the amount of money that is available for teaching aids. In spite
of the fact that while attending training colleges, teachers are taught about making classroom aids, it is apparent that upon graduation few utilize any. To some teachers, making aids is "a waste of time". Textbooks, paper, blackboards, chalk, and pencils appear to be the only aids found in most classrooms. Therefore educating or re-educating teachers to understand the use and value of minimum resource teaching is most desirable.

**Non-traditional Approaches to Teaching**

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<th>Objectives</th>
<th>Content</th>
<th>Procedure</th>
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<tr>
<td>1. To demonstrate various ways of teaching children.</td>
<td>Children can teach children - peers and pairs.</td>
<td>Discussion and demonstrations of topics e.g. utilizing a single theme in several subjects and utilizing games in the classroom.</td>
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<tr>
<td>2. To demonstrate alternative ways of teaching and evaluating children.</td>
<td>Utilizing a single theme in many subjects.</td>
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<tr>
<td>3. To understand the value of traditional and nontraditional approaches to teaching.</td>
<td>Utilizing games in the classroom.</td>
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<tr>
<td></td>
<td>Alternative ways of evaluating children.</td>
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<td></td>
<td>The value of using the community as an educational resource - people and places.</td>
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<td></td>
<td>Utilizing experience charts and stories written by teachers and children for reading.</td>
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<td>Developing an individualized or small group program.</td>
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The non-traditional approaches to teaching presented in this sub-unit were selected because they were deemed appropriate for the West Indian setting. In part, it was done in conjunction with minimum resource teaching.

The Implementation Phase

Having outlined the major sub-units in the curriculum, it is necessary to say that some changes were made in the model at the field site. These changes were deemed necessary because of conditions that existed at the site. Teachers, both trained and untrained, needed more exposure to child development and psychology. The relationship between teachers, parents and the community was such that attention had to be paid to that subject. Increased time had to be spent on helping teachers identify techniques for observing children and making case studies. The physical facilities provided made it difficult to do as much in the area of minimum resources as was desirable. More time should have been built into the curriculum to include specific concerns of teachers.

During the field testing there arose topics about which teachers were concerned and from which the group could have benefitted, but which because of time limitations the facilitators had to handle on an individual basis. For example - two teachers wanted to know how they could use a single theme in all subjects they taught - "Arts and Crafts". The facilitators took interest in this question and after presenting it to one group found that such an approach was not known to any of the members. Another teacher, for the first
time read a book on Piaget supplied by the project and wanted to
discuss it. The group could have benefitted, but time did not permit.
The facilitators therefore discussed Piaget with the individual
teacher. The project supplied a number of books but did not provide
enough time for discussing them satisfactorily.

Having discussed the content of the model, it is only
fitting to deal with the methodology utilized. The first part of
each day was used to focus on the teacher. Topics included an exercise
entitled "Who am I?" The intent was to force teachers to look at
themselves, some of their values and their roles. This exercise
"opened" the group up and enabled members to learn more about each
other than their names and the schools at which they taught. The
exercise called for each person including the facilitators to answer
the question "Who am I?" eight times and to draw a labeled diagram of
his life. The answers and the diagrams were then discussed. At
first a few teachers were somewhat hesitant about exposing themselves,
but as the discussion moved away from answers, they were a great deal
more open in their comments. Among the answers received were:

A teacher
A Negro
A mother
Middle class
A son
An educator
A learner
A builder

A Black woman
Of East Indian descent
A member of society
A Trinidadian
A citizen of Trinidad and Tobago
A change agent
A man
A guide for youth
Diagrams of many teachers showed that not all were able to pass the eleven-plus examination, or exhibition examination - the examination taken for entrance into high school. The diagrams also showed that not all of them had graduated from high school at the highest level - Grade one or with advanced passes. Many in the first part of the exercise who said they were middle-class opened up to acknowledging that they were not always in that category. The majority of participants had come from poor families and had been socially mobile as a result of education. Facts such as these having been brought to the conscious mind were left to be utilized at a later stage.

Among other topics used to have teachers focus upon themselves were: "Teachers can Teach Teachers"; "The Teacher as a Change Agent"; "The Teacher's Role in the Nation Building Process"; "The Teacher and the Community"; and "Teachers Helping Teachers". This sub-unit took several forms from organized debates, individual presentations to group discussions.

The second period of day focused on presenting teachers with facts on specific topics. In the main, the lecture approach was utilized with questions being asked during and after. The topics covered the "ages and stages of development of the child up to twelve years." These were subdivided into three sessions. The remaining three sessions during this period were "Observing Children"; "Writing and Analyzing a Case Study"; and "Providing for Children with Special Needs". It became quite apparent that teachers were
not equipped with sufficient knowledge on these subjects.

The third period of a day was devoted to topics which were the main goal of the project - On the first day attention was paid to: "What is meant by children with special needs?", "Who are such children?", "What is meant by human wastage, handicapped, and educationally handicapped?" These questions presented in a quiz format followed by a discussion, allowed the participants to become involved in defining the terms and drawing their own examples. Attention was then focused on their own classes as they determined if there were any children with special needs. At this point the goal was to identify children at all points in the learning spectrum - gifted to slow.

The corresponding period of the second day focused on the "slow learner". Teachers first presented the characteristics of slow children and the facilitators supplemented the presentations where necessary. Factors that cause children to work at different rates were presented in a lecture format followed by methods of teaching the slow learner. A description of two children was presented to two sub-groups and each group was expected to plan for the child in a class. Group presentations determined the cause of the child's difficulties and explained how the problem could be minimized. A discussion and description of various types of under-achievers - the average under-achiever, the slow under-achiever, the culturally deprived under-achiever - and the term "potential" aided in helping teachers clarify their individual plans.
On the third day the group looked at children who were "partially handicapped". Teachers in groups of three participated in an exercise intended to have them experience the effects of a sight handicap. One teacher played the role of an observer, another the tester and the third was tested. The third person in the group read a passage of some difficulty and the tester made notes of the errors while the first person observed other behaviors. On completion, the reader covered one eye with a dark patch and read a second passage of equal difficulty. The exercise was again repeated with a similar passage but with the reader having a sheer piece of material tied tightly over the eyes to obstruct vision. At each reading the other members of the group repeated their roles. Attempts were also made to have the reader read material at all three stages of the exercise from a distance. After discussing the experience, the teachers expressed various ways of helping the child with an eye defect. The facilitators presented a list of signs that may indicate an eye problem that teachers may observe. The session closed by discussing ways of minimizing the problem, including ways of helping the child through teacher-made materials, appropriate places to seat the child in class and how to get outside help.

During the next part of this period the child with hearing defects was the point of focus. Teachers in groups of five participated in an exercise intended to demonstrate the impact of a hearing defect. Using cotton and hard coverings the group participated with varying levels of impairments. One member of each group gave a hearing test,
by making sounds of various tones - utilizing the voice, bells, and other noise makers. On completion, the results were discussed. The facilitators then presented ways of detecting children who may have a hearing problem and appropriate ways of providing help. The noise level in all the schools worked in was extremely high, therefore teachers were reminded of this fact, talked about the effects and ways of lowering the noise.

Attention was also paid to where children were seated in class. The facilitators also found it necessary to discuss the seating of the left handed child and how to discourage children from teasing those who had observable physical defects. Though speech was touched upon, it was dealt with to a lesser extent.

As the facilitators observed teachers administer the Easter Term Test to their classes they noted many undesirable forms of behavior. Because of these observations, a change in the original schedule was made. The facilitators designed two tests and during administration of these two tests to the participants, displayed many of the undesirable forms of behavior they had seen. This proved to be a very interesting experience. The facilitators gave a spelling and dictation test. It was given in a place that enabled the group to experience the normal high noise level found in most schools. The words for the spelling test were not part of the everyday vocabulary of teachers and some were only parts of words. The passage used, although related to education, was also one that participants would be unlikely to read.
The rules for this test were the same as the participants used in their classes. Each person headed his paper by writing his name, date and "Spelling and Dictation". They were then told to number their Spelling page from one to ten. The spelling words were said twice. The first time they were to be listened to, the second time they were to be written. At the end of the spelling the dictation passage was read. Directions were as follows: "I will read the passage three times. The first time you must listen while I read the passage through, the second time I will read phrases for you to write, and the last time I will read the entire passage for you to write anything you missed." The test was administered according to the rule. Two teachers who were late in arriving began from the word they heard. When the papers were collected, they were told to sit quietly while their papers were marked. Several times they were told, "I said to be quiet," and some were even told that their papers would be destroyed if they did not remain quiet. When the papers were marked the results were read aloud and negative comments made when deemed necessary. Since several people made poor marks, but did not know what was going to be done with the results they tried to argue for additional points. If a teacher's writing made a correctly written word look wrong, he or she was told "you should learn to write properly" and no additional points were given. Teachers tried to defend their performance. Comments included:

"We should have been told that we were going to get a test.

We should have had the words to learn first."
Those words you gave us are not words commonly used. Your accent is different from ours and made us spell some of the words wrong." (Note: the person giving the test was a Black American assistant to the writer. Before this test, however, no major complaints had come from the teachers about being able to understand her).

When they were told that the procedure utilized had been an imitation of behaviors displayed by them, they became defensive. After some discussions and explanations they started accepting the fact that some of the undesirable things demonstrated in administering the test were their own. At this point a discussion about the purpose of testing, the effects on children, other methods of evaluation and the psychological damage their remarks, comments, and expectations could have on children followed. Also discussed were the effects of administering the same test to all children, knowing that some would not be able to perform the task.

The child with emotional and social problems was studied the next day. The causes of social and emotional problems were dealt with first. Teachers were very knowledgable about the reasons why children fell into this category and were able to give examples of children in their classes. When the home was examined, teachers attacked the parents. Two teachers participating in the project who had contacted parents and had made progress, however defended the parents and discussed their experiences.

At this point teachers were asked to reflect upon their
childhood and analyze their families' socio-economic positions, the level of education their parents had and their parents' attitude towards school. Attention was paid to such things as why some poor parents may feel alienated from schools, the attitudes of teachers towards parents and the community and the effects of more women being part of the labor force in society.

The discussion continued by examining the importance of the Parent Teachers Association. Refocusing again on the child with social and emotional problems, attention was paid to his characteristics, his needs, ways to motivate him, and ways to rechannel his energies where necessary. Time was also spent on planning for him in a regular classroom.

The value of teaching aids was considered by the writer to be of great importance. Some teachers saw no value in this and looked at it as a waste of time. Because of inadequate physical facilities (not materials) the group was not able to become as involved in this as was necessary. However some time was spent discussing classroom games, flash cards, the use of solid objects and pictures and the building of models. At this time each teacher was asked to bring to the next session two classroom devices which they had made.

"Using Community Resources" was a topic that was also dealt with. The advantages of such an approach were presented. Although none of the teachers had any prior experience in this, they responded to it in a very favorable manner. The idea of field trips was not well accepted, even though some teachers had taken their students on
Field Impressions

On completion of the field test the writer was pleased with the outcome but felt the need to further assist the teachers. An example of an area that needed more help led to the following decision being made by teachers. In one class there was a little girl who had definite special needs. When the writer first came into contact with this child she had observed her teacher give the entire class a test. On seeing the child's paper, the writer asked to see the child. The teacher responded by pointing out the child and saying that she was "mentally retarded". The child was eight years old and in a second year class. The average child in her class was six years.

Having heard the teacher's comment the writer decided to spend some time with the child. After testing her motor coordination - large and small muscles - perceptual vision, visual memory and auditory memory - two teachers in front of the child asked, "Isn't she mentally retarded?" From the short test the writer found that the child's motor coordination was not properly developed. She did appear to have a visual perception problem. She was unable to identify similarities or differences in shapes and confused many letters, for example "a, o, and e". Her auditory memory was slightly better. Questioning her teacher about her home background revealed that the child had many special needs that were neither being met at home nor at school. The writer and the three teachers then
discussed the effects of the comments they made in front of the child and what the other children might think of her as a result of their remarks. The effects of teacher expectations on a child's performance, the effects of constant failure and frustration, the child's home situation were all dealt with. The class teacher at the end of the Easter term decided to promote her simply because she felt this would be the best technique for minimizing the psychological damage. No provisions were made however to give the child any special help in her new class. This child was used as a case study in a workshop session at a later stage. Many of the teachers when presented with the case recommended promoting also, however, only a few had an adequate plan that could be used to help the child cope with the work she had failed to learn and the work she was going to be expected to learn. The writer felt that while the workshops succeeded in making teachers more sensitive, there was a need to reteach the segment on how to meet the needs of the individual child. Had the teachers had more time, it may not have been necessary to reteach these ideas.

At the completion of the field testing, the facilitators and participants agreed the curriculum should be expanded. They felt that the project did make them more aware of the differences among children and their needs. Teachers felt that during classroom visits the facilitators should have given at least one demonstration lesson. The writer does not believe this would have been appropriate. However, a substitute to this would have been to allow teachers to
observe and evaluate each other. The writer had included this idea in the original proposal - peer group observation and supervision - but found that it was not possible to carry out the idea since teachers could not be released from their classes to attend workshops and to observe other teachers. This idea, however, should be tried.

The writer, before going into the field, had developed an observation check list. This check list, deemed inadequate was not used because it could not be applied to the actual classroom situations. In its place notes were made of observations and later discussed with the teachers. These discussions would have been more beneficial if they could have immediately followed the observation which was not always possible. An attempt is made to correct this in the revised version of the curriculum.

Any education system in the West Indies that utilizes this curriculum model can benefit from its use. The curriculum addresses an area of teacher-education that needs to be given increased attention. The writer, however, does acknowledge the fact that it will not solve all the problems of the schools. No claim can be made that it will solve all the problems of the educationally handicapped child in the school. There are definite limitations to a six-week or ten-week training program. This curriculum model, also because of time limitations, is unable to address techniques for educating parents and the community as to their role in helping minimize the problems of the educationally handicapped. The curriculum does, however, make teachers more aware of the needs of individual children, ways of
helping the child and the importance of their role in the society.

This type of model and others similar can help improve the system by constantly introducing teachers to recent developments and innovations in education as well as basic foundations of education.
CHAPTER V
Evaluation

Having discussed the content of the model curriculum for West Indian teachers, it is only fitting that some attention be paid to the evaluation process. In designing the model, the writer attempted to create one that would meet the needs of the West Indian area as defined in Chapter one of this document. Designing such a model, however, does not imply that the systems of education in all the territories of the region are identical. Though there are many similarities, the systems do have some differences. Some territories can be described as more advanced in the field of education than others. For example, in some territories all primary and secondary school teachers on entering the teaching profession have completed their secondary school education and have passed the Cambridge School Certificate examination, the General Certificate of Education examination, or an equivalent. In other territories, many teachers, especially those in the primary school have, on entry, only completed primary school and may or may not have completed the various teaching examinations.

The number of children who receive free or paid secondary education influences the number of teachers with more than a primary school education. The length of the teacher training programs fluctuates from one to two years among territories. The admission requirements to training colleges vary from high school education with no previous teaching experience to previous teaching experience. These facts indicate that only a
curriculum with built-in flexibility can be utilized. The designer of such a curriculum must take into consideration the degree to which teachers have been exposed to educational and child psychology, the reading level of teachers and the years of previous teaching experience. He must also consider the amount of money the government can and is willing to spend to supplement such a program. One major similarity in the area however, is the need for improved teacher education. There is also an urgent need for teachers to be educated to meet the needs of the special child, for example, the educationally handicapped. It is to this similarity that this document was addressed, providing built-in flexibility for specific territories and groups of teachers within a territory.

This chapter will present to the reader the process that was developed to evaluate the field test. It will explain how criteria were selected and how the evaluation documents were designed. The chapter will also present an analysis of the outcomes along with comments based on observations made throughout the study.

Financial limitation as previously mentioned was a key factor that limited the writer from field testing the curriculum in more than one territory, or in more than one setting. It is therefore recommended that a pilot study be implemented before the curriculum be utilized on a large scale. Such a study would, upon evaluation, highlight any areas that need to be strengthened for a specific location. For example, a group of teachers who read and knew more about children might need less psychology than a group who were less knowledgable. Another example is that one may find minimum
resources utilized to a greater extent in rural areas than in urban centers. Where such a situation occurs, less emphasis should be placed on that sub-unit and more on another. The amounts of money provided to buy books may also differ and therefore require the facilitators to make more presentations. The model does also provide some reading material and a list of books.

A mechanism for evaluating the curriculum was designed and utilized during the field test. This mechanism was in the form of a questionnaire which can be sub-divided into four segments. (Appendix IV). The first provides general information about teachers and the second extracts cognitive data relating to the participants' knowledge of objectives. The third provides feed back from the participants as to the strengths and weaknesses of the project and the fourth is an observation guide. The evaluation data extracted from the major questionnaire - the Content Evaluation Questionnaire - has certain limitations. As with most paper and pencil tests, it does not differentiate between cognitive knowledge and actual behavior. Therefore, one cannot say that if teachers answered all the questions correctly then they would also demonstrate appropriate behavior in their classrooms. It is therefore absolutely necessary that classroom observations be taken into account along with the questionnaires.

The "Content Evaluation Questionnaire" (Appendix IVC) used in the field test was given on the first day of the program and repeated on the last day - six weeks later. Teachers did receive another questionnaire three months later, but not enough were returned
to the writer to warrant their use in the final evaluation. Thus only
the questionnaires administered on the first and last day were used
for evaluation purposes in this document. Because the same test
was used, one cannot determine to what extent memorization influenced
the post-test responses. After the pre-test teachers requested that
the correct answers be given. The facilitators did not oblige, but
explained that the theme of each question would be dealt with in the
program and that a similar test would be given at the end of the
program.

In designing the final evaluation questionnaire, the
writer also eliminated all true and false questions. Analysis of the
evaluation data revealed that some technique was needed to limit the
degree of possible guessing. The true and false questions appeared
to have provided less of a challenge than the multiple choice
questions. Observation sheets were also prepared to be utilized
during the field test. These sheets proved to be unsatisfactory
because they did not identify the realities of West Indian schools
and were abandoned. Because of this an alternative was utilized.
The facilitators made notes of teachers and classroom behaviors.

Questionnaires

The questions developed for the Content Evaluation Questionnaire
were divided into two broad categories. In the first category an
attempt was made to gain pertinent general information about the
participants. Questions one to six sought general information such
as their names, their schools, the class level they taught and their
educational background. Twenty five teachers were signed up for the program, however, only twenty-two completed the program. Of the twenty-two teachers who were evaluated, seven were trained - attended teachers' training college - and fifteen were untrained - did not attend training college. All of the teachers had completed secondary school education to the ordinary level. Also, all of the teachers reported that they had received no training to meet the needs of the child who had learning problems. Questions seven and eight sought to learn their feelings about teaching. Was teaching something they liked, or would they prefer another job if it were available. Interestingly enough, there were some participants who answered "yes" to the former question and "no" to the latter question although they were furthering their studies with the hope of entering university to pursue other fields. This information was obtained by the facilitators from conversations.

Questions nine and ten asked teachers to select from a list of choices those words that described them as persons and as teachers. There were few changes in the pre- and post-test to these questions. Most people described themselves as friendly, average and shy, while few described themselves as bold or very self-confident. Though the sample of male teachers was very small no major differences can be seen in their responses. The responses to question ten showed that most described themselves as friendly, loving and helpful teachers. In the pre-test more people saw themselves as sharers and leaders while in the post-test some reversed their position. It would seem apparent that the words "disciplinarian" and "strict" were
not clear to teachers. In the pre-test five said they were disciplinarians and thirteen said they were strict; while in the post-test, eleven said they were disciplinarians and five said they were strict. It is not clear what the denotative and connotative meanings of these words were to teachers.

The second category of questions can be sub-divided into eight sub-sections. These sub-sections related directly to the curriculum content. The questions sought to determine the extent to which each participant could answer questions relating directly to the curriculum objectives. The questions were of two types. The first type comprised multiple choice questions and the second true and false questions. With the multiple choice questions, the participant was asked to select one correct answer from a set of four possible answers. With the true and false questions, the participant was asked to determine whether each statement were true or false.

The sub-sections into which the questions in the second category were divided are as follows:

- The Teacher Psychology
- Child Development
- The Educationally Handicapped
- The Emotionally and Socially Disturbed
- The Slow Developer
- The Partially Handicapped
- Teaching Aids and Alternative Approaches to Teaching
Teachers and their Self Concept

The first portion of each day of the six weeks was devoted to focusing in on teachers. This segment was intended to help teachers analyze the importance of their roles in society. It was intended to help teachers look at themselves and their profession as being very important to the nation. Its goal was to help teachers see themselves in a most favorable light. Teachers were asked to define what a good teacher was and in so doing it was hoped that they would seek to develop in themselves those qualities that make good teachers.

One of the questions in this sub-unit that demonstrates the over-riding goals are -

Question 40

The teaching profession is very important since it is the teacher who lays the foundation for doctors, brick layers, lawyers, thieves, engineers, shoe makers, and other teachers.

This was a true or false question. The question led to a great deal of debate when the concept was discussed in a workshop and proved to be extremely beneficial. Although participants in the end may continue to have opposing view points, the exercise did help teachers analyze their roles and determine other factors in society that influence children. In the pre-test ten teachers wrote that the above statement was false however, in the post-test four answered that it was false. Their answers reflected their point of view as it related to the question.

When comparing the pre- and post-test responses to this
sub-section of the evaluation, there appears to be a notable difference in the responses (See Table 5.1). Comparing the results of the paper and pencil test responses to the observations, it can be said that some of the teachers did attempt to improve themselves and their job performance. One teacher constantly shared the things she was learning with other teachers in her school. Teachers also seemed to spend some of their free time discussing and debating the pros and cons of some topics that were discussed. Other teachers became involved in reading several books that were provided by the facilitators on their own initiative. On the negative side, the facilitators' observations led them to feel that far too many of the participants appeared to be filled with apathy. They seemed to project an attitude of helplessness. There appeared to be a lack of confidence in their ability to bring about a change of any kind - positive or negative. If a change is to occur, and children learn by example, then this attitude must be corrected. Teachers must therefore develop greater confidence in themselves and recognize that only when they work towards a progressive change for national development will they be able to set appropriate examples to their students.

Psychology

Major emphasis was given to psychology during the field test. This is an area that needs a great deal of attention since the field test revealed that the background of teachers needs to be strengthened. Untrained teachers who graduate from high school or primary school generally have had no exposure to training in psychology. This lack of exposure forces teachers to rely mainly on techniques
they learned from the way they were taught, from observation of other teachers and/or on their own judgement. The sample of teachers who were trained also displayed only a limited knowledge of the subject. In spite of the teachers' lack of background knowledge in psychology, many teachers must be complimented for their approach to teaching.

Unfortunately, teachers who taught the way they were taught in some instances made severe mistakes. For example, some teachers felt that administering corporal punishment to a child would make him learn. Thus a teacher would say that a child was mentally retarded and yet expect the same child to perform successfully on a test given to the class. It is unfortunate that a teacher would punish a child without considering the child's potential or knowing the reasons why the child failed to perform the task correctly.

Attention was paid in the program to children with various types of special needs and to various types of under achievers. This theme needed to be examined to demonstrate to teachers techniques for determining the child's level of functioning. Another topic within this sub-unit that teachers did not appear to understand was the purpose of testing. All children received the same test on the same day because the ministry decreed it was testing time. This subject needed to be dealt with and teachers needed to be exposed to alternative ways of evaluating pupil growth other than the traditional paper and pencil test.

Though all teachers understood that the home life of a child does affect his school life, many were misled in the belief that there is a direct relationship between intelligence and wealth. Some
of the teachers seemed to believe that poor children fell naturally to the bottom of their classes. This type of erroneous belief can and does affect the child's and/or the teacher's attitude in class. Unfortunately, teachers who held this belief were not aware of the relationship between teacher expectations and child performance.

Some questions used in the evaluation of this segment of the program are:

Question 17

One way of motivating a child in a positive manner is to:

1. Praise him all the time.
2. Give the child lots of work to do.
3. Give the child lots of attention.
4. Assign the child tasks so that he can experience success and failure.

Question 37

Whipping a child for poor marks will make him improve:

1. The above statement is not absolutely true.
2. A whipping is a positive form of motivation therefore makes a child improve.
3. Negative motivation never brings positive results.
4. None of the above statements are true.

A look at the responses to this sub-section, for both trained and untrained teachers, showed that there was a difference between the pre- and post-test responses (Table 5.1). In spite of the
outcomes, however, this area has been extended in the final curriculum. It is an area to which new teachers on entering the profession must be quickly exposed and to which experienced teachers must be constantly refreshed. From observations, the facilitators found that teachers used various methods of embarrassing children in front of their peers as a punishment technique. Teachers would punish a child in front of the class, belittle a child for bad marks in front of his friends or use negative labels to describe a child in the company of others. Children would be made to know that very little was expected of them and shown that they were incapable of achieving success. On the more positive side, some teachers demonstrated that they cared about their students, regardless of the fact that they may have also demonstrated their inability to correct a situation. Teachers did attempt to show some concern and affection for children. The writer believes that many of the weaknesses that teachers demonstrated in this area were due to their own limited knowledge about alternatives.

Child Development

Complementing psychology was another sub-unit on child development. Many teachers had only limited basic knowledge about this topic. The facilitators presented the topic beginning with the unborn child and progressed to the child of twelve years of age.
For many, the unit on the ages and stages of development was revealing. That the development of a muscle was related to toilet training was unknown. Thus teachers learned the relationship between muscle development and the performance of specific tasks. Throughout the presentation within this segment attention was paid to the types of behavior that could be expected of the "normal" or "average" child. Explanations and examples were given to help clarify the points of what is normal or average and what is not. For example, it was pointed out that even though specialists may say that certain behaviors are common to children at two years of age, the child who displays those behaviors at two years four months is not abnormal. Behavior patterns common to each age and stage of development occur within a small time span. The theories of some specialists in the area were presented. Among these were Piaget, Gessell, Montessori, and Freud. The presentations in this sub-unit provided teachers with some of the background to handle the next sub-unit on the educationally handicapped.

**Educationally Handicapped**

Since helping the educationally handicapped was the major goal of the curriculum, a great deal of attention was paid to this sub-unit. Teachers were taught how to observe and record a child's behavior, to make a case study and to determine the most appropriate plan of action to minimize the child's problem. For the most part, few of the participants had been exposed to this type of exercise before. They were also made aware of the effects of incorrect labeling on a child. During the first set of case studies, words such as mentally ill, mentally retarded and brain damage seemed to occur
repeatedly. It was therefore absolutely necessary that emphasis be placed on the adverse effects such labels could have on a child. Teachers were advised that they were not qualified to make such an analysis, and that only a specially trained physician is capable of making such a diagnosis. The importance of making a preliminary diagnosis or an evaluation of a child was stressed along with the choice of words utilized. Not only was the matter dealt with as it affects the child in educational circles but also as it affects the child in the community at large. The impact of the phrase "emotionally disturbed" as opposed to "mentally ill" was analysed along with words such as "apparent" or "it seems to be". The writer being a product of West Indian society was able to discuss in the language of the teachers and of the people how such labeling would be translated and interpreted and relate it to the social and psychological consequences.

The characteristics of the slow developer, the partially handicapped, and the emotionally and socially disturbed were presented in the following sub-units. Discussion on these subjects included: factors that created or contributed to the development of such problems, the impact of such problems on learning, minimizing such problems through planning and when and where to get outside help when it is needed. Teachers were required to make observations of specific children over a period of time, make a case study and develop a plan for helping the specific child whom they used in their case study.

The type of questions used to evaluate these sub-units were:
Question 30

Emotional and social problems which may affect a child are:

1. An unhealthy home situation resulting from parental friction.

2. The financial situation of the child's home—rich or poor.

3. A fear of failure, resulting from parents' high expectations.

4. All of the above.

Question 13

The term "educationally handicapped" refers to:

1. A mentally retarded person.

2. A person who has difficulty controlling his limbs.

3. A person who for one reason or another has difficulty learning, which may be physical, social and/or emotional.

4. All of the above.

Question 13 listed above when first presented, not as a question but as a concept, led to some notable observations. The word "handicapped" when used by most people referred to a person who was physically handicapped, i.e. a person who had difficulty using or controlling his or her limbs. However, when the facilitators told participants about the types of children under consideration—children with learning problems—many translated this into mentally ill, mentally retarded, or mentally deficient. Thus the term handicapped had to be examined. During the analysis, teachers were asked what things they were unable to do. The things that they were unable to do that were necessary to perform tasks were pointed out to be handicaps. Then the analogy was drawn that a
person who had difficulty with reading or any behavior necessary for learning had an educational handicap.

The evaluation data on this sub-unit showed that participation in the project did result in increased knowledge as revealed by the objectives tested. Materials that covered the slow developer, partially handicapped, and the emotionally and/or socially disturbed were in the facilitators' opinion very beneficial. In the oral evaluation by teachers recorded on tapes, most of them commented on how helpful this information was to them.

By the end of the program, most teachers were able to write a plan to help specific children in their classes. These plans took into consideration all aspects of the child - physical, social, psychological as well as the academic. Unfortunately the writer does not believe that teachers were ready to assist more than two children using an individualized approach within their classes.

Non-traditional Approaches to Teaching and Minimum Resource Teaching

Developing teaching aids and utilizing non-traditional methods of teaching formed the next sub-unit to be evaluated. The absence of commercial products in the schools and the lack of financial resources to supply them make this sub-unit an absolute necessity. Unfortunately, some teachers felt that the time spent making aids was wasted. It was apparent that only while in training college did teachers make aids since this was expected of them. Such a practice ended once they were in the classroom. Not all teachers responded positively to this segment. The young untrained teachers were far more responsive however. Each teacher
was asked to make two devices for their classrooms. Some of the teachers tried the devices they had made in their classes and were satisfied. The writer felt after observing some aids that teachers needed to realize that they ought to make aids that were appealing to children. In many of the lower classes children used "sweet drink caps" (soda bottle caps) as counters. These would have been more stimulating if they were strung on string and painted. From answers to the questions in the evaluation, one sees that participation led to more knowledge of the value of classroom aids. However, the writer feels that more time should have been devoted to this area in the field testing and has therefore expanded it in the final curriculum.

As in the psychology unit, the writer feels that teachers did not utilize more alternatives to teaching and evaluating children because of a lack of knowledge. Using games as a device for teaching and evaluating children was well received. This topic presented teachers with ideas of which they were not previously aware. Using a unit approach to teaching all subjects was also a totally new concept to teachers, which they found very interesting. When teachers evaluated the program they said that it would have been useful to them if the facilitators had provided some demonstration lessons using their classes. More time should have been devoted to this topic, but the few approaches presented were useful. No comments based on observations can be made, since the facilitators were not available to do so.

Analysis of the data for the overall program was done by comparing the responses of the trained and untrained teachers as two
separate groups. The analysis was done this way to determine if trained teachers were more knowledgeable than untrained teachers about the subject. This proved true only in psychology. However, they - the trained teachers - were not sufficiently knowledgeable to handle the task put before them. The comparison of trained and untrained teachers was also done to determine if one group were more responsive than the other. The results showed that untrained teachers had a greater increase in the number of correct answers (Table 5.1). The results also give positive reinforcement to continuing this type of training process for all teachers. Based on observations, the facilitators found that more untrained teachers seemed to try and experiment with ideas put forward in the program. They were also more open to criticism and had questions for the facilitators. As a whole untrained teachers demonstrated more carry-over from workshop to their classrooms.

Participant Evaluation

At the end of the program teachers were asked to evaluate their experience. Among the major criticisms made by teachers were:

1. More time was needed to obtain maximum benefit from the program.

2. Facilitators should have provided demonstration lessons using their classes.

3. Immediately following an observation of a teacher, facilitators should have provided feed back.

4. More physical amenities for the program were needed.
5. More time for each topic was needed to provide a balance of theory and practice.

6. Facilitators as authorities should have provided specific answers at the end of discussions. Discussions did provide ideas, but they - the teachers - needed the authorities to give a final say.

On the more positive side of the evaluation, some of the comments were:

1. The program provided teachers with new knowledge. Their lack of knowledge prevented them from using suitable methods. High points of this section were: ages and stages of development, how to help the educationally handicapped, aids to teaching, the use of games, and other approaches to teaching.

2. The program helped them as teachers understand children's problems and resulted in better ways for communicating with children and parents.

3. Teachers took time to strategically place partially handicapped children in their class - this they did not do before.

4. The program helped them as teachers learn more about their own country and about life in other countries.

5. The program helped them as teachers realize to a greater extent the importance of their job to society.
Facilitators Observations

Overall observations made by the facilitators of themselves and the training program can be summarized as follows:

1. There was a deficiency in the teachers' ability in the area of methods and content.
2. Teachers needed to develop a more positive self-concept and recognize their role in the nation-building process.
3. Teachers needed to develop the habit of reading. Although books are expensive, the teachers' adversity to reading is a stumbling block which closes the world of knowledge to them.
4. More emphasis should be placed in the training of teachers in the areas of child development, methods and visual aids.
5. Teachers needed to understand the concept of success and failure and the impact these have on individuals.
6. Teachers needed to obtain accurate knowledge about topics before presenting their lessons. They also needed to realize that there was nothing wrong with them if they did not know the answer to a question, and that they, together with the children, could try to find the answer to the unknown.
More Positive Observations

1. Some teachers were willing to vocalize - they were willing to bring new ideas into focus, to question facilitators, to draw conclusions and to challenge facilitators.

2. Some teachers were prepared to try new ideas.

3. Some teachers used humane approaches to teaching even though they were dissatisfied with the nation's attitude to teaching as was reflected in the way teachers were treated and the salaries they received. This is remarkable, when one considers that some teachers felt that what they did in their classes was their business and not to be questioned by members of the community or by parents.

4. Some teachers realized the need for change in the curriculum. Unfortunately, most of them did not attempt to turn their realization into real change.

5. It appeared that some relevant information was being introduced into the schools to help youths of the nation develop a sense of their own identity. This was very important since the people for too long learned only about their colonial masters. Hopefully, with people gaining more knowledge about themselves, they may be moved to become involved in the political process, which can help to correct many of the society's social problems.
The same evaluation questionnaire utilized in the field test will be retained for the final document with a few changes. (Appendix IV). As was stated earlier in the chapter, the true and false questions have been reworded. These questions now test the same concepts, but are structured according to the multiple choice format. It is the writer's belief that this approach is likely to provide more reliable results by minimizing guessing.

The new observation sheets for the final curriculum have been developed to include those things which the facilitators found most important during the field test. These sheets were designed so that an evaluator could select any one or two observations made during the first part of the program and compare it to any one or two made during the last part of the program. The sheets can also be utilized for a follow-up evaluation at any point after the end of the program. There are nine guidelines on the observation sheet which range from a physical description of the class, the teaching techniques utilized, the relevancy of the materials taught and how the needs of children are met. (Appendix VI).

After field testing this curriculum in Trinidad, the writer believes that in spite of limitations, the teachers who participated in the field test did benefit from the experience. The exposure to the concepts presented broadened their knowledge. The importance of this type of program cannot be overestimated in any of the territories since education is a key that opens the doors to the future. The future of the area is dependent upon all of the citizens particularly the youth. As an emerging area, investments made in education cannot be wasted, for the greatest wealth of the area are the people who live in the area.
In summarizing, the writer feels that the content of the teacher training curriculum must be constantly evaluated for improvements to occur. Attempts must be made by the administrative super-structure to improve communication at all levels of the systems. Attempts must be made to have principals and teachers improve their relationship with the ministry and teachers' colleges and vice versa. Only through an improved relationship can the ministry and colleges work to overcome the problems found in the classrooms. An example of this lack of awareness and communication is as follows: Both ministry and high level members of the university's faculty of education told the facilitators that less than one per cent of the children in the schools had learning problems as described by this study. On the other hand, when the topic was discussed with actual classroom teachers, some teachers felt that as many as fifty per cent of the children had problems. It is quite obvious that unless education planners and curriculum specialists are aware of the existence of such problems they will not consider them in their planning. That there are many children with special needs in the school is a known fact to teachers, to some psychologists and to the facilitators. It is therefore necessary that more communication and interaction occur at all levels of the education system.
<table>
<thead>
<tr>
<th>Categories</th>
<th>No. of Questions in Category ((n))</th>
<th>No. of Possible Correct Responses</th>
<th>Pre-test Responses</th>
<th>Post-test Responses</th>
</tr>
</thead>
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<td></td>
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<td>Untrained (n \times 15)</td>
<td>Total</td>
</tr>
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<td>The Teacher</td>
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<td>28</td>
<td>60</td>
<td>88</td>
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<tr>
<td>Psychology</td>
<td>7</td>
<td>49</td>
<td>105</td>
<td>154</td>
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<tr>
<td>Child Development</td>
<td>7</td>
<td>49</td>
<td>105</td>
<td>154</td>
</tr>
<tr>
<td>Educationally Handicapped</td>
<td>4</td>
<td>28</td>
<td>60</td>
<td>88</td>
</tr>
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<td>Slow Developer</td>
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<td>88</td>
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<td>No. of Possible Correct Responses</td>
<td>Pre Test Responses</td>
<td>Post Test Responses</td>
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<td></td>
<td></td>
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<td>88</td>
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<td>6</td>
<td>42</td>
<td>90</td>
<td>132</td>
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</table>
CHAPTER VI
The Final Curriculum

John Dewey once described the world as a place that was constantly changing and said that the purpose of education was therefore to prepare people to live in a constantly changing society. The last quarter-century has seen significant change in the Caribbean. It saw the formation and destruction of a West Indian federation and the birth of new nations in the region. The days of colonial rule will in the foreseeable future be a thing of the past. Nationhood, however, must mean more than a flag and a collection of national symbols. The desire for so-called independent democratic states can only become a reality with education, for democracy can only exist with a literate and informed people.

The education system cannot in this decade function progressively unless it stays abreast of the changing times. In many ways the curriculum of the last few decades was not appropriate. However, to continuously dwell on the past and not on the future is self-defeating. The writer, therefore would like to present a curriculum which can, in a small way, contribute to the development of the territories. The curriculum aims at the education of teachers rather than at the education of children, since the teachers' education directly affects the students they teach. It can therefore be said that the investment made on teachers has a multiplying effect on the society.

In the beginning of this document, the writer stated that it was her intent to design an inservice training model for West Indian teachers to meet the needs of the educationally handicapped. At this point, it is appropriate to discuss the content of the final curriculum. The original model was designed to utilize six days within a six week period. The final model, however, has been expanded since the field test to cover ten days within a ten week period. (Appendix V).

After field testing the curriculum in Port of Spain, Trinidad and evaluating it, both facilitators and participants felt that more time was needed to fully explore the topics covered. The expansion in time has therefore not resulted in the addition of many new topics. The intent was to utilize the extra time so that the existing topics might be more thoroughly covered. The major sub-units of the ten week curriculum are therefore the same as the six week curriculum. The three papers used during the field test as supplementary reading materials will be re-used with the final curriculum. (Appendix IV). A list of books will also accompany the final model. The books chosen are a collection which the writer feels can only complement and enhance any professional collection. These books cover a range of topics which include the following: Theories of Child Development, Psychology, Alternative Approaches to Teaching, Teaching the Special Child, Creating a Healthy Learning Environment and Foundations of Education. The books listed can provide educators at all levels with increased information on topics included in the curriculum. (Appendix VI).
The Final Curriculum

Like the original curriculum, the final curriculum is divided into the same six sub-units as follows: (Appendix V).

Child Development

This first sub-unit deals specifically with the area of child development. In this sub-unit teachers are introduced to facts on how the young child grows and develops. This sub-unit is covered in three sessions - The child from 0 to 5 years, the child from 5 to 8 years and the child from 8 to 12 years. It discusses the normal child and therefore provides a point of reference for comparison. Within this sub-unit attention is paid to sucking, bedwetting, toilet training, school adjustment, the value of play, large and small motor development, reading readiness and puberty. (Appendix IIIA which is summarized in Chapter IV is intended as a reading material to supplement this segment.)

The Educationally Handicapped

The second sub-unit deals with the educationally handicapped child as defined within this document. This sub-unit begins by first discussing children with special needs, among whom are the gifted children, various types of underachievers and slow developers. It then pays specific attention to the slow developer - his characteristics, reasons why his problem exists, methods of minimizing his problems and techniques for teaching him. The partially handicapped follows, and attention is essentially paid to those children with partial seeing and hearing problems. Teachers are exposed to behavioral signs that
children display that may indicate that either one or both of these problems exist. They are shown ways of testing children to determine if a problem exists, methods for helping the child and instructed as to when and where to get specific professional help if it is needed. The importance of simple factors such as where children are seated in class is discussed. The sub-unit also provides an opportunity for experientially based learning to occur. The emotionally and/or socially disturbed child completes this sub-unit and follows much the same pattern as the two previous topics. Supplementary reading material is provided to complete this sub-unit. (Appendix IIIIB).

**Psychology**

During the field testing it became apparent that teachers needed to be exposed to the use of more psychology. As a result this sub-unit now provides additional time to expand on topics such as motivation, the effects of success and failure, the importance of a positive self-concept, praise and reinforcement, the impact of teacher expectations on children's performance and the psychology of learning. The importance and value of this sub-unit lie not only in teaching the educationally handicapped but in teaching all children. It is an area that the writer feels still has limitations, since it can be further developed to meet more of the needs of teachers. Nevertheless, an attempt is made to cover as many areas as possible and to repeat some of the ideas as other sub-units are discussed.
Alternative Approaches to Teaching

This sub-unit attempts to inform teachers about non-traditional approaches to teaching. This sub-unit does not attempt to present a vast number of new approaches. It does however attempt to present only those approaches which the writer feels could be implemented in the region at present. One of the approaches presented was peer-group teaching. This is not completely new but was not observed during the field test. Other approaches presented were the discovery approach, the contract method, the organic approach to reading, ways of using games as a teaching and evaluating device, using community people as an outside resource and field trips.

Minimum Resource Teaching

A great deal of emphasis has to be placed on minimum resource teaching. The school must become a place attractive enough that a child would want to go there. The plain walls of a large room filled with rows of desks, tables and chairs are in no way an exciting stimulator. The economic reality of the territories on the other hand prohibits the governments from spending sizeable sums of money on commercial teaching aids and attractive wall posters. This deficiency however, can be corrected with a minimum amount of money. Teachers can, through the use of minimum resource materials, utilize their creative potential and stimulate students to help make the classroom environment a more attractive place. This sub-unit attempts to destroy many of the negative ideas that teachers may have about making teaching materials. The general attitude during the field test was that it was a waste of
time. This attitude was prevalent in both trained and untrained teachers in spite of the fact that at the teachers' training colleges this practice is encouraged. It is possible that student-teachers use this approach while practice teaching but upon graduation many of them discard it. This sub-unit therefore attempts to change the basis of the negative ideas and demonstrate the definite advantages of the use of such materials. It also shows a variety of specific ways to make classroom materials. The paper used in the field test, "Minimum Resource Teaching", (Appendix IIIC) complements this sub-unit and is to serve as a resource file for references, to which teachers are to be encouraged to add new ideas.

Teachers, Their Needs and Self-Concepts

One area that has been strengthened within the final curriculum since the field testing is the time provided to meet the immediate needs of teachers in each group. Open time slots have now been made available for this purpose with alternatives provided if, for one reason or another, teachers fail to voice their concerns. These open areas are structured so that they may provide teachers with skills, and/or a clearer understanding of any topic. They may also help teachers clarify an unclear experience, discuss a child with special needs or a book they have read. However, as was the procedure utilized during the field test, the opening portion of every day will again focus on the teacher. This segment will look at teachers as people, their role in society and their profession. At this time, some open periods are also provided when teachers will be able to
determine what topics will be discussed. It is advisable that participants be encouraged to assume leadership roles as much as possible, especially during this period. It is advisable that facilitators at such sessions take the position of a provocator. Some of the planned topics in this sub-unit include "Who Am I?", "Teachers Can Teach Teachers", "The Role of the Teacher in the Nation Building Process", and "The Teacher and the Community".

Implementation

The curriculum in its final form is designed so that it can be utilized with minimum assistance from the writer or original facilitators. It provides a list of recommended readings that facilitators and teachers may find useful. The program is intended to supplement the many teacher training programs that are presently in use in the area and has within it built-in flexibility. In implementing it, planners can utilize several approaches.

Educators and teachers using this document are advised to choose the most appropriate implementation plan for their specific situation. The writer will propose two plans but others can be substituted. Plan one suggests that thirty to forty teachers, divided in two groups participate in a given ten week period, each group meeting one day each week or two half days each week with one or two teacher educators. They are also advised to take all schools from one school district so that, where possible, as many as four teachers would come from the same school - two each day. This would enable
easier supervision by facilitators, peer group support and an opportunity for peer group supervision. Another administrative approach would be plan two. It suggests the use of one school supervisor and one or two staff members of the teachers' training college. The timing of classes can then be changed to facilitate implementation. All three members of such a team, having to meet the demands to their present positions, may operate in the following manner. Each participating supervisor would co-ordinate a group of twenty teachers either one day a week or two half days each week. The training college staff members would then assist by taking those areas of the curriculum in which they are knowledgeable. A day may therefore run as one of the following examples:

Example Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Supervisor</th>
<th>Topic focuses on teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 10:00 a.m.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00 - Noon</td>
<td>Training College Staff</td>
<td>Topic relating to child development or psychology</td>
</tr>
<tr>
<td>1:00 - 3:00 p.m.</td>
<td>Supervisor</td>
<td>Minimum Resource Teaching</td>
</tr>
</tbody>
</table>

Example Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Supervisor</th>
<th>Topic that focuses on teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 10:00 a.m.</td>
<td></td>
<td>Non-traditional approaches to teaching</td>
</tr>
<tr>
<td>10:00 - 12:00 noon</td>
<td></td>
<td>Techniques for teaching the educationally handicapped</td>
</tr>
<tr>
<td>1:00 - 3:00 p.m.</td>
<td>Training College Staff</td>
<td></td>
</tr>
</tbody>
</table>
Two half days a week would simply mean splitting a day's program into two parts. Two members of such a team might spend about ten hours a week visiting participants in their group. The effect of such a procedure cannot be overlooked. If five supervisors and five staff members of the nation's training colleges become involved in such a project in various districts, at the end of a ten-week period one hundred teachers would have additional skills. The small budgetary input that this may require is well worth spending if the hundred teachers who participate all have an average of thirty students. Any procedure utilized, i.e., plan one or plan two or any other feasible method can have positive national results. The goals proposed here are in no way contradictory to national goals. It aspires to help every child in the primary school below twelve years to develop to his or her fullest potential. The model, though developed for children below twelve can be utilized as a pattern for older children. The future of a nation is dependent on the youth of the nation. Therefore to decrease the degree of human wastage that develops in the society is to increase the rate of national development.

Final Evaluation Questionnaires

An appendix to the final curriculum consists of three evaluation questionnaires. These questionnaires are (1) The Background Questionnaire. (2) The Participant Evaluation Questionnaire and (3) The Content Evaluation Questionnaire. (Appendix IVA, B, and C). The background questionnaire should be administered prior to the beginning of a workshop with sufficient time for the facilitators to
examine the responses. This questionnaire provides specific background information about the participants - their education, the class they teach and their knowledge and awareness of educationally handicapped children. During the field testing facilitators found this information very helpful.

Neither the background questionnaire nor the Participant Evaluation Questionnaire was used for evaluation purposes. The Participant Evaluation questionnaire provided general information about the overall workshop. It provided opportunity for participants to share with the facilitators the strengths and weaknesses of the program and a chance to make recommendations for future sessions. This should be utilized by facilitators after every ten-week session.

The content evaluation questionnaire is most important. This questionnaire attempts to check the extent to which participants have grasped each objective. This questionnaire should be given on the first day of a ten week session, on the last day and again three months later. The answers should be compared to determine the effects of participation in the program.

The observation check list that was developed for the field testing was eliminated during the field test because it proved to be inadequate. The check list included in the appendix, therefore, has not been tested but was developed as a result of the field experience. This observation sheet is less detailed and provides more opportunity for the observer to make comments. The writer also recommends that facilitators not only observe teachers during the ten week sessions, but visit them at least twice in the three months immediately
following. (Appendix IVD).

Limitations and Recommendations

As stated in chapter one, the writer did not claim that this document would cure all the ills of the education systems in the region. There are several other facets of change that are needed to complement the curriculum presented here. There is an urgent need to educate parents about the needs of children as they relate to education and overall development. The present level of parent-teacher-community communication and involvement cannot be described as satisfactory.

From observation, several children appeared to have sweet drinks (soft drinks or sodas) and a sandwich for lunch. This is certainly not an adequate meal; however, if parents are made aware of alternatives this could be corrected. The cost of five sweet drinks per week can be converted into five more appropriate drinks at about the same or less cost. Health education for adults is needed. The high cost of foods can limit the variety of foods some people can buy. This can lead to routine meals consisting mainly of starch and very little protein and other important food nutrients. How to prepare low-cost balanced meals is therefore necessary since the lack of proper meals affects the child's ability at school and the health of the nation.

Parents need to understand the value of talking and reading to their young children. They need to know how their children grow and how they can help them develop. An effective Parent-Teachers Association can serve such a purpose. In such an organization, or a similar community-based organization, parents can be educated to
aid in the education of their children. In conjunction with teachers, parents can then help to make the school environment more inviting to children. Parents can also help minimize some of the problems of the school and foster better community relations.

Not only can schools use additional support from parents, but schools are also in desperate need of additional support services. Though governments may not be in a position to provide every school with a nurse, a doctor, a psychologist, a social worker, a nutritionist and a child development specialist, money spent on such a team for a school district would be a wise investment. Such a team of specialists would also need the backup services of an eye specialist, a dentist, a speech therapist, an audiologist, and other specialists who can be called upon when necessary. The ideal situation would be to have every child checked by a team of specialists annually. In lieu of this, children identified as having problems can be checked upon recommendation by teachers. To complement this service schools or special classes for children with special needs must be developed. Although this may seem contradictory to the position of many researchers in special education, the writer feels it is appropriate for the region at present.

The one- and two-year teacher training programs do not and cannot provide teachers with all the necessary background. Many teachers also begin teaching with no training, therefore to expect them to do jobs for which they have not been trained is unrealistic. The writer would support the position of integrating children with special needs in regular classes when the teachers are prepared to handle such situations. In the interim, the writer recommends the use of this
curriculum or other approaches of inservice training.

The objectives of this proposed curriculum are stated in behavioral terms. This is very acceptable to many educators. However, one aspect of teacher behavior that causes concern is attitude. An approach to correcting this situation might be the creation of incentives. Teachers who look upon teaching as nothing more than a means of making a living and teach with a laissez-faire attitude can cause damage to the society. This situation needs to be corrected either through raising the political awareness of the society or through material incentives. The former is more appropriate. Teachers must be made to see themselves as part of the nation building process and instruments for progressive change. Too many teachers feel that once they have been trained their education has been complete. Trained and untrained teachers must therefore be encouraged to constantly improve themselves.

Also needed to improve the quality of teachers is a mechanism for teachers to exchange ideas and materials. During the field testing, it was observed that the few teacher-made materials used in one class had little possible chance for re-use by another class. A fraction chart used by one standard three class can be reused by another. The writer therefore recommends that a teacher's newsletter be started in which teachers can share with other teachers their successful ideas and experiences. Valuable articles on education can also be included. Also in schools or school districts, a material-lending depot can be formed. Teachers could give to the depot materials they have made and used and borrow those that others have utilized.
Counselling staff is urgently needed in schools. Counsellors are needed to provide children with academic and vocational guidance. They are needed to help youngsters cope with their social encounters. The writer believes that the schools must also develop programs that will help meet the needs of the gifted. It is the writer's belief that the West Indies needs to and can improve its present situation in schools through various types of inservice training programs. The large number of untrained teachers and teachers trained prior to the last ten years certainly demonstrates a need for immediate upgrading. The time is now, when the best available means to cope and improve the present situation must be used. This situation can be handled if schools, teachers' colleges and ministry personnel pool their resources and work together for the benefit of the system. Long term and short term approaches must be instituted to improve the overall quality of teachers and to enable all teachers to stay abreast of new developments in the teaching profession.

The area of curriculum development is being worked upon. Making the content more relevant to the West Indies is a wise and practical move. Education must prepare West Indian children to live in West Indian society. However, such changes must do more than teach West Indian history and geography. It must help youngsters understand the institutions in the society, the political process and their roles in area development. They must learn what is required of them so that they can learn to contribute to social, economic and political development of the region. The youth of the area cannot be expected to actively participate in the political process unless
they can comprehend the process. The writer therefore suggests that teachers use the speeches made by government ministers, members of the opposition, right and left wing groups, and editorials as materials to be incorporated into their classes. Students must learn to examine and analyse the words of orators and writers. They must learn to pay attention to current local, regional and world news and realize the relationship of various events.

West Indian Society has in the past copied and continues to copy many ideas from the so-called developed nations of the West, mainly from the United Kingdom and the United States. The writer recommends that educators and politicians begin to look at some of the so-called non-Western countries. Since the United Soviet Socialist Republics (USSR) and more specifically Russia have made tremendous progress in the last fifty years, there must be something that can be learned from them. The same can be said of the Peoples Republic of China in the last twenty-five years and of Cuba, to move even closer to home. Both the People's Republic of China and Cuba are countries who have overthrown the shackles of colonialism and foreign exploitation. The vast majority of people in these two countries prior to the last quarter century were uneducated. Education was a luxury afforded only a privileged class, yet today everyone is given an education - that is everyone learns to write, read, participate in the nation building process, learns about social, political, and economic development of the country and gains skills to aid in national development. Today, the People's Republic of China is respected and stands tall among the so-called world powers. In many respects it appears to be more progressive
than the old colonial masters, for example, Great Britain. West Indian society must therefore examine the steps these countries have taken on the road to advancement and determine which, if any, can be adapted for her own purpose. There is nothing wrong with intelligent copying from the North and South, East and West, developed and underdeveloped if West Indians take and adapt those things that are useful and practical for their society. Intelligent copying has been done by many societies, and is appropriate if it brings with it progress. The Japanese have shown how effective this approach can be. The writer therefore recommends that attention be paid to approaches used by various countries. New procedures can be experimented with and evaluated through small scale pilot studies before attempting implementation on a large scale.

Change is occurring slowly and steadfastly in the West Indies. Many of the changes are progressive. However, educators, politicians, and national planners must be careful not to use the "cart before the horse" approach. Before new subjects can be taught or new techniques used personnel needed for implementation must be trained. Plans must therefore be developed to handle long range and short term training so that programs can be implemented with maximum success in a minimum amount of time.

The writer of this document has presented an analysis of educational trends in the West Indies. In this analysis attention was focused on the reasons why and how education emerged in the area. Recent innovations were also examined, with specific reference to
Trinidad and Tobago. However, the main value to be derived from examining the past is that it be used as a guide for the future. Thus omitting all errors, and never repeating mistakes it is the responsibility of educators, planners, and politicians to plan and implement programs that can result in area progress.

The writer has prepared a model curriculum to deal specifically with one small area of education. However, she believes that those who utilize this curriculum will learn far more than skills for teaching the educationally handicapped. As teachers analyze and realize the importance of their self-concepts and their role in the nation-building process, they will commit more of themselves to developing the area's greatest and most valuable resource. As they develop the ability to identify the individual differences and needs of educationally handicapped children, they will be able to help all children and thereby improve the quality of education in society.

Teachers must be prepared to provide the people of the area with "liberation education". They must share the responsibility for the doctors and lawyers, brick layers and shoe-makers. They must help build today and tomorrow with the building blocks that are available.
LIST OF SELECTED REFERENCES


Sunday Express, May 12, 1974.


Williams, Eric. History of the People of Trinidad and Tobago. London: Andre Deutsch Ltd., 1962.


INTRODUCTION TO APPENDICES

The appendices that follow all go to making this document complete. Each one is of value in that it contributes in a specific manner to the practical application of the model curriculum designed for West Indian Teachers. The following is a description of each:

Appendix I - The Original Curriculum Outline

This appendix presents an outline of the six day curriculum that was designed and taken to the Caribbean to be field tested. It details the objectives, activities and evaluation criteria.

Appendix II - Actual Plans Utilized in Field Testing

Because of a variety of reasons, some changes were made in the daily plans utilized in the field test. This appendix outlines the topics presented in the field test.

Appendix III - Supplementary Reading Materials

As mentioned previously, financial limitations prohibited the purchasing of a wide variety of books. The materials in this appendix are intended to be utilized as reading materials. Each paper has been written to meet specifically with the objectives of the curriculum.
Appendix IV - Pre- and Post-Evaluation Materials

This appendix provides the materials utilized for gaining knowledge about the participants prior to the beginning of the field test, the participants evaluation to be used at the completion, an observation guide to aid in evaluating the performance of teachers in their classes and an evaluation questionnaire which seeks to determine the teacher's ability to answer questions relating to the objectives.

Appendix V - Final Curriculum

The final curriculum is presented in this appendix. It is designed to cover a ten week period. It describes the objectives, suggests activities and states criteria that could be utilized for evaluation purposes.

Appendix VI - Reading List for Teachers

The final appendix presents a list of a wide variety of books which, if available, can enhance the program. The list is varied in that the writer in preparing it took into consideration that teachers in the Caribbean region may not have access to all. The list therefore provides alternatives within limits.
### 1st Day

<table>
<thead>
<tr>
<th>TIME AND THEME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8:30 - 9:30</strong></td>
<td><strong>1.</strong> To develop an awareness of one's self.</td>
<td><strong>1.</strong> Answer the question &quot;Who am I?&quot; eight times.</td>
<td><strong>1.</strong> Aware of ages and stages of development of the child from 0 to 5 years, e.g., knows what skills children can master at each age.</td>
</tr>
<tr>
<td>Introduction</td>
<td><strong>2.</strong> To be cognizant of the needs of the pre-school child.</td>
<td><strong>2.</strong> Draw a line or diagram representing your life.</td>
<td><strong>2.</strong> Can identify from a group of things those appropriate for age group. e.g., pencils, crayons, puzzles, books, toys, etc.</td>
</tr>
<tr>
<td></td>
<td><strong>3.</strong> To be aware of the factors that can affect the child's later development.</td>
<td><strong>3.</strong> Discussion of diagrams.</td>
<td><strong>3.</strong> Can advise parents about child.</td>
</tr>
<tr>
<td><strong>9:30 - 11:30</strong></td>
<td><strong>1.</strong> To develop an awareness of the character of the pre-school child.</td>
<td>Lecture followed by question and answer period.</td>
<td></td>
</tr>
<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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</tr>
<tr>
<td>11:30 - 12:30</td>
<td>LUNCH</td>
<td>Using pictures of several children to discuss similarities and differences.</td>
<td>1. Can identify characteristics of children at each age.</td>
</tr>
</tbody>
</table>
| 12:30 - 1:30   | 1. To develop an awareness of the characteristics of children from five to eight years. (5-8 years)  

2. To analyze the needs of children at this age. 

Using pictures of several children to discuss similarities and differences. 

Lecture and discussion. |
| 1:30 - 3:30    | 1. To develop classroom materials. | 1. Make mobiles.  

2. Make puzzles.  

3. Write short stories.  


2. Effective use of device.  

3. Can write experience charts. |
<table>
<thead>
<tr>
<th>TIME AND THEME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
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</thead>
<tbody>
<tr>
<td>2nd Day</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>8:30 - 9:30</td>
<td>Teachers helping teachers</td>
<td>1. To help teachers realize that they can teach each other.</td>
<td>Evaluation will take place towards the end, and will be based on ideas being used.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discussion of ways teachers can help each other. For example, possible ways:</td>
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<tr>
<td></td>
<td></td>
<td>a. List books or articles that may be of interest or benefit to others and keep in teachers' room.</td>
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<td></td>
<td></td>
<td>b. Have teachers prepare topics to be presented at weekly staff meetings.</td>
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<td></td>
<td></td>
<td>c. Develop a file of ideas that have been useful or of new ideas to be kept in the teachers' room.</td>
<td></td>
</tr>
<tr>
<td>9:30 - 11:30</td>
<td>The child from eight to twelve years. (8-12 years)</td>
<td>1. To develop an awareness of the characteristics of children from eight to twelve (8-12 years).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lecture followed by question and answer period.</td>
<td>1. Aware of ages and stages of development:</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>a) knows appropriate skills for each age.</td>
</tr>
<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td>11:30 - 12:30</td>
<td>2. To analyze and determine the needs of the child from eight to twelve years (8-12 years).</td>
<td>L U N C H</td>
<td>2. Can identify from a group of things those appropriate for this age group.</td>
</tr>
<tr>
<td>12:30 - 3:30</td>
<td>1. To develop non-traditional approaches to teaching.</td>
<td>Math - Bingo</td>
<td>3. Can plan learning experiences to combat problems encountered in various situations.</td>
</tr>
<tr>
<td></td>
<td>2. To teach games that can be used in the classroom.</td>
<td>Spelling - Password</td>
<td>Participation in games. Teachers' utilization of lessons, the discovery approach and non-traditional methods.</td>
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<tr>
<td></td>
<td></td>
<td>English - Sequence pictures</td>
<td></td>
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<td></td>
<td></td>
<td>Readiness - Dominoes</td>
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<td></td>
<td></td>
<td>Science - Collage</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(things in our country)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Devices made before</td>
<td></td>
</tr>
<tr>
<td>3rd Day</td>
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</tr>
<tr>
<td>8:30 - 9:30</td>
<td>*The teacher's role in the Nation-building process</td>
<td>To identify the role of the teacher as a change agent.</td>
<td>Participation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Debate and discussion</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Can teachers help build the nation&quot;</td>
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</tbody>
</table>

*Nation-building refers to the teacher's role in social change necessary for social, political and economic development to occur.
<table>
<thead>
<tr>
<th>TIME AND THEME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 - 11:30</td>
<td>The slow developer</td>
<td>1. To help teachers understand that children learn at various rates.</td>
<td>Short Quiz</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. To determine the factors that cause children to learn at various rates.</td>
<td>1. What is meant by human wastage?</td>
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<td></td>
<td></td>
<td></td>
<td>2. Why are some children slow?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. What things cause children to learn at various rates.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Can all children learn?</td>
</tr>
<tr>
<td>11:30 - 12:30</td>
<td></td>
<td>L U N C H</td>
<td></td>
</tr>
<tr>
<td>12:30 - 3:30</td>
<td>Techniques of helping the slow learner.</td>
<td>To develop techniques that would benefit the slow learner.</td>
<td>Using written case studies, have teachers determine ways of helping children. (5 teachers per group - 20 mins. each case).</td>
</tr>
<tr>
<td></td>
<td>To develop lesson plans for teaching the slow learner in a regular class.</td>
<td>Have teachers write a lesson-plan for a class and make special provisions for two of the cases previously used.</td>
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<td></td>
<td></td>
<td>Discussion of group reports and various approaches.</td>
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<td>1. Able to identify problems and determine ways of helping the slow learner.</td>
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<td>2. Develop lesson plans with special provisions for the slow learner.</td>
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<td></td>
<td>3. Leader, peer, and self evaluation.</td>
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<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td>4th Day</td>
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</tbody>
</table>
| 8:30 - 9:30   | To help teachers realize the importance of a positive relationship with their community. | Provide a list of interview comments which express the community's views of the teacher. | Interview questions:  
1. What is the role of the teacher?  
2. How do you feel the teachers in your children's school?  
3. Would you like to see teachers doing any additional things? |
| 9:30 - 11:30  | 1. To expose teachers to tools for observing children.  
2. To highlight the benefits of an observant teacher. | 1. Empty a bag containing a variety of objects, expose objects for three minutes, then have teachers list objects. Discuss and note how different people recall different things. | Develop an observation check list, and observe two children. |
<table>
<thead>
<tr>
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<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30 - 12:30</td>
<td>Partial defects</td>
<td>1. To understand the concept of partial defects.</td>
<td>Discussion on defects.</td>
</tr>
<tr>
<td>12:30 - 2:00</td>
<td></td>
<td>2. To analyze the impact of partial defects.</td>
<td>Reading test:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. To determine ways of detecting defects.</td>
<td>1. Read a passage and each time note errors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. To determine ways of minimizing defects.</td>
<td>a. ... in a normal way.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>b. ... with black patch on one eye.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>c. ... with gauze over both eyes.</td>
</tr>
<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td></td>
<td></td>
<td>Discuss eye test. How it is made. How it is used. Placement of child in class.</td>
<td></td>
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<tr>
<td>2.</td>
<td>a.</td>
<td>Work in groups of five. Give directions to group in four voice tones constantly getting softer, and have others follow, note hearing ability.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b.</td>
<td>Give direction to followers with cotton in one ear facing speaker.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c.</td>
<td>Give directions to followers with cotton in one ear away from speaker. Compare hearing ability on each occasion.</td>
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<td></td>
<td>Discuss ways to check hearing and placement in class.</td>
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<td></td>
<td></td>
<td>Discuss how children learn to speak in relation to hearing.</td>
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<tr>
<td>3.</td>
<td>Discussion:</td>
<td>When to get help for children and from where.</td>
<td></td>
</tr>
<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td>2:00 - 3:30</td>
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<tr>
<td>Children teaching children</td>
<td>1. To help teachers understand how children can help each other.</td>
<td>Press Conference: Theme - &quot;Can Children Teach Each Other&quot;. Use a panel of participants and have them answer questions, and others ask.</td>
<td>Participation as revealed by questions and answers. Observation.</td>
</tr>
<tr>
<td></td>
<td>2. To discuss approaches to children teaching each other.</td>
<td>Discussion of topic and the importance of teaching children to give and receive help.</td>
<td>Implementation of a situation in class and evaluation of outcome. (Observe from a distance and assign a specific task.)</td>
</tr>
<tr>
<td>5th Day</td>
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<tr>
<td>8:30 - 9:30</td>
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<td></td>
<td></td>
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<tr>
<td>9:30 - 11:30</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Impact of social and emotional problems.</td>
<td>1. To analyse various types of social and emotional problems which affect the child.</td>
<td>Discussion - What are the social, emotional problems that affect the society, family and children?</td>
<td>Participation. Ability to identify problem and develop strategy to limit its effects.</td>
</tr>
<tr>
<td></td>
<td>2. To analyze the impact of social and emotional problems.</td>
<td>Discussion of impact on learning. Use three case studies, in groups. Determine ways of limiting impact and causes of problem.</td>
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<td></td>
<td>3. To develop ways that would limit the effects of social and emotional problems on learning.</td>
<td>Group presentations and discussions.</td>
<td></td>
</tr>
<tr>
<td>TIME AND THEME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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</tr>
<tr>
<td>11:30 - 12:30</td>
<td>LUNCH</td>
<td></td>
<td></td>
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<tr>
<td>12:30 - 3:00</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Material</td>
<td>1. To finalize materials started.</td>
<td>Develop and make material.</td>
<td>Outcome.</td>
</tr>
<tr>
<td>Development</td>
<td>2. To develop new material for the special child.</td>
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</tbody>
</table>

**6th Day**

<table>
<thead>
<tr>
<th>TIME AND THEME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 9:30</td>
<td>Topic and activity determined by teachers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30 - 11:30</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1. To meet needs of teachers.</td>
<td>Discuss topics requested by teachers.</td>
<td></td>
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<tr>
<td>2. To provide final review.</td>
<td>Review points that need attention.</td>
<td></td>
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</tr>
<tr>
<td>11:30 - 12:30</td>
<td>LUNCH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:30 - 3:00</td>
<td></td>
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<tr>
<td>To evaluate the entire project.</td>
<td>Do post-test.</td>
<td>Analysis of results at a later date.</td>
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<tr>
<td></td>
<td>Discuss project using tapes for participant evaluation without facilitators.</td>
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<td></td>
<td>Express thanks to participants.</td>
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</tbody>
</table>
Actual Plans Utilized in the Field Testing

Day 1

Exercise: "Who Am I?"
Discussion of program goals.
The pre-school child - The child from 0 to 5 years.

Day 2

"Teachers helping teachers" (Debate - "Can teachers help teachers?").
The child from 5 to 8 years.
The slow developer.
How to write a case study - What to look for when observing children and how to record your observations.

Day 3

The teacher's role in the nation-building process.
The child from 8 to 12 years.
The child with partial defects:
- major emphasis on vision and hearing
- minor emphasis on speech and co-ordination.
- experiential role plays to depict effects of handicaps.

Day 4

The teacher and the community.
The child with social and emotional problems.
Techniques for helping children with special needs.
Evaluating children (Experiential learning - testing of teachers - discuss testing techniques and the value of testing).

Day 5

Children can teach children.
Non-traditional approaches to teaching - using games, trips, classroom aids, case studies, role plays, community resource people and others.
Developing classroom materials.
Individual problems with special children
- Small group presentations.
Day 6

Can teachers really be change agents?
   The importance of their role, and how to force change and get results. (This theme was chosen by teachers).
Material development.
Case studies and evaluation of projects.
How to incorporate all subjects under one theme.
Evaluation of program.
The Cycle of Human Development and Deviations from the Norm

The cycle of human development is a continuous process. All growth is based on previous growth, thus the growth process can be described as a paradoxical mixture of creation and perpetuation. Birth marks only the arrival but the true beginning is conception; and it is from this point that the growth process begins.

Each stage of a child's development is characterized by a layering of his experiences one upon the other. This means that each degree of motor development, muscle co-ordination, and cognition is dependent upon the previous learned experience. As we look at the development of the "normal" child, keep in mind that at any one stage the normal development can be retarded by a wide variety of factors which we will deal with more extensively later.

In this paper we will outline some of the major stages of child development. As supplementary reading material the paper does not handle the subject in minute step-by-step progression. It provides a general introduction to the subject. Readers must recognize that since no two children are exactly alike we cannot say that all children at any given age will have specific skills. At fourteen months most infants are able to walk. The average child usually walks between ten and eighteen months. Therefore, if a child is not walking at sixteen months, he is not handicapped. A child of seven years can normally identify many objects in almost any room of a house. However,
if the child were to visit a house that was furnished to represent the style of 1805 and had difficulty identifying many of its furnishings it would not signify a learning problem. The furnishings may not be objects with which the child is familiar. When comparing children with what is generally considered normal, we must take into consideration the physical, social, and environmental experiences to which the child has been exposed.

Muscle Development

To truly look at a child's development consideration must be given to his muscular system. It is known that a considerable amount of activity occurs during the prenatal period, which is probably indicative of characteristics that will be displayed at a later stage. Soon after birth children indulge in active posture which involves their eyes, head, arms, legs, and trunk. By eight weeks they use their eyes to aid in exploratory inspection. Inspection will be more detailed by twenty-eight weeks when it will also involve manipulation of the object. Not only does the child explore objects, but from forty weeks when he starts to creep as he broadens his horizons there are fewer things that he can reach that he will not touch. He will pick up and poke everything with his newly acquired index-thumb prehension. Exploration now involves even the holes and grooves of an object.

The ability to stand alone for a short period is a great achievement for the one year-old, but it becomes more exciting from fifteen to eighteen months when walking starts inspite of falls and tears. At the end of this period he can walk and run as he explores
all of mother's cupboards and re-arranges them. He is delighted when manipulating books, and when looking at pictures, people, and aeroplanes. Between two and two-and-a-half years, the child learns to respond to rhythms by running, jumping, galloping, and swinging to music. Drawing and building are also two favourite activities.

The four-year-old is a busybody, covering more ground than ever before. He enjoys activities requiring balance, large blocks, paints with precision, though he uses fewer objects than he did at three. At three he was at a most delightful stage and enjoyed giving and taking. At this point he began to have an increased appreciation for language. The four-year-old who is best described as out of bounds, is this way in all forms of behaviour. He is out of bounds in his physical activities as well as in his language. He loves to print his name on all of his work in crude letters. As the tricycle is discarded, the five year-old not only masters his balance on a bicycle but gains mastery over his large muscles, and advanced control over his small muscles. Eye, hand, and feet coordination have reached new maturity, as he manipulates his environment. When reading he delights in underlining familiar words, copying familiar forms, and drawing and printing.

During the next three years, the child is constantly in motion as he learns caution, rhythm and grace. During this period there is a great desire for bicycles, roller skates, and ropes. The period ends with the girl running into moving ropes, while the boy enjoys cricket, volley-ball and football. The child at this time needs some assistance and direction to complete tasks. He handles
and attempts to utilize tools and materials, however, prior to eight he uses a heavy grasp. By eight there is increased ability, and smoothness of eye-hand performance as he masters the materials and tools with which he works.

Confronted with unfamiliar tasks during the intermediate age, the nine and ten-year-old works and plays hard. He is more skillful in motor performances and enjoys displaying this skill. More interest is now shown in competitive sports, and in overdoing. Earnestly engaged in mastering skills, he works with channelized intentness and is not easily diverted from one activity to another. Relaxed, casual and alert he takes in stride his choices and challenges.

The child up until twelve is exuberant and energetic. He operates on a store of physical energy which is easily released and quickly renewed. He has great difficulty knowing when he is tired and or when he has had enough. At this time, loud and boisterious, he does not understand why adults object to his fun. Though his growth slows down, his muscles and bones are developing rapidly, while his strength almost doubles. His body at this time demands activity. This store-house of activity and abundance of energy can be put to constructive use, since children at this age learn better when active. Muscle coordination is gradually being harmonized as the neuromuscular system matures. Peer group pressure demands mastery of certain skills which children learn from each other – football, jump rope, boxing, etc. Success in sports at this time is less important to girls than to boys who lose status if they fail, and may be called "sissy". The rate of growth differs between boys and
girls at this age, with girls maturing faster. For girls puberty may come between ten and early adolescence while for boys it may be two years later. It is for this reason that boys and girls should not be compared at this age since comparisons could have negative effects on children of either sex.

Social Development

Closely bound to the milk that nourishes him, the bassinet that contains him, and the hands that hold him, the child progresses rapidly into a social being. Through sight, touch and hearing, and ceaseless experimental contacts with the world he develops a sense of body-self-identity. The social insight grows and patterns itself through the succession of interactions between the child and someone else. The social smile that appears at eight weeks, changes at twenty-four weeks when he learns to discriminate strangers. He demands more of mother at forty weeks, but also shows special positive response to her, as he withdraws from strangers.

The one-year-old is very social. At the height of social give and take he enjoys kissing. He is however, very shy with strangers. During the next six to nine months he learns to take run of the house. He is interested in household activities and knows which object belongs to each member of the household. With special demands on mother, all other children are called "Baby". At this time however, he enjoys solitary play, as he shows affection for his toys.

More dependent on mother, he clings to her and expresses affection. The family is nearly the whole social world of the two
year-old. An acceptable member of the household, he can say "Mummy", "Daddy", and the names of his siblings. Not ready for cooperative play, he enjoys parallel play with other children. As his sense of self increases, especially in relation to his abilities, the two and a half year-old enjoys talking about himself. During the next year temporary attachments begin--interest in marriage and marrying. In the development of a strong sense of family and home, parents are quoted as authorities. Helpful in the home, he wipes dishes, runs errands and he also enjoys visiting, parties, and trips.

Expanding the sense of self the four year-old is noted for bragging, boasting, and out of bounds behaviour. He begins to recognize other children as separate entities, like himself in some ways. Cooperative and imaginative group play occurs frequently as the child now enlarges his group of special friends of the same sex. The family, as earlier, continues to be all-important. He will begin to adjust to school in the next year, as together they will combine to form the cultural workshop which will prepare the child for the future. Five is rather an impersonal age. The child is more interested in the names of others, and his age, than his own name. Boys are interested in marrying their mothers as she is the center of their world. Though girls tend to like school more than boys, neither group reports on school activities at home.

At six the child is the center of his own universe; knows everything, can do everything, and owns everything. His name is important to him, as he displays possessive, aggressive, domineering, and stubborn streaks. Emotionally he is excitable and defiant; while physically and
verbally he is aggressive and belligerent, and resistant when attacked.

There is little organization in group play though he can take sides. There is little concern for the welfare of the group, considerable time is spent with constant friends. There may be some adjustment problems to first grade.

More withdrawn into himself the seven year-old is self-conscious, he absorbs impressions from what he sees, hears, and does. Afraid of losing his identity, he is sensitive about his body, years, and mistakes. His world is broadening and he is trying to place himself into the social and physical world. He wants his own place in the family and school group. Thoughts about death are constantly on his mind, as he is afraid to die. Very proud of family possessions, he makes comparisons with other people's homes. Group play is still not well organized and still primarily for individual ends. However, group cooperation is beginning. Relationship with teachers is important in the adjustment to school. Though the child may like school, he prefers to be accompanied by other children rather than his parents. He accumulates his school products and only takes them home occasionally.

More outgoing, the child at eight and nine, finds himself in his environment and becomes more independent, self-sufficient, dependable, and trustworthy. Interested in his own anatomy he is busy with his own concerns, and has less time for his parents' demands. His chief interest is in relationships with other children, he is active in things concerning school and his peer group. More concerned about others, he is at times anxious to please, and wants to be liked. This results in him at times being too demanding of himself. This
may be the last age of wholehearted enthusiasm about family outings. Though the child likes to be away from the family, they are very important. He may be sensitive as to how family possessions and relationships compare with others.

A more stable individual, the child displays more obvious signs of maturity between ten and twelve. Displaying a strong dislike for members of the opposite sex, they become more involved in single sex activities. They also at this time move further and further away from the family. More knowledgeable, he is better able to participate in group activities and though more independent of adults, the child is more dependent on his peer group. The importance of friendship ties sometimes causes clashes with adults since the demands of adults and peers are sometimes conflicting.

This too, is the age of informal, same-sex clubs. These are often short-lived, they have their own secret rules and passwords, with special names. It is at this time that the sexes separate.

**Behaviour Characteristics**

A child cannot express how he feels, even when he has learned to talk. This is understandable since adults have difficulty expressing their own feelings. Though children may not verbalize or express their emotional feelings, it is shown in many visible forms of behaviour. Life begins with a cry and in the life of the newborn he cries approximately two hours every day. He cries from hunger, pain, discomforts and denials. If he could spend more time with his mother he would cry less. In his first year he is raised on a
schedule. Through his various cries he learns to assert himself, as they become more meaningful to mother. Crying is an expression which can be interpreted in terms of developmental determinations. In the first few months the infant cries on slight provocation. By sixteen weeks there are fewer and shorter crying episodes, because at this time he is in a state of equilibrium. At thirty-two weeks he becomes overly excited quite easily. There is a close interplay between crying and laughter. During the period of forty to fifty-two weeks the child cries less. Crying occurs more when the child becomes frustrated, or needs attention because of a specific irritation. But by one year, the infant is a wonderful social being. Loud crying and thrashing of arms and legs occur when frightened or angry. Thumb-sucking is very strong at this age, and possibly some slight masturbation. Pre-sleep rocking in crib, bed shaking, head banging, or head rolling are all tensional outlets. These tensional outlets reach a peak at eighteen months, and now include temper tantrums as the child casts himself on the floor and hits, kicks, and struggles. He may become rough with other children and other objects. Children at this age are often afraid to see mother leave and of mechanical objects. He will respond to "NO, NO", but loves to have his own way.

There are fewer tensional outlets at two. The child is sensitive, and tearful. Though not characteristically aggressive, he will engage in tug-of-war over materials. At this point he is afraid of rain, thunder, wind, the dark, animals, strange noises, trains, trucks, and a flushing toilet. Separation from mother is painful. At two and a half, aggressive acts are sudden. When attacks
are on other children, the intent is to hurt: bites, hits, kicks, especially in disputes over toys. He will hit at strangers or grab objects from others. Anger at this time is chiefly caused by interference with physical activity or possessions. He may need physical restraint, since verbal directions are seldom enough. Neither praise nor blame are very effective.

The three year-old is more equable. There is less crying and aggression, while there is increased self-control. His increased use of language may take the place of physical aggressiveness. Anger occur more because of interference. The child at this point fears the dark, bogey man, policemen, old people, and parents going out at night. Responsive to directions, he tries to please and conform.

During another period of aggressive behaviour, the four year-old bites, kicks, throws, brags, boasts, and calls others names. Inspite of this, however, much crying and whining occurs. Words such as "scared" and "afraid" are now part of his vocabulary. He enjoys being mildly frightened by adults in play. Less anxious to please, obey, or conform, he understands that rules and restrictions are necessary. Verbal restrictions are now better than physical. He likes to receive competition, it helps to motivate him. The four year-old cries and whines freely. His behaviour patterns however, are certainly maturing and result in a much better five year-old.

Less tearful, moody, fearful, or aggressive, the child at five is more sociable. Serious, business-like and realistic, he is friendly, affectionate, sympathetic and helpful. Five and a half
marks the transition from calmness to aggressiveness of six years. From here until seven he is destructive in play and with objects, makes verbal threats, calls other names, resists directions, and is very cruel. He is a real "cry-baby". He cries at everything. His fears have increased, including being late for school. Because of the tendency to respond negatively to demands, indirect approaches are usually more effective. He loves praise, and wants approval and will resist punishment.

The seven-year-old is able to pull himself together, he is in a sensitive phase which may cause sadness and tears. His emotional instability causes him to vary from sweet and good to cross and tearful. Less aggressive he may still threaten others verbally--"to beat somebody up". He demands fair play and will object by saying, "That is not fair". A great worrier, he worries about not being liked by parents, teachers, playmates, being late for school, and finishing school work. Suggestible and sensitive, he cares what others think of him; and responds well to praise. He likes warnings and wants to know the reason for punishment. It is much easier for him to make decisions even when both alternatives are appealing. He takes less things to school to show, however he is more interested in his possessions and takes better care of them.

The inquisitive eight year-old invades his environment to gain new experiences and insights. The eight, nine and ten year-old is at his best giving encouraging evidence of man's ability to make peace not war. Sensitive to pain he cries mainly when emotionally over-taken, angry or wrongly accused. There are few fears at this time, however,
he still fears fighting, failure, and not being liked. Girls also fear strange men. Though they also worry less, they worry mostly about school failure, trouble at home and the demands of competitive situations.

Between ten and twelve, membership in the group is of prime importance, and from here on the influence of parents on the child diminishes, while the peer group's influence strengthens. Sex differences become pronounced at this age, however, it is more objective and matter-of-fact, and does not have the enormous emotional charge found during adolescence. At the end of this period, there appears to be an interest in the affairs of the world and other people. There is a genuine desire to talk about issues and problems. This is the point when parental values begin to get questioned and the youngster begins to acquire a personal conscious value system. At this point boys tend to put friendship, excitement, recreation, and family at the top of their value list, while girls put friendship, family life, excitement, and recreation at the top of theirs. What friends and other adults say also affect their behaviour and influence their ethical sense. For the first time the child begins to understand why things are right or wrong, just or unjust. A sense of adventure permeates this period of childhood and is part of the maturing process. The child at this age loves to belong to groups and can benefit from boy scout and girl guide organizations which meet many of its needs, dreams, and desires and still permits the child to be guided by adults. The child at this point demands to be treated as an adult although at times he will assume authority for major things and at other times he
will ask permission for small things. He likes to have his own way, although a threat of deprivation of a desired object or activity will bring him back in line.

**Language Development**

The language development of a child is also another significant feature. Man, like no other animal has the ability to communicate through language. However, at birth the child is only able to make small throaty noises and cry. By one year the child is able to say only two words other than "dada" and "mama". However, by eighteen months, he has a vocabulary of a few favourite words: "Oh my", "all gone", "bye-bye", and "ta-ta". Gestures help to enforce his language, but his entire vocabulary comprises only about ten words.

By three years there is some command of language. The child can now use words to control his environment, and can be controlled by it. The four year-old is out of bounds verbally: talks a great deal; exaggerates, boasts, and tells tall tales. "Why", and "How", are key words in conversations with adults. The five year-old likes to talk and will talk to anyone. He enjoys using new and large words. He can use language thoughtfully and conformingly. He can define simple words, though he cannot distinguish reality from fantasy.

Aggressive behaviour is displayed even in the language of the six-year-old. He uses language aggressively: threatens, contradicts, argues, and calls others names. He likes to use big words, usually with good pronunciation and fairly accurate grammar. He can accept
correction. Stuttering is especially common to boys. Complainingly, the seven year-old uses language, "Nobody likes me", "They are unfair". Interested in the meaning and spelling of words, he reads and spells a great deal. He now uses slangs and cliches fluently.

Out of bounds verbally, as he was at four, the eight-year-old talks a great deal. He uses language almost as fluently as an adult, but has secret passwords. There is less belief in magic, but more in magicians. Thus he can verbalize how tricks are performed. The nine and ten year-old is no longer out of bounds. Language is now used as a tool, which is sometimes expressed in subtle and refined emotions. The emergence of independent, critical thinking brings considerable verbal criticism to the actions of parents.

With a better grasp of reality, the child between ten and twelve knows there is no 'Santa Claus' or 'Good Fairy'. More concerned with the world he lives in, he engages in conversations about current topics and expresses his position. Towards the end of this period he enjoys being in the company of teenagers, and looks forward to becoming a teen. This is sometimes a period of conflict during which he finds himself wanting to be treated as a grown-up and at other times a child. Adults also seem to make the same demands on him: "You are too young to stay outside after six o'clock", and a few minutes later, "You are old enough to know better". This phase continues for the next couple of years.

The language of the child reflects direct growth. His sense of self becomes more discriminating. He looks upon himself and his
parents discriminately as he reviews his philosophic outlook, as he looks upon the changing world in a changing light. To do justice to the child, we must look at growth in terms of developmental maturity and environmental conditions. This is to recognize the cycles of his life. A child's performance must be considered in terms of his developmental history and his unique growth patterns, not expecting him at any age to respond like other children, but like himself. We must understand why he acts as he does, so as to eliminate anxieties and frustrations between the child and adults.

Deviations

The foregoing is an overview intended to set broad outlines of developmental patterns. It attempts to describe what is often referred to as "normal" or "norm". However, it is necessary that this concept be understood. Normal or norm means rule, standard, or average. It is measurable by the frequency of occurrence. The majority of children will develop within a fairly set period of time. In other words, it would be normal for a child to begin to walk anywhere from one to two years. Whether or not a child develops before or after this time is of course dependent on the total development and environment of the child. The failure to develop cannot be viewed in a vacuum. Developmental problems can be viewed in a number of ways which teachers, parents, and other adults must become cognisant of.

Although the newborn child is not able to clearly see an object for the first couple of months after birth, he does move
his eyes about. A loud noise will cause a jerk or convulsion that is strong enough to be visible. If the child is breast-fed, he is able to detect feeding time by smelling the milky secretions before actually tasting the milk. He will move even if the movement has no specific direction or expected gain.

It is hard to analyze the above because of the many variables at work. A child's eyes will fail to focus for as long as a year if he is afraid, or uneasy. A hearing deficiency may not be detected because of random movements - what is perceived as a reaction to outside stimuli may only be natural spontaneous movements. But it is important for the parent to be aware of these variables; there is a better chance for correction at an early age if suspicions are confirmed or dispelled.

The very young child learns to trust his sense of touch because it is the only sense that he can really rely on. Smell is also important but there are many more things that can be touched. An awareness of something "safe" is confirmed by touching, if that something is obscured and cannot be touched, a look of anxiety can be seen on the child's face. A child who touches the oven when it is hot after being told not to, quickly learns why his parents told him not to. This is a sign that the child has built up a series of expectations and responds when those expectations are denied.

The child at birth until five months has no control over his head or limbs if he is being opposed in his efforts to move. He cannot hold up his head, his body lacks tone - with the exception of his palm. He can and will grasp whatever is placed within it.
By the time he is four months old, he can be felt resisting when he feels his body being manipulated. He will try to do some things alone, steadfastly clinging to his sock although he cannot master putting it on. By nine months he is sitting up, and his desire to get things that are not being given to him is strong enough for him to attempt activities his body is not ready for. At this stage in life some parents are extremely protective of their children; they are unable to allow the child to go at his own pace. This attitude persists at times throughout the child's 'babyhood', and effectively stifles the desire to grow. This fear on the parents' part is transmitted to the child and can create an atmosphere of tension, so much so that the child never learns to attempt anything on his own. The child at two is ruled by his desires; when he is denied things, he may fight to take that which he feels is his due. When this happens among other children he should be disciplined. However, if he has no experience in being refused in the home, he will not understand why he cannot have what he wants. If this pattern is established at the age of two, at the age of five when socialization outside the home is occurring the child will not be able to cope. Behaviour patterns will be those of sulking, tantrums, destructive modes of retaliation and other forms of negative aggression. Pampering a child will have negative results not only for people with whom the child comes into contact, but also for the child himself. Allowing the child to revert to infantile forms of behaviour has almost the same inhibiting effect on growth. Those behaviour patterns are carried over into an age
where they are no longer appropriate, e.g., allowing a child to sleep with lights on when he is at an age where the initial fear has totally been blown out of proportion in the face of constant reinforcement. This sort of accommodation allows the child to postpone acceptance of mature behaviour in spite of his increasing mental and physical development. Trying to keep the child a baby by speaking to him in baby talk retards his speaking abilities. A child learns to speak by imitating what he hears. If all he hears is 'wa-wa', for water, and other forms of baby talk, when he begins to interact with others outside the home, he will not speak knowing that he sounds different.

Children from seven to nine are eager to invade their environment. They are discovering new things that exist outside their home. This natural curiosity can be inhibited by the treatment of the child within the home. Again fearful parents instill a fear of new things and of new people in the child. Strangers are always strangers even when the child is exposed to them daily in school. Children who have had little experience in trying and failing can react in several ways, all extreme. Between seven and nine is when the child begins to take pride in his achievements. If he is afraid to try, he develops a sense of low self-worth. He also becomes withdrawn and a target of those children in his peer group to whom different is 'funny'. The teacher looks upon him as being unable to produce and his grades suffer. The child can also feel that he must prove himself or remain an outcast within his peer group. He will try
to do what the group does even if it is wrong or he lacks the skills. His parents begin to take on the appearance of villains for dooming him to this position of scorn. He may choose to avoid dealing with the problem altogether, in which case his standing with the peer group becomes more compromised, or he may come into open rebellion with his parents.

Parents sometimes take the opposite track. The child must be better than others. He is pushed to perform (and in this case, the word is appropriate) before he is ready. He is pressured into walking, talking and being toilet trained earlier than the norm with no consideration being given to the natural development of his muscles. He is an object to be shown off before company and is made to feel like a possession rather than a person. If the child of eleven or twelve is still striving only to please his parents and constantly demanding attention from others he will have difficulty with his peer group and at school. When he does not get the attention he will wonder what is wrong and will soon discover that he lacks an identity. Because of his desire to over-achieve he becomes isolated from his peer group. Soon he will not venture outside the safe circle where the expectations of his parents are clearly defined. This is the child for whom failure at school is a totally debilitating experience. He is a perfectionist, and tends to have compulsive behaviours. He is at best when he is told what is expected of him, and treats others the same way.

Children between nine and twelve are developing friendships.
Girls see belonging or not belonging as a major crisis; discussions about both boys and growing up take priority. Boys, on the other hand, are intent upon sports. Becoming a member of the team, being invited to go camping by a best friend are important. Children who are neglected during the first years of life are not able to fit into this phase with ease. They have never seen or felt what it is like to share or give attention, and consequently find it hard to enter into a spirit of shared confidences. They find it hard to express feelings as they have not been exposed to that type of home environment. Father and sons can feel hurt and pain, and adults and children cannot know some things.

All of the described behaviours are based on, for the most part, nurture. In other words, the child is born with fears that are designed to protect him in his initial helplessness. It is the responsibility of parents and adults to aid him in learning about his environment so that the dangers are coped with in acceptable ways; and the enjoyable experiences of growing and learning are incorporated as well. The deviations in behaviour patterns previously mentioned, while taking place during the early years, are not limited to those years. The ramifications extend throughout childhood and sometimes beyond. It is essential that teachers dealing with children who exhibit these behaviours recognize them and not attribute them to the wrong cause. There are times when the teacher will recognize the problem, but not the source. Whereas recognition is but part of the solution, it is the necessary first step. Further examination
can determine whether the problem is physical, e.g., loss of hearing that has not been detected, loss of vision, speech defect with physical basis (cleft palate), or emotional and/or social maladjustment.

Every child is unique, but there are some behaviours that are common to most children of a specific age. When a child's behaviour deviates significantly from the norm, attention must be paid to the child. If an eight year-old cannot walk without bumping into objects, or a ten year-old cries every time his parents leave, certainly these children have special needs that should be investigated. The same is true if a six year-old cannot walk up a stair case, or speak in sentences. The sooner adults detect the problems of the children, the greater the chances of minimizing or eliminating their existence. Attention therefore must be given to all areas of the child's development.
BIBLIOGRAPHY


Helping the Educationally Handicapped

Every teacher in every class has had experiences with children who have had serious difficulty in some area of the school curriculum. Some teachers have had children who have faced difficulty in specific subject areas; while others have had difficulty with specific concepts. This can be seen when one child, e.g., John constantly finds "Arithmetic" difficult and needs to be taught this subject at a slower rate than the rest of the class, with extra help. On the other hand, the teacher may find another child - Bob - is usually able to grasp most of the material taught in the arithmetic class but finds it difficult to understand "percentages". This child, then requires extra help merely to understand this concept. This is a normal situation, but one which calls upon teachers to use extra time and skills. In some instances some children have difficulty with all subjects of the curriculum. When any of the aforementioned situations occur, remedial teaching is sometimes necessary. Remedial or supplementary teaching, is an integral part of good teaching. It is a technique that teachers at all levels - from first stage to teachers' college and university - should master, for it is needed at all levels.

A review of research shows that in every country there exists a group of children that can be classified "exceptional". Lloyd Dunn in his book Exceptional Children in Schools writes:
An important key to excellence in teaching is an understanding and acceptance of all children and their individual differences... Increasing numbers of teachers now recognize the special abilities, or their limitations - physical, intellectual, social, and emotional.

In his book he writes about eleven types of exceptional children - educable and trainable mentally retarded; the gifted; the emotionally disturbed and socially maladjusted; children with sight, speech and hearing problems; the crippled and the neurologically impaired. Other terms are used to describe the "exceptional" child, not utilized by Dunn. Some educators and writers use terms such as: slow developers, educationally handicapped, learning disabled, the child with special needs, the special child, and others. For the purpose of this work specific attention will be paid to children classified as "educationally handicapped".

The educationally handicapped children to whom attention will be paid are sometimes referred to as the slow developer, the partially handicapped, and the emotionally and socially disturbed. R.C. Orem in his writings on the "special child" which includes the educationally handicapped states:

"Although terminology in the field of special education is still in the process of development, we can for our purpose define such a child as follows: one who deviates from normal physical, intellectual, emotional or social patterns to a degree warranting special consideration. ... the deviation can be in a positive direction as well as negative ..."

Individual differences in learning abilities require that techniques be developed to meet the individual's needs. Equal educational opportunities does not mean that all children should be
taught the same thing at the same time; it does mean, however, that all children should have an equal chance to develop to the best of their abilities. In the same way that children in a family— even twins—who are given the same food may not be able to eat the same amount, or may not all get fat, children taught the same lessons may not be able to understand what is taught in the same period of time or be able to display the same amount of ability.

**Characteristics**

The development of a child is seen as a series of stages, each becoming more complex; increasing his experiences; and influencing how he copes, handles, or adjusts to the next developmental stage. There are two major ways of looking at development. The first way, projected by Arnold Gesell is the "normative approach". In this approach the child at each age level is expected to be able to solve increasingly difficult problems and master more complex skills. The second view was presented by Piaget which says that the child uses different methods to solve problems as he develops; even though the solution to the problem may be the same. Piaget says that each experience the child has is like a building block all contributing to the house being built. If we combine these two approaches we can visualize development as a step-like process. We can then say that the number of experiences that a child has and the variety all play a major role in his development. In order to understand a child or his learning problems, we must understand the factors past and present that affect him and his learning. We must understand why he sees the
world as he does; and why he responds in a given manner.

The educationally handicapped child is one "whose stages of development has either broken down, or are noticeably delayed." The problem of the child which may be physical, social, emotional and/or mental can occur for a variety of reasons. The problem must be identified, and a plan developed to minimize the child's handicap.

The three types of children that are educationally handicapped that we will be concerned with are:

1. **The Slow Developer** - can be described as the child who may demonstrate delayed physical, emotional, and intellectual growth and/or behaviour; and whose educational needs are therefore very different from the majority of children. Such a child may have difficulty controlling his small muscles and therefore display poor penmanship. A child may find it difficult coordinating his hands and feet at eight, in a simple march.

2. **The Partially Handicapped** - child is one who because of some physical handicap suffers varying degrees of impairments which dramatically affect his education and development. Such handicaps may be seeing and hearing.

3. **The Emotionally Disturbed and Socially Maladjusted** - child may be one whose personal problems prevent him from adjusting to regular classroom situations. Their overt behaviour may cover the gamut of extremes, ranging from aggressive destruction to morbid withdrawal.

Though these children can be placed into three sub-groups, they share many common characteristics. The characteristics though numerous can be grouped into three general categories: biological, psychological, and/or environmental. The biological factors include disorders or malfunctions in the area of vision and hearing; glandular
dysfunction; dominance and/or laterality confusion; disorders of the central nervous system; and many other physical problems.

The environmental category includes such factors as instructional inadequacies, cultural deprivation, and pre-school experiences. The psychological category includes such things as emotional problems. It is important that those who work with children be able to identify these children and their specific problems.

Some educationally handicapped children differ significantly from the average child in physical characteristics. The child may be very thin or very fat which may be the result of a glandular problem or an inadequate diet. The fact that these two characteristics are very obvious may lead to peer group taunts along with the physical problem. Poor motor coordination is another characteristic that some children may display. The inability to coordinate their large muscles is seen in their inability to run, skip, or jump at eight years, and in the child who constantly bumps into things when walking. Limited control of the fine muscles can sometimes be seen as the child attempts to handle a pencil, scissors, or any other small object. Though all children will not master all skills at the same age, attention should be paid to children whose physical characteristics differ significantly from those of their peer group.

There are other factors that affect children's learning. Poor health or a poor diet can severely retard a child's progress regardless of his potential and willingness to try. That children attend school with these two problems and their effect are well known
facts. Frequent absence from school is another factor that creates difficulties. Though most of the points already mentioned can be easily noticed, there are some less noticeable areas that affect children. Vision, speech and hearing problems are serious and sometimes go unnoticed and unattended. All children should be tested in these areas, especially vision and hearing, since most learning requires the use of these senses. The following are observable symptoms that indicate that a problem may exist:

**SYMPTOMS FREQUENTLY OBSERVED IN READING**
- losing place while reading
- avoiding close work
- poor sitting posture while reading
- holding reading material closer than normal
- frowning, blinking, scowling, and other facial distortions while reading
- excessive head movement while reading

**OTHER SYMPTOMS**
- body rigidity while looking at distant objects
- tending to rub eyes
- tilting head to one side
- thrusting head forward
- tension during close work

**SYMPTOMS THAT MAY INDICATE A HEARING PROBLEM**
- earache (frequent)
- faulty pronunciation
- tendency to favour one ear
- breathing through mouth
- complaints of head noises or dizziness
- unnatural pitch of voice
- inattention or poor scholastic achievement
- frequent rubbing of the ear
- blank expression when directions are given

It is probably safe to say that if more than two or three of these symptoms exist, a child should be referred for professional evaluation and treatment.

Some children fail to achieve because their limited ability does not permit them to keep up with their classmates; others fail apparently because they are bored with the too slow pace of instruction; still others fail for a wide variety of reasons ranging from physical and psychological problems to too limited experiential background.

What children of any given age group are expected to do is determined by the things the average child of that specific age range can handle.

Thus in analyzing maximum development and optimum progress in a class one may find several types of groups of children who are underachievers for a wide variety of reasons. The following are some types of groups:

1. The Child with Average Capacity - On the basis of the capacity to learn, this type of child should be able to master the skills of his age/grade placement. When failure occurs repeatedly, the outcome follows this sequence:
... in many cases failure leads to frustration and frustration leads to – or complicates existing – emotional problems, which in turn interfere with further attempts to learn and create still more frustration. Thus, the difficulty may become chronic, and as failure begets failure a severe learning problem is created.

2. **Slow Learners** – Some children are categorized this way because of their limited capacities, and therefore cannot be realistically expected to achieve at their chronological grade level. Of course some slow learners may also not be achieving at a level in keeping with their capacity.

   It is all too common for slow learners to get off to a bad start toward mastering the basic skills because at the time they enrol in first grade they have not yet reached a level of mental maturity that enables them to respond successfully to typical beginning instruction. When a child is 'ready too late' he is likely to get caught in the cycle of failure-frustration-more-failure-greater-frustration that leads to both underachievement and severe learning problems. ... slow learners in general are likely to respond best to teaching that is adapted to their level and rate of learning.

3. **Bright Underachievers** – Some children who are achieving at their age/grade level are underachievers since they may not be achieving at capacity level. It is important that teachers be able to identify this child since the lack of challenge often results in the child's failure to achieve his potential. This lack of challenge, and praise for brightness can lead to emotional and psychological problems for the child and discipline problems for the teacher.

4. **Reluctant Learners** – Like the bright child, the reluctant learner may function below his capacity because of a lack of motivation.
The fact that the things taught at school are uninteresting or from his point of view unrelated to life provides no stimulation.

Often they can be reached by teaching what is designed to stimulate and develop interest. Occasionally they require instruction that is, essentially, individualized remedial help before they can make optimum use of the skills and abilities they possess.

With children from poor homes, this sometimes results when they look at the cycle of poverty within their families, and those members who failed inspite of their use of education as a means to gain social mobility.

5. **Children with Limited Experiential Backgrounds** - For many of these children the language patterns, behaviour expected, and topics discussed at school are alien. Some children come from homes where books are noticeably absent; conversations with adults seldom occur; and discipline permeates the atmosphere. "Children must be seen and not heard," or "Ask no question and you will be told no lies", may be family mottoes. For these children if attempts are not made to bridge the gap between their world and the school's they are certain to have additional problems.

**Emotional and Social Roots that Affect Learning**

Two additional characteristics often common to educationally handicapped children are emotionally and socially rooted. These problems may stem from any of the previously mentioned setbacks. They may also result from personal problems. The socio-economic status
of the family may lead to the development of an inferiority complex when the family is poor or a superiority complex when the family is of some means. On the other hand, the behaviour patterns and health conditions within the family can have its impact; or for other children a major incident in their lives may leave scars that will require special attention for removal, e.g., death, sudden departure of a loved one, or the mental condition of a family member.

It is important that teachers become aware of the characteristics of the educationally handicapped. It is only through an awareness that teachers can move to the next stage to help the child. However, as teachers identify the problems, an attempt must be made to understand the causes; as well as means for minimizing the problem.

Factors that Affect Learning

A good doctor is often considered to be one who is able to identify the illness of his patients; determine the cause; and prescribe treatment to curtail the ailment. It is not enough for a doctor to be able to identify the symptoms of malaria. It is important that he be able to prescribe for the sick and to be aware of the causes and effects of the diseases. If he does not know that he must report the case to the public health department and then attempts must be made to locate the anopheles mosquito, the community will face serious consequences. The same is true if a doctor identifies a case of typhoid. To be effective, he must know how to prescribe and how to curtail the disease from spreading.
In like manner, if teachers are to be effective they too must be able to identify the children who need special attention. They must know what symptoms indicate what problems; be able to prescribe for individual differences; and know the causes of the problem, or know that it exists in order to refer the child so that another can identify and prescribe. If this is not done and the child is left unattended, damaging effects will be felt by the child, the class, the family, and the society.

The home situation should be considered when trying to determine the roots of children's problems. The prenatal environment is psychochemical. In a normal pregnancy it is essentially the same for all human beings - darkness, wetness, and silence - as the unborn lies cushioned against shock in the womb of the mother. However, not every infant has the best prenatal environment. Some children are unwanted prior to conception; others are conceived to immature parents - especially mothers - who fail to pay proper attention to adequate health care - proper diet, exercise, and medical treatment, etc. - while still others have mothers who are mentally or physically ill. After about 266 days of life the baby enters what to him is a new world in which he comes into contact with light, noise and hard surfaces. At this point, the child becomes dependent on adults for food, clothing and shelter. The learning problems of some children as well as some health problems can be traced to this early stage.

The postnatal environment is even more varied than the
prenatal one for children. This period is influenced by a wider variety of people and objects.

"No two babies are born into the same environment. If the human creature is to survive, benevolent adults must minister to basic human needs. Among these adults there is one prepared by nature, and hopefully also by nurture, perfectly suited to offer protection, nourishment, and comfort to the most helpless of newborns. Mother and child form a unit. And where the relationship is marked by reciprocal pleasure, the infant thrives. Through touch - the mother senses - the infant feels relief and pleasure in contact with her body at the touch of gentle affectionate hands.

But who is the mother? The mother is she who nourishes, protects, and consoles, and who is mature enough to enjoy doing these things. ... In recognition of the right of every infant to a mother, society has provided substitute mothers for those infants whose natural mothers are unwilling, or unable to fulfill the role to which they had been destined. Unfavorable postnatal environmental factors are represented by parent attitudes of detachment, rejection or over-protection; the failure of parents to develop emotionally as mothers and fathers account for many childhood behavioral disorders that affect many children who are normally endowed and neurologically intact."

The home of the child continues to be the major institution affecting the child during the pre-school years. The socio-economic status of the family influences the type of home a child comes from. Some children coming from poor homes may enter school poorly fed, poorly clothed, and poorly prepared for school - that is, with very little contact with reading materials, number concepts, or the ability to speak in sentences. Other children also coming from poor homes may enter school highly motivated to learn, very mature and independent, and with very interested parents willing to spend
time helping with their school work. Children from wealthy homes, on the other hand, sometimes enter school with a large acceptable vocabulary, fully exposed to printed materials but very immature. Others from wealthy homes sometimes come over fed with the wrong foods; unable to share the teacher or objects with other children; and with parents too busy to spend time with them or their school work. The need for real affection and attention not got at home becomes a classroom problem.

For many young children before entering school, the world is no bigger than the house and the block in which they live. Deprivation of a wide variety of experiences starts them off in school at a disadvantage. When this occurs use must be made of the experiences the child has had and then expanded for maximum growth.

The mother/father relationship; the parent/child relationship; the inter-family relationship; and the family/community relationship and behaviour affect children. The parents who only give orders teach their children only how to give orders. Parents who abuse their neighbours in front of children, teach their children to be disrespectful. Parents who are kind and affectionate to others teach their children to do likewise. The drunk parent who makes noise at night or whose behaviour is unpredictable, causes the children to have anxious, sleepless nights, and therefore experience extreme tiredness during the day. Parents who are too busy with their social or work life to show their children some affection, more than providing food, clothing, shelter, and nice material things also affect their children.
The attention a youngster fails to get at home will be sought elsewhere. The problems the child has at home will affect what he does at school and elsewhere.

Children learn what they see; and say what they hear. The home environment is a major contributor to a child's development. It has total control during the pre-school years and controls to varying degrees during the later life. The interest that parents show can often be a positive motivating factor if a positive parent/child relationship is to exist, that can help in the growth period and in the learning process.

Learning for all children does not begin with the school, but starts during infancy as the child learns to cope with his environment. During the pre-school years, the home is the major socializing institution since it influences the types of experiences children have. It is only when the child begins school that a second of society's major institutions starts to contribute.

Some children attend some type of school or nursery before entering the first stage or first grade in a regular school. This type of environment provides such children with an opportunity to learn to interact with other children; participate in activities designed for their specific age group; expands their immediate environment and prepares them to cope with regular school. Though some children may want to return home - especially those who did not have a pre-school group - for the first few days of school, it is not a sign of rejection or dislike, it may be simply a stage of immaturity. For many it may
be the first time they are being separated from their parents, siblings or familiar people. The child in some instances might have been so very excited about going to school that he told everyone he came into contact with prior to the start. In some places, to help in this adjustment period, parents are encouraged and allowed to spend decreasing periods of time with their youngsters as they adjust to the school environment. As the child grows accustomed to the other children, the toys, and the environment, there is less need for the parents to stay. After a while the child will happily say "good-bye".

In their early years children are very curious and very interested in exploring their environment. For most five year-olds it is a period of good equilibrium and easy adjustment. Children enter school with a willingness to learn, though their abilities and level of maturity may vary. The natural curiosity provides the most important basic tool for learning. The major goal of the young child as he enters school is to be accepted and to please those he comes into contact with - parents, teachers, other adults, and peers. The focal point of the school is the teacher, and when the teacher and child are matched and like each other, neither equipment or buildings become a hurdle.

The focal point of the young child's life in school is his teacher and to have a teacher he likes matters more to him than anything else. Well designed buildings and good equipment improve the morale of the teacher and help her to do her job, but the child's demands on his physical environment are minimal compared with his emotional and social needs. If his teacher is right he can adjust to almost any situation.
Since the teacher is the most important person to the child, in the school, who and what is the teacher and what is her role?

A school exists and functions as a social establishment, and the person appointed to fill the role of teacher is expected to behave according to rules which seem appropriate within that society. In other words, society defines or sets forms which become applicable to all people fulfilling the role of teacher. ...

Society in general expects the teacher to establish a suitable atmosphere in which learning can take place, to get to know her children as individuals and to select that from which they shall learn to develop their powers of communication so that she can impart knowledge and skills in order that they, in due course, can contribute as individuals to the community. Fundamental to the process of education in school is the teacher's ability to control both the children and the situation in which they learn, and to lead her charges towards self-control. She is in short, responsible for their intellectual, social, emotional and physical growth during the time the children are with her in school, and is expected to pay some attention to their spiritual growth as well.

If we accept the premise that learning should begin with the known and move to the unknown, then certainly educators and teachers must begin to teach children by utilizing a familiar language and familiar experiences as they perform their task. All too often teachers of children who speak "Non-Standard English" by their behaviour tell children that their language, and that of their parents and family is wrong or bad. Standard English can be taught by merely letting children know that there is another way that they can express themselves. Children will be able to grasp that in the same way they dress one way for school - in special school clothes - and another way to stay at home, the must learn to speak and behave
in a special way at school and in uniform. To tell a child that his speech is wrong is to negate him. Teachers who provide children mainly with criticism and negative reinforcements aid in the child's development of a negative self-concept. This rather than helping the child to improve, retards him, for children perform according to expectations.

Children given encouragement and motivation, in spite of their limited abilities, make more effort to succeed. A child who experiences constant failure after a while stops trying. He begins to believe in his inability to succeed. The same child, however, given the opportunity to experience some success which is acknowledged by others will try harder.

As children grow older it is important that adults realize that their influence on youngsters decreases. The influence of the peer group begins to take effect on children from about ten years and increases for a period of a couple of years. At this juncture, children feel the need to be accepted by their peers as they desire to participate in group activities and gain group approval. Sometimes the demands of the peer group and those of parents, teachers, or adults are in contradiction. When this occurs problems arise. A bright child may be encouraged to do poorly by his friends if they object to his constant success. In like manner a slow child can be motivated to try and do better. Recognizing this, teachers should attempt to determine the leaders within the group and utilize their leadership skills to ensure positive motivation on all.

The factors that affect children's learning are numerous.
Because no two children are alike it is difficult to prescribe specific solutions to solve problems. However, there are several approaches that have been utilized by many teachers and recorded that others can adapt to suit their specific needs and those of their students.

**Approaches to Teaching Educationally Handicapped Children**

There are a few broad approaches to teaching the educationally handicapped. In some school systems, children are placed in classes and promoted according to their ability to perform certain skills. In others, children advance with age, but are placed in tracts. In such schools, homogeneous groups implies children of a similar age group and level of functioning. In other places, emphasis is placed on individualized instruction. Still in others, children are placed in heterogeneous ability groups within multi or single-age classes; when this occurs children functioning at the same level work in small sub-groups.

An analysis of any of these approaches has definite pros and cons. The first approach wherein children are promoted according to their ability to perform certain skills seeks to ensure that children will be functioning at the level of their particular class. This is the least advisable approach. Consider the impact that this method can have on a child who is unable to master certain skills, for example, reading. His lack of reading ability is likely to affect his work in other subject areas thus at the end of the school year he is held back. If his problem re-occurs the second year, he will find
himself in a class with children two years his junior. This child's problem may be a physical defect - seeing or hearing. To inflict such a situation on a child can only do damage to his self-image. He will see himself as less capable than his peer group, backward, and unable to learn. Such a situation can only lower his level of aspiration and would culminate in a dislike for school. Peer group, parent, and teacher pressure in such a situation is often more than a youngster can handle. This may lead to building of defense mechanisms which may reveal themselves in several forms; he may become a bully or rebellious, boisterous in behaviour or a classroom disruptor, to name a few.

Systems in which tracts have been utilized have been severely criticized by many educators and abolished in many places. Critics of this method say that it provides no upward mobility for children once placed in the lower tracts. The material in the lower tracts prepares students to function on the lowest levels of society's totem pole. The only future for such children is, therefore, service and menial type jobs. Seldom do youths from the lower tracts graduate from high school. On the other hand, however, children in the upper tracts find themselves in a more stimulating, motivating, situation. If the child is evaluated by his family background and not motivated, his performance may not reflect his ability.

The third approach presents the teacher with a class of thirty youngsters at different levels of functioning. This type of system, also very common, can only be successful with a creative, energetic teacher. Two approaches are prevalent in this type of class. The first is to attempt to reach children at their individual levels.
Small working groups of children are formed at various levels within the class to meet specific needs so that children do not have to feel they are in the dumb group. The second approach is to present material to the entire class and provide follow-up exercises at different levels. Resource or remedial teachers are sometimes available to provide additional support.

Evidence shows that the third approach seems to be most beneficial. It is my intent in the model that will be presented to use this latter approach. Since resource or remedial teachers are not available, it is also my intent to expose teachers to remedial techniques and the concept of peer group teaching. The remainder of this paper will address itself to some techniques that have proven to be very useful.

Techniques for Working with Slow Developers

Learning Centers - In attempting to help the slow developer some teachers have utilized the approach of developing within their class, centers of interest. This approach is extremely useful for children regardless of their level of functioning. Centers of interest provide small areas of the classroom set aside for children to go and work independently. These areas are equipped with work sheets, subject area games and puzzles, or other forms of teaching aids. The material is such that it is designed to provide immediate or almost immediate feedback; and is useful and relevant. It should be available to youngsters during free periods, on completion of assigned work, or when they feel the need to work alone. The material should be such that it (1) is self-motivating to children; (2) should relate to
life and life experiences; (3) should be of varying levels of
difficulty to meet the needs of all children; (4) should provide
opportunities for pupils to participate in significant undertakings
that aid progress.

The Buddy System - This approach is called by several
different names - "peer group education" or "youth teaching youth". Teachers using this approach, use (1) pairs or small groups within
the class to help each other; (2) child in a higher class is paired
with a child in a lower class. The goal of this approach is that the
brighter child will help his buddy and in the process of teaching,
review and reinforce his own studies. When children are in the same
peer group, it is good to provide opportunities for the slower child
to teach his buddy sometimes. Children in a class using this approach
must learn to give and receive help. The second approach which uses
an older child has him function as a big brother or junior teacher for
the younger. In one study where adolescents with reading problems
were assigned to first and second graders, it was found that both
groups of children made significant progress. The older practiced
reading and then prepared tapes for the younger children. This stimulated
the youths who saw their task as having meaning, and therefore worked
at a task that would otherwise have been frustrating. For the person
doing the teaching in either of these two approaches, it fosters a
positive self-concept, provides for learning while preparing or teaching,
and fosters a sense of cooperation and responsibility. This approach
frees the teacher to work with other children, and gives children in
need of individual attention more assistance.

**Extended School Programs** - This is a widely used means of providing improved and expanded educational opportunities for children. Among the types of programs utilized are: (1) providing pre-school experiences for the very young; (2) tutoring outside of school hours; (3) guidance and enrichment experiences and extended educational activities.

**Experiential Learning** - This approach is very useful for all children who are slow developers. It takes the child where he is and uses his experiences to teach the basic skills. Children in the early grades tell about their experiences and from such a day-by-day record the child's curriculum is designed. His story when written - which may only be a sentence - becomes his reading material for the day. From that he practices handwriting, new vocabulary, language arts. Newspapers, paperbacks and other forms of mass media can be utilized to teach social studies, English, and writing. This approach to not using textbooks was very successful for Daniel Feder at the Maxey School to the extent that the idea was later used in fourteen (14) other schools in Detroit and some other parts of the country. Social approaches to mathematics have also been utilized so that the learning of this subject is also related to the child's daily activities.

**Practical and Artistic Activities** - If we accept that this type of activity has educational value its status must be raised from that of an educational frill. A well planned program offers practical arts. This should not be viewed as primary vocational education, but as an outlet for the child unable to gain satisfaction in a purely
academic setting. The feeling of accomplishment and satisfaction that is derived from producing acceptable work in art and craft has wide implications, and may lead to improved oral expression. Reading material and mathematics may also become more meaningful when students involved in this activity want to move to the next stage. This approach has helped teachers to reach children and present the picture of the school from a different view. Some activities include: gardening, arts and crafts, sewing and knitting, shop, etc. The end products should be displayed so that their good features will be noticed.

Field Trips - This has been found to be one of the most effective learning-teaching tools. Trips provide new experiences for children, enrich the curriculum and give children who sometimes never talk something to talk about. In the same manner that a trip enhances the lives of adults, it does to young children. This is especially true with slow developers who seem to learn much better when experiential learning is utilized. This tool helps to broaden the horizons of the child and if well planned can relate to several subject areas. It provides excitement and in some instances reality for children with limited experiences.

Pictures and Concrete Objects - Often children, because of their learning problems, find it difficult to grasp certain concepts. The use of pictures or concrete objectives can help to minimize such problems, since they enable the child to use more of his senses in the learning process. The concept of half or an eighth can be very abstract, but can become very real when a child can see an object
divided. In like manner, a child who has never seen snow can better grasp the concept if pictures are utilized.

**Experience Charts** - This is a widely utilized and successful technique. Through the use of experience charts children can connect the spoken word to the written form. Slow developers not only learn to read in this process, but also to see how words can be found to describe their personal experiences. This also has value which, if well handled, can provide carry-over for creative writing at another stage.

**Feltboards or Flannelboards** - This device helps to present material in a step by step manner. It provides a chance for children to use various senses in the learning process. It has been found to be extremely useful in working with vocabulary development, storytelling, sentence structure, fractions, and geometric figures.

The foregoing are some techniques that can be used in a regular classroom. Because children, teachers, and schools vary, it cannot be said that any one approach would be more appropriate than another. It will therefore be necessary that teachers choose or adapt the approach or approaches most suited to their particular circumstance.

The content of this paper is in no way complete. Its intent is to increase the awareness of regular classroom teachers as to some of the handicaps affecting children with special needs and to introduce them to some supplementary teaching techniques for minimizing the problem.

The future of the Caribbean is dependent not only on
politicians and economists, but also upon teachers and students. To stop the high percentage of human wastage prevalent in our society, teachers and educators must work to help every child develop his potential, his self-awareness, and an awareness of his role as a contributor in the nation-building process.
BIBLIOGRAPHY


SUGGESTIONS FOR MINIMUM RESOURCE TEACHING

Recognizing the value of education, the limited economic resources of many Caribbean countries, and consequently the importance of utilizing minimum resources, the writer provides suggestions to teachers for enhancing the classroom environment. Because the territories still find themselves with limited resources for teacher training, many primary school teachers find themselves entering the classroom with either a secondary education or eight or nine years of primary education. Considering too, that most of the primary school teachers spend as much as five years before entering a training college, it is my intention to share with such teachers some simple ideas to aid them in the teaching process. This document is in no way complete but is the beginning of what teachers can develop as a catalogue that should become an ongoing process.
LANGUAGE ARTS

Picture Files

MATERIAL: Develop a picture file of a wide variety of pictures and categorize them, e.g.,

- Workers
- Children
- Food
- Culture (lifestyles)

ENCOURAGE CHILDREN TO BRING PICTURES FOR FILE AND UTILIZE THEM TO HAVE CHILDREN WRITE STORIES. CHILDREN MAY BE ENCOURAGED TO PUT THEIR STORIES ON CARDS OR IN SMALL BOOKS AND DEVELOP A CLASS COLLECTION.

BENEFITS:
1. Stimulates and encourages writing and reading.
2. Facilitates teaching correct grammar through practical application.
3. Facilitates the teaching of penmanship in a highly motivated situation.
4. Enables individualized instruction and diverse interest areas.
5. Can be used as reading material for other classes.
6. Can be utilized to connect reading to other subject areas of the curriculum.
Word Bingo

MATERIALS: Three types of cards can be made with 12 to 20 squares on each. A smaller type of card must also be made which may come in three varieties.

A. Large cards may have words, pictures, or combined words and pictures in each square. The number of large cards may vary as needed. There should be at least 30 to 40 words per set.

B. Each player will need one card and a pack of smaller cards.

C. A master card with all words must be made for each game set.


Students can participate in the development of this material by working in groups or individually.

2. Game can be played in large or small groups to develop and/or review vocabulary. A caller pulls one word at a time out of a container and calls it out. He then places the word on the master card, while the other players cover the corresponding squares. The first player to cover an agreed number of words and make it known wins.
BENEFITS:

1. Encourages group participation with the ability to lead and follow.

2. Develops vocabulary for all aspects of education.

3. Provides tool for enhancing reading.

4. Provides pleasure in learning.
Sequencing

**MATERIALS:** Pictures of familiar stories or situations. Stories of familiar experiences with illogical sequencing. (Each experience may be placed in a packet, e.g.,

a) Sleeping, dressing, entering shower, eating, arriving at school, cleaning teeth.

b) (Building a House) - roof, stairs, flooring, foundation, windows, walls, door.

**ACTIVITY:** This activity can be done verbally or in writing. Children will be required to utilize material by putting them in sequence. This activity can be conducted individually or in groups.

**BENEFITS:**
1. Develops the concept that events often follow a sequence. Can be transferred to child's behavior patterns.
2. Provides opportunities for oral and written expression.
3. Helps in the understanding that there is order in nature.
Treasure Chest

MATERIALS: A box or bag can be used to conceal several objects or a single object.

ACTIVITY: Have children describe the object or objects without seeing them from their sense of touch.

BENEFITS: 1. Develop writing skills.
2. Develop tactile awareness.
3. Develop imagination.

Word Analysis

MATERIALS: List of Words

ACTIVITY: Have children pick out common characteristics in word list, e.g., vowels, consonant, consonant blends, words in words, prefixes, suffixes, etc. Children can be required to complete stated task within a time limit. Competitiveness can be built into this exercise if so desired, at which time children can work in groups of ones, twos, or threes.

BENEFITS: 1. Develop word analysis skills.
2. Develop reading skills.
Stop, Pause, Question

MATERIALS: Large cardboard upon which a game board is made. Draw a railroad track with any design and divide the track into several smaller rectangles and number them. Write as many punctuation rules as possible in the rectangles. On some write the word "question". Make "question" cards. On each card ask a question about punctuation or grammar. The cards should state the reward for successfully answering a question or the penalty for failure to do so. A dice is also needed and markers.

ACTIVITY: 2-6 players can use the game. Students move according to the numbers indicated on the dice, and read aloud what is written on the space upon which they land. If a player falls on "question" they must pull a card and answer the question. The first player to complete the journey wins.

BENEFITS: Teaches and reviews the rules of grammar.
Old Maid Vocabulary

MATERIALS: Make a deck of fifty cards upon which words are written. The words must be grouped according to categories, each with an equal number. Categories can be: homonyms, antonyms, synonyms, abbreviations, contractions, gender, etc.

ACTIVITY: This exercise can be played in a small group of 2-6 players. One card is taken out of the pack, and the others divided equally among the players. Each player forms pairs according to the various categories, and turns them upwards to be checked by the others. Players then hold their cards with words facing them in a fanlike position and, in a clockwise direction allows the player next to him to select a card from his hand. As a player forms a pair he turns it upwards. The last player with a card in his hand is the Old Maid. The player who uses all his cards first, wins.

BENEFITS: 1. Teaches or reviews several aspects of vocabulary development.

2. Teaches children how to use their leisure time.

EXAMPLE WORDS FOR CARDS:

<table>
<thead>
<tr>
<th>OPPOSITES</th>
<th>HOMONYMS</th>
<th>ABBREVIATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>employer</td>
<td>employee</td>
<td>aisle isle</td>
</tr>
<tr>
<td>arrive</td>
<td>depart</td>
<td>sight site</td>
</tr>
<tr>
<td>priest</td>
<td>nun</td>
<td>four fore</td>
</tr>
<tr>
<td>honest</td>
<td>dishonest</td>
<td>flew flu</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B.C. Before Christ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ph.D. Doctor of Philosophy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co. Company</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i.e. for example</td>
</tr>
</tbody>
</table>
Vocabulary Concentration

MATERIALS: Use same cards as used for Old Maid vocabulary.

ACTIVITY: Game can be played with 2-6 players. Place all cards downwards and spread them out on a flat surface. Each player takes turns and selects two cards, if they form a pair the player continues his turn. If a pair is not formed the cards are turned downwards and the next player plays. The game continues until all the cards have been used and the player with the most pairs wins.

BENEFITS: 1. Reviews vocabulary.
2. Develops concentration skills.
3. Teachers constructive use of leisure time.
**Phonics Flash Cards**

**MATERIALS:** Using cards of a consistent size, place a picture on each side that depicts an object or person, the name of which begins with a specific sound. The name should then be printed and the letters representing the specific sound underlined. (The picture used should be familiar to the children so that they can function as contact clues).

**ACTIVITY:** The teacher or a child can hold up the flash cards and have children respond. This may be done with the entire class or with a small group. The children can respond with the word or the phonics sound. They can determine if the sound is long or short; and at an advanced level give another word with the same sound. The back of the card, if it has no picture, can have another word, and can be used to check sight vocabulary.

**BENEFITS:**

1. Teaches phonics which is a basic reading skill.
2. Children who master phonics usually have less difficulty when encountering new words.
VISUAL PERCEPTION

Dominoes

MATERIALS: Use match boxes or hard wood squares. Paint or cover each. Draw a solid line to divide each into half. Dominoes can be made of three types. There must be 28 pieces.

<table>
<thead>
<tr>
<th>NUMBERS</th>
<th>COLORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-6 to 6-0</td>
<td>Red-Red and every color</td>
</tr>
<tr>
<td>5-5 to 5-0</td>
<td>Blue-Blue</td>
</tr>
<tr>
<td>4-4 to 4-0</td>
<td>Yellow-Yellow</td>
</tr>
<tr>
<td>3-3 to 3-0</td>
<td>Black-Black</td>
</tr>
<tr>
<td>2-2 to 2-0</td>
<td>Brown-Brown</td>
</tr>
<tr>
<td>1-1 to 1-0</td>
<td>Orange-Orange</td>
</tr>
<tr>
<td>0-0</td>
<td>Green-Green</td>
</tr>
</tbody>
</table>

ACTIVITY: 2-4 players. The pieces are divided among players who must match the ends, e.g., "6" must be matched with "6" or "brown" with "brown". If a player does not have a matching piece he passes. The first player to use all his pieces wins.

BENEFITS: Visual perception.
Thinking Time

MATERIALS: Sets of cards each card having 12 to 18 pictures of matching pairs. Each matching pair must have a common feature, e.g.

1. Serve same purpose but is shaped differently.
2. Tools and application (fishing rod and fish).
3. Opposites (sizes, gender, etc.).
4. Numbers and sets.
5. Words and objects.

ACTIVITY: 1. Children may draw lines to match pictures.

2. Write a statement about each pair.

BENEFITS: 1. Develop visual perception.

2. Develop writing skills.

What is Missing?

MATERIALS: Materials or pictures with missing parts, e.g., a chair or a picture of a chair with three legs.

ACTIVITY: Have children identify the missing parts.

BENEFIT: 1. Develop visual perception.

2. Develop oral skills.
Perception Cards

MATERIALS: Using large cards or sheets of paper draw 16 or 20 squares. In each row across draw 4 objects or shapes that look alike or have common characteristics, make two exactly alike; or one that does not belong to the group. Directions must be consistent.

ACTIVITY: Have children identify the two squares that are exactly alike; or the one that does not belong. If this is reviewed in a small group, children can be asked to say why the object did not belong.

BENEFITS: Develops ability to identify similarities and differences.
Visual Perception Puzzles

I. MATERIALS: 5-6 boxes, plastic containers, blocks of wood, or any item of various sizes.

ACTIVITY: Show child that they fit into each other or on each other, take them apart and have child try.

BENEFITS: 1. Tests visual memory.
2. Helps child perceive concepts and aids development of small muscles.

II. MATERIALS: Take a large box and cut shapes of various sizes in top and sides. Cover box with brightly colored paper. Get several objects of different shapes that can enter only those holes that are of matching shapes.

ACTIVITIES AND Same as Puzzle No. I.

BENEFITS:

III. MATERIALS: Make puzzles of single objects, e.g., fruit, clothing, or simple pictures and divide them into 4-10 pieces. Pieces should be large and have a hard back.

ACTIVITY: Have children put puzzles together.

BENEFITS: Same as in Puzzles I and II.
MATERIAL: A large circle mounted on a hard piece of construction paper with numbers. Two hands are placed in the center of the circle.

ACTIVITY: Spin hand and perform mathematical operation. Prior to spinning, players must agree on operation to be carried out.

BENEFITS: 1. Reinforces math skills.
2. Provides small group instruction.
3. Provides a learning activity for children who have completed other class work.

Scale

MATERIAL: 1. Using a wooden base, place a long flat piece of wood to form a scale. Then utilize smaller wooden blocks as weights of equal size.
2. Using a clothes hanger, attach a piece of string, and to that attach a bowl, basket, or container on either side. Use other objects to illustrate weight.

ACTIVITY: In teaching weight, children can gain a more realistic representation of the concept by seeing it work. Containers that are of specific weight can be used to further illustrate point.
Rulers

MATERIALS: Cardboards, one ruler, and a pen.

ACTIVITY: Using strips of cardboard each point of measure can be marked to facilitate individual use for each child.

BENEFITS: Provides children with ruler which may otherwise be absent in classroom; thereby advancing lessons on measurement and related topics.

Geometric and Fraction Kit

MATERIALS: Cardboard cut into shapes. Each set of shapes would represent the whole, half, quarter, third, fourth, fifth, eighth, etc. The shapes should be of various geometric shapes as well: squares, circles, triangles, rectangles, etc.

ACTIVITY Use kit when teaching concepts; several kits can AND be made by class for small groups. These visual BENEFITS: cards can help children grasp the two concepts when they are being taught, providing a visual and tactile representation.
Math Bingo

MATERIALS: Three types of cards are needed:

1. Large cards, with numbers drawn on them.
   Each card should be divided into 25 squares.
   There should be as many cards as needed for a small group of children or the class as a whole.

2. One large master card with all possible answers.

3. A set of small cards with a variety of math problems. These may cover any or all aspects of math covered in the classroom.

ACTIVITY: A caller picks small cards out of a stack and reads the math problem, then places the card on the correct answer. All other players in the game use cards from group one; plus some cards for covering and also cover the answers. The first person to cover all the answers, wins.

BENEFITS: 1. Provides review of basic math skills.

2. Provides opportunity for constructive use of leisure time.
**Set Theory Kit**

**MATERIALS:** Using large cards, attach common pictures or objects. Each card can represent a set. With varying numbers on each card the set theory can be taught.

**ACTIVITY:** Using cards students can gain a visual representation of the concept of a set and all sub-categories of a set theory.

**BENEFITS:** The union of sets and subsets are sometimes difficult to understand by young children. This will help to facilitate easier understanding.
Five Card Spread

MATERIALS: Use 52 cards
   3 numbered 1-10
   2 numbered 11-17
   1 numbered 18-25

Use 8 cards with two of the following signs: addition, subtraction, division, multiplication.

ACTIVITY:
1. Place direction cards in a separate pack and shuffle them, reshuffle them when all are used during a game.
2. Shuffle numbered cards and give each player 5 cards.
3. Turn up a direction card and the players must work a math problem as indicated by the sign. If no hands can be made, the player pulls a card and discards one which is turned upwards. Any player takes one or two cards turned upwards to make a spread.
4. When one player uses all of his cards a round is finished.
5. At the end of each round, the players add their totals or minus the cards in their hands. The first player to get "100" wins.

BENEFIT: Review of basic math skills.
SOCIAL STUDIES

Caribbean Travel

MATERIALS: Game Board with a variety of pictures and symbols of the area, one dice, and 2-6 markers. Design may be similar to Monopoly.

ACTIVITY: Roll dice to determine who plays first. Highest number decides. Each player moves the indicated number of squares as shown on the thrown dice, and follows directions as stated on the board. If two players land on the same square they must answer a question to move.

BENEFITS: Teaches a wide variety of facts about the area, while providing fun.

National Kits

MATERIALS: Replicas of national symbols

Flags

Birds and animals (pictures, stuffed or real)

Flowers

Instruments and music

Natural resources

Local products

Pictures
Caribbean Tab

MATERIALS: Make four cards of each island to form a set. In each set have:

1 card with a map and the name of the island
1 card with the chief crop or export
2 cards with things for which the island is known.

ACTIVITY: Shuffle the cards and deal 8 cards to each player. The game is played according to the rules of Rummey. For a player to win, he must make two spreads of 4 cards. A spread must either form a set of an island or a common characteristic of several islands.

BENEFITS: Teaches basic information about the Caribbean. (Can include the English and non-English speaking islands). Stimulates discussion about region necessary for area's development.

Provides an introduction to the region.

Number of cards can be expanded to include more information in each set.
Land, Weather, and People

MATERIALS: Picture cards will be used to represent countries or regions. Cards will be grouped in sets of four - people, crops, minerals, countries, national symbols, cultural symbols, land, etc.

ACTIVITY: Cards will be shuffled and dealt with each player having an equal number of cards. At the end of the game the player having the most sets wins. Rules are the same as in "Old Maid".

BENEFIT: In an informal manner children learn a wide variety of facts about the world's people. This material can be utilized even prior to a study of the world in earlier grades with the teacher serving as a facilitator.
Picture Files

MATERIALS: Develop a picture file of a wide variety of pictures and categorize them, e.g.,

- People of the islands
- People of other lands
- Workers
- Communities
- Methods of Transport
- Pictures of outstanding Caribbean Citizens

ACTIVITY: Encourage children to bring pictures for file and keep them to have children use in this subject area.

BENEFITS: Learning is maximized when more than one of the senses is used in any learning experience.

Provides a pictorial representation of topics being discussed in class.
Island Rummy

**MATERIALS:** Picture cards with symbols of each island. Cards will be grouped to display the special characteristics of each island. They will tell about the people the culture and land. Each set should have four matching cards.

**ACTIVITY:** Cards will be shuffled and dealt. Each player will receive five cards and will take turns in a clockwise manner to drop or pick up cards. A hand will comprise three people from an island or three people from several islands who hold similar positions, or four symbols of an island or four similar characteristics of an island, e.g., from four islands - fruit, minerals, national symbols, etc.

**BENEFITS:** This game provides an opportunity for children to increase their knowledge about the Caribbean while they have fun.
Nature File

MATERIALS: Develop a collection of various objects found in nature:
- rocks
- leaves
- plants
- flowers
- soil
- minerals
- animal coverings (feathers, skins, etc.)

Also a file of pictures of above.

ACTIVITY: Encourage children to participate in forming collections and teach how to label.

BENEFITS: Facilitates immediate reach of objects and pictures that could be utilized in a variety of lessons, which may be difficult to locate otherwise when needed. Helps teach child about saving and organizing for the future.
ART

The Creative Process

MATERIAL: Bowls, flowers, water, cloths, sticks, grass, dirt.

ACTIVITY: Children will search out flowers with bright coloring, grass, dirt, etc. They can separate the different colors, place them in bowls and pour hot water over them. They can then paint the cloths.

BENEFITS: This activity would aid in:

1. Helping elementary or pre-school children to identify colors.

2. Teaching children the process of mixing i.e., how different colors are made.

3. Encourage a sense of self through accomplishment.

4. Encourage creativity in making new colors, new designs.
Map Puzzles

MATERIALS: Draw large maps of each island in the Caribbean, Pan African countries, Third World countries, and The World. Place maps on hard cardboard and cut into patterns of puzzle.

ACTIVITY: Map puzzle should be designed to show physical characteristics of the world.

BENEFITS Fun and learning that can be reinforced each time children use the puzzles.

Citizen's Task

MATERIALS: Game board can be made on a large sheet of paper or cardboard, cards for each category available.

ACTIVITY: Play game.

BENEFITS: This game highlights many of the more positive qualities that should be encouraged in young citizens.
PHYSICAL EDUCATION

MATERIALS: Cloths, ropes, old tires, sand, pebbles, wood, crocus bags.

ACTIVITY: To build a gym. There is a variety of equipment that can be made with minimum resources. From the above list, these can be made:
   a) Swings - made with ropes tied over a stout tree and old tires.
   b) Punching bag - sew together crocus bags and fill with coarse dirt.
   c) Tennis rackets - shaped wood, and strands of ropes.
   d) Volley-ball nets - ropes and wooden stakes.
   e) Basket hoops - ropes and crate frames.
   f) Bean bags - cloths and sand or pebbles.
       Similarly slides, see-saws, trampolines and jungle jims.

BENEFITS: 1. To dispel notion that things cannot be had unless they are factory made.
2. To promote physical fitness.
3. To give children sense of satisfaction with their own handiwork.
4. Work can be a vehicle to things both functional and enjoyable.
BACKGROUND QUESTIONNAIRE

All information on this questionnaire is confidential. No-one but the researcher will have access to the material.

1. Name:__________________________________________________________

2. School: _________________________________________________________

3. Last level of education received:____________________________________

4. Level of class you teach:__________________________________________

5. Number of children in your class:____________________________________

6. How old are most of the children in your class:________________________

You will need additional paper to answer the remaining questions.

7. Are there in your class any children who have difficulty grasping what you teach? List them.

8. Describe two children who are not doing as well in your class as you would like. Describe their behavior in as much detail as possible.

9. What things might cause a child to have difficulty learning?

10. What motor skills should children in your class have?

11. How can children in your class develop their motor skills?

12. What other skills should children in your class have?

13. What does the term "self-concept" mean to you?

14. What does the term "educationally handicapped" mean to you?

15. Are there any educationally handicapped children in your class? Name them.

16. What are some of the factors that cause children to be educationally handicapped?

17. How many years have you been teaching?

18. Do you think you have a knowledge of and understanding of school problems? Explain some.
19. Have you had any training to prepare you to teach children with learning problems? If yes, describe it.

20. Describe the manner in which you teach.


22. Describe how you treat children who are very quiet.

23. Describe how you treat children who are dull or slow.

24. Describe how you treat children who are bright.

25. Describe how you treat children who are average.

26. Do you find all of the above types of children in your class?
PARTICIPANT FEEDBACK QUESTIONNAIRE

The purpose of this evaluation is to determine your feelings about the program. Comments are needed about its strengths and weaknesses; how it helped or why it failed to help; how it can be improved; and to provide overall feedback for the final curriculum.

Name: __________________________________________

On the space provided at the side, mark the letter that best describes your view or opinion of the program:

1. How do you view what you have done in this program?
   a) valuable  b) unimportant
   c) important  d) useful
   e) not useful  f) if other, describe

2. Have you gained any specific new knowledge about children?
   a) none  b) very little
   c) a fair amount  d) much
   e) a great deal  f) if other, describe

3. Did you get what you expected from this program?
   a) had no expectations  b) got what I expected
   c) got some expectations  d) got nothing
   e) got more than I expected

4. Do you think you can use the things we did in your school?
   a) none of it  b) some of it
   c) much of it  d) very little of it
   e) all of it

Answer the remaining questions as you see fit.

5. What do you think were the most important parts of the program?

6. What parts of the program were most valuable to you? Why?
7. What parts of the program were least valuable to you? Why?

8. What specific things do you think should be added to the program that would be useful to you?

9. Have you tried any of the ideas presented in the program in your class? What was the outcome?

10. What specific learning experiences would you like to have that would improve you effectiveness as a teacher?

11. What other areas of the program do you think should be evaluated?

12. Describe what you have done to help the two children you describe at the beginning of the program, mention their names.
CONTENT EVALUATION QUESTIONNAIRE

1. Name:__________________________________________________________

2. Class level you teach:____________________________________________

3. School:________________________________________________________________

4. Last level of education received:__________________________________________

5. Have you attended training college?:__________________________________________

6. Have you had any training to meet the needs of children with learning problems?________ If so, how much?____________

7. Do you enjoy teaching? Yes:_______ No:_______

8. Would you take another job if it paid more? Yes:_______ No:_______

Write the number(s) in the space provided that best describe you: e.g.

How would you describe yourself as a person?
1. tall  2. thin  3. fat
4. friendly  5. a loner  6. short  __________

9. How would you describe yourself as a person?
1. shy  2. average  3. bold
4. aggressive  5. very self confident
6. friendly  7. if other, describe

10. How would you describe yourself as a teacher?
1. friendly  2. a sharer
3. a leader  4. class director
5. patient  6. a disciplinarian
7. strict  8. loving
9. helpful  10. if other, explain
Choose the most appropriate phrase to complete or answer the question and write the number next to the phrase in the space provided, e.g.

The term "elementary school" refers to
1. a high school
2. a school in which various trades are taught
3. a primary school
4. a university

11. In order for children to teach other children effectively, children must
1. be taught how to give and get help
2. understand that all children can teach each other, since they all have strengths and weaknesses
3. be taught that it is their responsibility if they know how to complete a certain task, to help others who may be in need.
4. All of the above.

12. The term "self-concept" refers to
1. personality
2. a self-centered person
3. how others see a person
4. how a person sees himself

13. The term "educationally handicapped" refers to
1. a mentally retarded person
2. a person who has difficulty controlling his limbs
3. a person who for one reason or another has difficulty learning, which may be physical, social, and/or emotional.
4. All of the above
14. A major problem which the child who is educationally handicapped has when compared to the normal child is

1. the parents, peers, and teachers of the educationally handicapped are sometimes unable to understand him
2. the educationally handicapped are lazy
3. both groups are always very active
4. normal children can do everything better than the educationally handicapped.

15. Very young children should be given large objects to use because

1. their hands are small
2. they put things in their mouths
3. their fine motor coordination is not yet properly developed
4. their large motor coordination needs to be developed.

16. The emotionally and socially disturbed child can be described as

1. a delinquent child
2. a child constantly seeking attention
3. a child whose personal and social problems affect his behavior
4. a mentally disturbed child.

17. One way of motivating a child in a positive manner is to

1. praise him all the time
2. give the child lots of work to do
3. give him lots of attention
4. assign him tasks so that he can experience success and failure.
18. Emotional and social problems may result in a child behaving in the following manner
   1. becoming very quiet and withdrawn
   2. becoming very disruptive
   3. constantly seeking attention and approval from others
   4. all of the above.

19. If games are used in class, children will more than likely
   1. look upon school as a playground
   2. find school a place for fun but not for learning
   3. learn that learning can be fun
   4. display a greater number of behavior problems.

20. The average pre-school child can handle puzzles with
   1. 3 - 10 pieces
   2. 10 - 30 pieces
   3. 30 - 100 pieces
   4. 100 - 1000 pieces

21. The characteristics of the educationally handicapped are such that
   1. they all can be identified by the casual observer on entering the classroom
   2. only the partially handicapped can be identified by the casual observer on entering the classroom
   3. the casual observer may or may not be able to identify them on entering the classroom
   4. only the emotionally and socially disturbed can be identified by the casual observer on entering the classroom.

22. The child with a partial vision defect may be helped by
   1. providing glasses
   2. giving him material to read that is of a somewhat larger print
letting him sit in a position that affords the best lighting possible to meet his needs

4. all of the above.

23. The teacher who makes use of minimum resources can

1. waste a great deal of time preparing unnecessary material that can be purchased

2. provide additional materials for the class that can assist in minimizing some of their learning problems

3. develop many classroom aids that can reduce the amount of time spent with individual children

4. correct all the learning problems that her students may have.

24. When teachers recognize that children are educationally handicapped, they should

1. send them to the principal's office saying they need outside help

2. try to identify the specific area in which the child needs assistance and attempt to minimize the problem as much as possible

3. 1 and 2

4. none of the answers above are correct

25. If a child at 10 years is unable to jump rope or run and jump he/she must

1. be learning disabled

2. have a problem with gross motor coordination

3. have a problem with fine motor coordination

4. be not very active
26. A child who suffers from a partial eye defect
   1. is totally blind
   2. should be taught braille
   3. can see but has a vision problem
   4. has an eye disease.

27. If a child has a hearing defect in his right ear, where should you sit him in your class?
   1. to the front of the room
   2. with his left ear towards the point of the room where you speak to the class from
   3. with his right ear towards the point of the room where you speak to the class from
   4. with the right ear towards the front of the class.

28. Every 3-year old should be toilet trained and able to go up and down stairs alternating feet and steps
   1. true
   2. false
   3. toilet trained but not able to go up and down stairs
   4. able to go up and down stairs but not toilet trained.

29. A child who is emotionally disturbed may be helped by
   1. keeping him out of school
   2. giving him sedatives as often as he acts up
   3. giving him some affection and attending to his specific needs
   4. by getting him into a school or class for the mentally ill.
30. Emotional and social problems which may affect a child are

1. an unhealthy home situation, resulting from parental friction
2. the financial situation of the child's home situation, rich or poor
3. a fear of failure, resulting from parents' high expectations
4. all of the above.

31. The 5-year old may cry the first few days of school because

1. it may have been the first time he has been separated from his family
2. he dislikes school and would prefer to stay at home and play
3. he knows that school is not fun
4. he is not mature enough.

32. Experience charts help children see the relationship between

1. words
2. the spoken and written word
3. pictures and words
4. pictures.

33. A significant difference between children at 5 and 12 years is

1. children at both ages are strongly influenced by their parents
2. children at five years are more influenced by their peers than by their parents
3. children will be more influenced by their peers at twelve years than they were at five years
4. this difference does not occur.
34. A good teacher is best described as
   1. a remedial teacher
   2. a creative person
   3. a bright person
   4. 1 and 2.

35. If not helped, a child who has a reading problem may
   1. never learn to read
   2. develop many additional learning problems which
      may affect other subject areas and various
      aspects of his behavior
   3. become mentally retarded
   4. need to be placed in a lower class.

36. Children between 8-12 years enjoy reading books
    with lots of pictures and four or five words a
    page. Such books are appropriate for this age
    1. the above statement is true
    2. children at this age should read few books
       with pictures
    3. children at this age do not enjoy reading such
       books nor are they appropriate for their age
    4. children at this age enjoy reading books with
       some pictures, but with a higher level of
       complexity and with topics that they find
       interesting.

37. Whipping a child for poor marks will make him improve
   1. the above statement is not absolutely true
   2. a whipping is a positive form of motivation, and
      therefore makes the child improve
   3. negative motivation never brings positive results
   4. none of the above statements are true
38. The child who may be described as a slow developer may
   1. be very slow in his academic subjects, but very talented with his hands
   2. be merely lazy and inattentive
   3. need to be given extra attention and allowed to get some of his work correct, as a source of motivation
   4. 1 and 3.

39. The slow developer is
   1. a slow or dull child who will never make it in academic subjects
   2. a child who once identified should only be taught a trade
   3. a child who should not be kept in a regular classroom
   4. a child who may be slow or dull prior to eleven years but may, given the opportunity, display rapid growth at fourteen years and on after that.

40. The teaching profession is very important since teachers lay the foundation for
   1. doctors, lawyers, engineers, and other teachers
   2. brick layers, thieves, shoe-makers and drunks
   3. reading books and counting figures
   4. all of the above.

41. The rate at which children learn is affected by
   1. the wealth of the family
   2. the amount of interest parents show in their children's work
   3. the educational level of parents
   4. none of the above.
42. It is important to identify children's reading problems early because

1. if they are not helped they will affect other subject areas
2. if they are not helped the child will become illiterate
3. if they are not helped the child will become a discipline problem
4. if they are not helped the child will get bored with school.

43. A child's hearing ability may

1. cause him to become an introvert
2. affect his speaking ability
3. cause him to show an apparent lack of interest in most things
4. all of the above.

44. Equal educational opportunities means

1. teaching all children in a class the same thing
2. teaching all children at their respective levels of functioning
3. dividing the educational budget so that an equal amount of money is spent on all children
4. dividing the educational budget so that an equal amount of money is spent on each class in the system.

45. Which of the following will most likely cause a child to learn

1. experiences of success and failure
2. experiences of only success
3. experiences of only failure
4. experiences of success and failure accompanied by praise or criticism.
46. Peer group teaching is helpful
   1. only to the child who is being taught
   2. only to the child who is teaching
   3. to none of the children
   4. to both children.

47. The manner in which a child sees himself affects
   1. his attitude towards work
   2. how he performs in class
   3. how he projects his future
   4. all of the above.

48. One of the following best describes the teacher's function in schools
   1. Teachers cannot bring about change in society. Their responsibility is to help children learn to read, write and to do arithmetic.
   2. Teachers can bring about change in society. Their responsibility is to teach children to read, write and to do arithmetic.
   3. Teachers cannot bring about change in society. Their responsibility is to help children learn so that they can get jobs.
   4. Teachers can bring about change in society. Their responsibility is to help children become active participants in the nation's developmental process.

49. Children can teach children if
   1. children teach each other subjects depending on their strengths and weaknesses
   2. older children teach younger children
   3. children of different levels of functioning work together
   4. all of the above.
50. Teachers can educate each other by

1. reading and working together in small groups
2. sharing knowledge and ideas with each other
3. 1 and 2
4. teachers cannot educate each other.
OBSERVATION SHEET

1. Description of Class:
   a) Size of class

   b) Physical location and facilities

   c) Noise level in class and surrounding area

2. Seating of Children in Class:
   a) Grouping based on academic ability

   b) Children seated according to physical size

   c) Children seated according to individual needs

3. Classroom Environment:
   a) Use of colours

   b) Use of pictures

   c) Use of classroom aids
4. Teaching Methods Utilized:

5. Relevancy of Materials Taught to Child's Future:
   a) Needed for passing examinations

   b) Needed for creating citizens to help build the society

   c) Knowledge that would help child find employment

6. Teacher/Child Communication:

7. Child/Teacher Communication:

8. Movement in Class:

9. Relationship of Class to Other Teachers, Adults and Other Classes:
## FINAL CURRICULUM

### DAY 1

<table>
<thead>
<tr>
<th>THEME AND TIME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction 8:30</td>
<td>1. To help group members open up to themselves and others.</td>
<td>Answer question &quot;Who am I&quot;?</td>
<td>Can explain the stages of pre-natal growth.</td>
</tr>
<tr>
<td>Explain program if no group meeting was held previously. Should be held if possible.</td>
<td>2. To explain the purpose and goals of the program.</td>
<td>Draw a diagram representing your life.</td>
<td>Can from questioning determine if there were pre-natal conditions that might be affecting a child. Can identify causes that may cause problems later in life that may occur at the pre-natal stage - social, emotional, health, etc.</td>
</tr>
<tr>
<td>The Pre-natal Stage 10 - 12 and 1 - 3</td>
<td>1. To determine healthy and unhealthy pre-natal conditions.</td>
<td>Discussion of objectives. Analysis of case studies that illustrate healthy and unhealthy situations - social, emotional, health, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. To understand the developmental process prior to birth.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. To determine how social problems affect the unborn.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is imperative that teachers realize that many factors that occur in the life of a child may have done so prior to birth. The health and mental well being of a mother affects her unborn. The unborn, prior to birth, feeds via the mother. If however, she has a calcium or vitamin deficiency, then the unborn will more than likely suffer the same fate. The child unwanted from the point of conception may suffer from severe emotional instability. Teachers must therefore realize that when looking at a child with specific problems they must attempt to learn as much as possible about the child including facts about the family situation and the mother's pregnancy prior to birth.
<table>
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</thead>
<tbody>
<tr>
<td>8:30 - 10:00</td>
<td>To determine how teachers can educate parents and the community.</td>
<td>Discussion - Who is a teacher? What is the role of a teacher? In what formal and informal ways do teachers make contact with parents and community people? Debate how can teachers help educate the community formally and informally? Will educating the community affect the children in your class?</td>
<td>Awareness of the role of the teacher in education. Can they formally or informally give advice to parents and community people about children and themselves.</td>
</tr>
<tr>
<td>10:00 - 12:00</td>
<td>1. To develop an awareness of the character of the pre-school child-infancy, toddlerhood, the pre-school years. 2. To be cognizant of the needs of children during the years from 0 to 5. 3. To understand the development process from 0 to 5 years. 4. To understand how children learn from 0 to 5 years.</td>
<td>Discussion of ages and stages of development. Discussion of noises, crying, creeping, walking, toilet training head knocking, thumb or blanket sucking. Play among young children - types and values, apparently aimless movements and noises; parallel play, dramatic play, attention span, learning through play.</td>
<td>Aware of and can explain ages and stages of development. Can explain the value of play and types of play. Can select appropriate toys and books for young children. Analyze case studies and determine the causes for problems in children. Can recommend actions to minimize problems of young children. Can advise and discuss with parents how they can help their children prior to entering school.</td>
</tr>
<tr>
<td>THEME AND TIME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td>5. To be aware of the factors that can affect the child then or at a later stage.</td>
<td>Analysis of case study. Discussion on what is a healthy home environment for the young child. Determining the value of doing the following with the young child talking, holding, reading, answering questions taking on trips, e.g. zoo, grocery, etc.</td>
<td>Can select and tell reasons for selection of toys, books and other learning material for young children.</td>
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<tr>
<td>6. To determine how teachers educate parents about this stage of development.</td>
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</table>

Though the child does not enter the public school until he or she is five years, attention must be paid to the early years. The first six years of a child's life are said to be the most important; what the child brings to school at five was gained outside of school. A healthy learning environment prior to entry into school provides the child with a head start. Since many parents may not be cognizant of this fact, school and other institutions in the community will have to become involved in educating the parents.
<table>
<thead>
<tr>
<th>THEME AND TIME</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Teachers helping teachers 8:30 - 10:00</td>
<td>To help teachers realize they can teach each other.</td>
<td>Discussion of ways teachers can help each other. Can staff meetings be re-structured - Teacher prepares and presents a topic. Can your school maintain a resource file of new ideas. Can you start a reading list of books and articles for the teachers at your school?</td>
<td>Evaluation will take place at end of program and will be based on ideas being used.</td>
</tr>
<tr>
<td>10:00 - 12:00 The child on entering school</td>
<td>1. To develop an awareness of the characteristics of the child as he enters school. 2. To analyze the needs of the child. 3. To determine effective teaching approaches for the child on entering school.</td>
<td>Using pictures, discuss similarities and differences. Discussion - How to maintain the curiosity of the young child. &quot;Should reading be taught or reading readiness&quot;.</td>
<td>Aware of characteristics of this age. Know how to meet the needs of individual children. Can plan appropriate learning experiences.</td>
</tr>
<tr>
<td>1:00 - 3:00 Learning Aids</td>
<td>To develop materials that would enhance learning for young children.</td>
<td>Mobiles, puzzles, &quot;Get Dress&quot; ideas from books, readiness, materials, picture files.</td>
<td>Outcome of materials and evaluation of its use.</td>
</tr>
</tbody>
</table>

The first three days have introduced the teacher to the young child and the many factors involved in making him what he is. Since much can be said for learning that begins with the known and moves to the unknown, it permits teachers to know where children are, so that they can guide them from the known to the unknown.
<table>
<thead>
<tr>
<th>THEME AND TIME</th>
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</tr>
</thead>
<tbody>
<tr>
<td>*The teacher's role in the Nation Building. 8:30 - 9:30</td>
<td>To identify the role of the teacher as a change agent.</td>
<td>Debate and discussion &quot;Can teachers help build the nation&quot;.</td>
<td>Participation</td>
</tr>
<tr>
<td>9:30 - 10:30</td>
<td>Any topic or concern teachers have</td>
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</tbody>
</table>
| The child from 5 years to 8 years 10:30 - 12:00 | 1. To develop an awareness of the characteristics of the child from 5 to 8 years.  
2. To analyze the needs of children at this age. | Lecture followed by question and answer period.                            | Can identify characteristics of children of each age.                       |
|                                    |                                                                            |                                                                            | Knows how to help meet the needs at various ages.                           |
|                                    |                                                                            |                                                                            | Can plan appropriate learning experiences.                                  |
| 1:00 - 3:00                        | 1. To determine value of using teaching aids.                              | Discussion on values of using teaching aids.                                | Making and using aids in class.                                             |
| Are teaching aids a waste of time, or do they help learning? | 2. To analyze good and bad teaching aids.                                  | Demonstrate two short lessons with and without aids and have teachers analyze the presentation. |                                                                            |
|                                    | 3. To examine the criteria necessary for selecting and/or making a teaching aid. |                                                                            |                                                                            |
|                                    | 4. To examine the effective use.                                           |                                                                            |                                                                            |

*Nation Building refers to the teachers' role in social change necessary for social, political, and economic development to occur.*


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<tr>
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<th>EVALUATION</th>
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</thead>
<tbody>
<tr>
<td>The teacher and the</td>
<td>To help teachers realize the importance of a positive relationship with the community.</td>
<td>Make a list of community people's views of teachers.</td>
<td>Participation</td>
</tr>
<tr>
<td>community 8:30 - 10:00</td>
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<tr>
<td></td>
<td></td>
<td>1. What is the role of a teacher?</td>
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<td>2. How do you feel about teachers who teach your children?</td>
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<td>3. Would you like to see teachers doing additional things? If yes, give examples.</td>
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<tr>
<td>The slow learner 10:00 - 12:00</td>
<td>To understand the characteristics of the slow learner. To understand that children learn at various rates. To determine the factors that cause children to learn at various rates.</td>
<td>Discussion on characteristics of slow learners. Discussion on types of under-achievers - gifted, slow, average experientially deprived</td>
<td>Ability to identify slow learner.</td>
</tr>
<tr>
<td>1:00 - 3:00</td>
<td>To determine the psychological effects of constant failure. To develop techniques that would benefit the slow developer.</td>
<td>Techniques of teaching slow children. Give test of nonsense syllables and give brief learning period - note results.</td>
<td>Able to plan for slow learners in class. Can explain why children learn at various rates.</td>
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</table>
### DAY 5 Cont'd

<table>
<thead>
<tr>
<th>THEME AND TIME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>To develop plans for teaching slow learners in the regular classroom.</td>
<td>Plan a lesson for a class and include an approach to help three slow learners. Using case studies to determine the problem of a child and how he could be helped.</td>
<td>Demonstrates an awareness of the slow learner and attempts to meet his needs.</td>
</tr>
</tbody>
</table>

### DAY 6

<table>
<thead>
<tr>
<th>What makes a good teacher</th>
<th>To have teachers look at themselves and their teaching styles.</th>
<th>Discussion</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 - 10:00</td>
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<tr>
<td>The children from 8 to 12 years</td>
<td>To develop an awareness of the characteristics of the child from 8 to 12 years. To analyze and determine the needs of children from 8 to 12 years. To analyze the effect of the on-set of puberty.</td>
<td>Lecture followed by question and answer period.</td>
<td>Aware of ages and stages of development.</td>
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<td></td>
<td>a) Know skills appropriate for each age.</td>
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<td>b) Can identify from a group of things those appropriate for a given age.</td>
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<td></td>
<td>Can plan learning experiences for this age range.</td>
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<tr>
<td>THEME AND TIME</td>
<td>OBJECTIVES</td>
<td>ACTIVITIES</td>
<td>EVALUATION</td>
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<tr>
<td>Non-traditional approaches to teaching 1:00 - 3:00</td>
<td>To examine non-traditional approaches to teaching. To evaluate the effectiveness of non-traditional approaches to teaching. To determine effectiveness of classroom games. To determine how classroom games are made.</td>
<td>Using the experience chart or organic approach to reading. Using games as teaching and evaluating device. Children can teach each other. Teaching children.</td>
<td>Teacher's application of new approaches to teaching. Teacher's ability to determine appropriate approaches. Teacher encourages children to learn by discovery.</td>
</tr>
</tbody>
</table>

**DAY 7**

Children learn to respect others from copying adults 8:30 - 10:00 or 9:30 - 12:00 Concerns or topics chosen by teachers if none

To emphasize the importance of adults respecting children so that they can have positive models. Discussion - (This area is very important, since when observing teachers during the field testing it was sadly lacking). Teachers' behaviour patterns.
## DAY 7 cont'd

<table>
<thead>
<tr>
<th>THEME AND TIME</th>
<th>OBJECTIVES</th>
<th>ACTIVITIES</th>
<th>EVALUATION</th>
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</thead>
<tbody>
<tr>
<td>Observing children</td>
<td>To highlight the benefits of an observant teacher.</td>
<td>1. Empty a bag of a variety of objects, expose it for 3 mins. Then have teachers list objects. Discussion -</td>
<td>Develop an observation check list.</td>
</tr>
<tr>
<td>10:00 - 12:00</td>
<td>To examine the tools for observing children.</td>
<td>1. Note how different people recall different things.</td>
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<tr>
<td>If time is used, move topic to</td>
<td></td>
<td>2. Show 3 pictures of children with varying degrees of complexity - have teachers list observations.</td>
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<tr>
<td>10:00 - 12:00</td>
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<td>3. Show a picture with words and have teachers list observations.</td>
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<tr>
<td>Day 8 and all</td>
<td></td>
<td>4. Discuss the need for teachers to be observant.</td>
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<tr>
<td>10:00 - 12:00</td>
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<td>5. What to look for in children. Make observation chart.</td>
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<td>topics backwards</td>
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<td>THEME AND TIME</td>
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<td>EVALUATION</td>
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<tr>
<td>The child with partial</td>
<td>To understand the concepts of partial defects.</td>
<td>1. Discussion on defects</td>
<td>Ability to check for defects.</td>
</tr>
<tr>
<td>defects 1:00 - 3:00</td>
<td>To emphasize the impact of partial defects.</td>
<td>Give reading test to groups of three - one reads, one observes, one notes</td>
<td>Can observe patterns of behaviour that may result from partial defects.</td>
</tr>
<tr>
<td></td>
<td>To determine ways of detecting defects.</td>
<td>errors.</td>
<td>Can plan ways for minimizing defects when teaching.</td>
</tr>
<tr>
<td></td>
<td>To determine ways of minimizing defects.</td>
<td>Have reader read first with regular vision then with obstructed vision -</td>
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<td>perforated material over eyes and then patch on one eye. Discuss eye test</td>
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<td>and placement of child in class.</td>
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<td>2. Work in groups of five. Demonstrate hearing test with all, then obstruct</td>
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<td>the hearing of some members of group.</td>
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<td>3. Discuss ways to check hearing in class. Discuss how children learn to</td>
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<td>speak in relation to hearing. Discussion: When to get help for children and</td>
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<td>from where.</td>
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<tr>
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<tr>
<td>Is your classroom a place children would enjoy coming to?</td>
<td>To encourage teachers to make their classroom a place children would enjoy.</td>
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<tr>
<td>(Let this take 1 hour if change in day 7)</td>
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<tr>
<td>Motivation and Teacher expectations influence children.</td>
<td>To understand the importance of motivating children. To understand how teacher expectations affect children's outcome. To understand the impact of praise on children. To understand the impact of failure.</td>
<td>Give test of very difficult words. When papers are marked make insulting comments about results to student for group to hear. Give a difficult dictation passage, once straight through; read in phrases for teachers to write then read a third time. Tell some teachers their work has improved, call some up and tell them their grades privately and make comments that would encourage them to do better. Passage must be beyond teachers level so that they will not all get good results. Discuss how they felt about their results. How comments were made to them. Discuss effects on children.</td>
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<tr>
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<tr>
<td>The emotionally</td>
<td>To analyze various types of social and emotional problems that affect</td>
<td>Discussion - What are social and emotional problems.</td>
<td>Participation</td>
</tr>
<tr>
<td>socially disturbed</td>
<td>children.</td>
<td>What are the effects of social and emotional problems on the society, the</td>
<td>Ability to identify problems and causes and develop strategy to limit its</td>
</tr>
<tr>
<td>child 1 - 3:00</td>
<td>To determine the impact of social and emotional problems on children.</td>
<td>family, the school, and the child.</td>
<td>effects.</td>
</tr>
<tr>
<td></td>
<td>To determine ways of identifying children who suffer from social and</td>
<td>Group's - Analysis of case studies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>emotional problems.</td>
<td>Discussion of impact on learning.</td>
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<tr>
<td></td>
<td>To develop ways that would limit the effects of social and emotional</td>
<td>Group presentation of cases.</td>
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<td>problems on learning.</td>
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<tr>
<td>8:30 - 10:00</td>
<td>Theme to be selected by teachers</td>
<td>Concerns and topic selected by teachers</td>
<td>Discussion</td>
</tr>
<tr>
<td>Turning the unexpected into a valuable learning experience</td>
<td>1. To help teachers appreciate the value of flexibility. 2. To accentuate importance of capitalizing on the unexpected.</td>
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</tbody>
</table>

**Classroom materials**

<table>
<thead>
<tr>
<th>1:00 - 3:00</th>
<th>To develop additional classroom materials.</th>
<th>Utilize ideas presented in suggestion for Minimum Resource Teaching and original ideas of teachers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME</td>
<td>THEME AND TIME</td>
<td>OBJECTIVES</td>
</tr>
<tr>
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</tr>
<tr>
<td>8:30 - 10:00</td>
<td>New approaches to teaching.</td>
<td>To highlight the value of trips. To explain the unit approach to teaching. To examine the use of contracts in the classroom.</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Evaluation</td>
<td>To evaluate the overall program</td>
</tr>
<tr>
<td>1:00 - 3:00</td>
<td>1. Participant Evaluation Questionnaire</td>
<td></td>
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<tr>
<td></td>
<td>2. In small groups of 4 or 5 have teachers discuss strengths and weaknesses of the program. Have a recorder take notes.</td>
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</tbody>
</table>


