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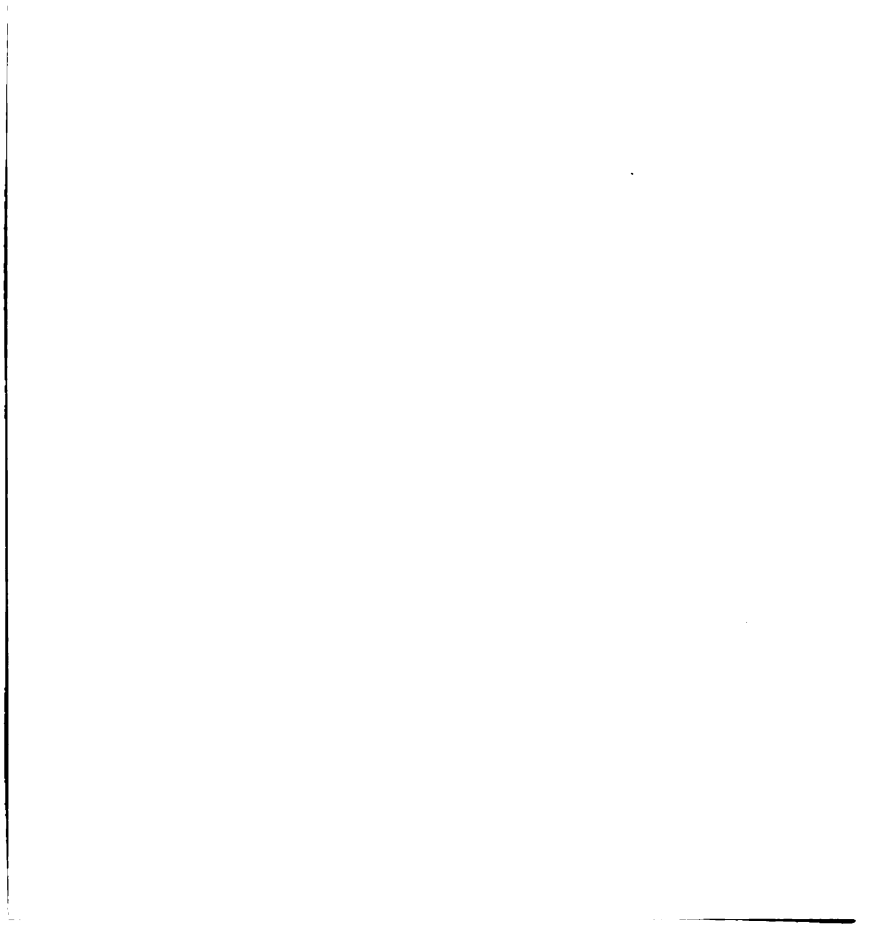

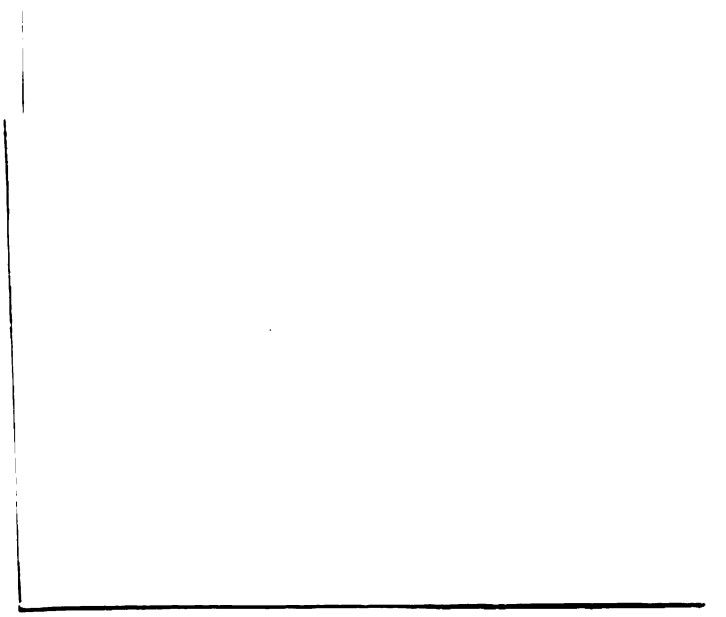

ABSTRACT

AN EXAMINATION OF SELECTED PROBLEMS
ASSOCIATED WITH PRIMARY TEACHER EDUCATION
IN PAPUA AND NEW GUINEA LEADING TO
SUGGESTIONS FOR POSSIBLE REDIRECTION
IN CURRICULUM PLANNING

By

Frederick Nicholas Ebbeck

The purpose of this study is to advance recommendations which will lead to a possible redirection in curriculum planning in primary teacher education in Papua and New Guinea. A number of recommendations are made which identify specific areas the writer feels need some adjustment.

The study is essentially a descriptive, analytical, and, to some extent, a comparative one. It does not claim to be exhaustive in its treatment of all problems associated with primary teacher education. It does, however, take into account the problems associated with the adaptation of curriculum content and teaching methods as they relate to the growth and development of the learner, his cultural background and its influence on his learning, modern educational

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technology and the latest thinking on curriculum construction, and national developmental policy for Papua and New Guinea.

In the absence of statistical data on either past programs or future policies, current programs have been studied in the light of past and present curricula; policy statements of the Papua and New Guinea Department of Education; and the writer's knowledge, which comes from personal involvement for ten years in teacher education in Papua and New Guinea.

Examples from selected UNESCO Reports and from selected African countries in their quest for better teacher education preparation have been used to highlight similarities with Papua and New Guinea where they occur, and where they point toward possible solutions to problems raised. The thinking and current research of selected American educators in the field of curriculum development and improvement in teacher education have been utilized.

Recommendations for redirection of curriculum in primary teacher education in New Guinea include:

1. a. All programs of primary teacher education be of three years' duration, with the added third year becoming a year of internship;

   b. All students entering a primary teacher training program be allowed to choose between Infant teaching and Primary teaching;

   c. Student-teachers be encouraged to participate in the work of the various social organizations throughout

New Guinea and receive credit towards certification for this work;

d. Further exploring of the possibility of changing Departmental and Mission policy for selection and recruitment of New Guineans into the teaching service;

e. Commencing a program in secondary schools on an elective basis to enable secondary school students interested in teaching and in people to participate as a teaching aide;

2. a. College programs cease attempting to prepare students for lower school teaching during the first year of the two-year program and for upper primary teaching during the second year;

b. College programs aim to assist the student's General Education during the first year of the program and their Professional Education in the second year;

3. An interdisciplinary approach to course structure be implemented;

4. College programs be presented in other ways than straight lecture methods;

5. Colleges explore the potential of a team-teaching approach to program organization;

6. College staff be encouraged to participate actively in the curricula of schools and in the in-service training of teachers;

7. College curricula to include more student experiencing of the affairs and aspirations of the developing New Guinea society in order to assist in deepening the student's observations and analysis of his society in meaningful terms of daily living;

8. Teachers colleges, in conjunction with the University of Papua and New Guinea, encourage research into child growth and development in New Guinea and the influences of traditional culture upon school and learning. Such research to include a study of New Guinea folklore, songs, art and dance;

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9. a. Colleges aim to encourage each student to experiment with various approaches to teaching, in order that a personal method of teaching will develop;

   b. Colleges to place less reliance on set methods and "college approved" lesson formats;

   c. Colleges aim to develop the student's skill in communication through improving his self-understanding, his understanding of his society, his oral and written ability, and his purpose in teaching.

The value of such a study is seen in the stimulus it could have on the staffs of the New Guinea teachers colleges to help them come to a better understanding of the principles of curriculum construction.

AS

AN EXAMINATION OF SELECTED PROBLEMS ASSOCIATED WITH PRIMARY TEACHER EDUCATION IN PAPUA AND NEW GUINEA LEADING TO SUGGESTIONS FOR POSSIBLE REDIRECTION IN CURRICULUM PLANNING

By

Frederick Nicholas Ebbeck

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

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ACKNOWLEDGMENTS

My appreciation is extended to all those who have so freely given of their time and experience to assist me with this study. In particular, my special thanks go to Doctor Troy L. Stearns who, as chairman of my committee, gave so much of himself, his experience and his talents. It is indeed an honor to have studied with such a scholarly and humane person. My special thanks go also to Doctor Louise M. Sause, who guided me through my cognate studies in Growth and Development. It is rare that one gets an opportunity to work closely with two such outstanding people as Dr. Stearns and Dr. Sause. My appreciation is extended to my other committee members, Doctor George R. Myers and Doctor Alice M. Davis, for their personal interest and encouragement.

To my wife, Marjory, and my daughter, Genevieve, for their love, patience and understanding, I dedicate this study.

CHAPTI

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CHAPTER I

THE PROBLEM

I. Rationale for the Study

Most people with more than three or four years of teaching experience in New Guinea spoke until recently of teacher training, and training is what they attempted to do. Teacher education as a concept, and as a term, is less than half a decade old.

Prior to 1955 teacher training was rather haphazard and unsystematized, but since this date it has become increasingly organized and standardized. In 1955 it became obvious to the Australian Government and the Administration of Papua and New Guinea that the success of the Australian plan for rapid educational expansion depended upon the rapidity with which a cadre of trained indigenous teachers could be made available to staff new primary schools. This plan resulted in a proliferation of small Mission-sponsored and Administration-sponsored teachers colleges and a one-year course of training to be given to prospective teachers who had successfully completed primary (elementary) schooling. As will

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be seen, the kind of training given in this one-year course was, of necessity, fairly prescriptive in content and methodology of teaching. The staff of these many small colleges were, in the main, recruited from the general New Guinea teaching service, were expatriates, and most had little or no preparation or apparent vocation for the teaching of teachers in pre-service training programs.

Since organized teacher education got under way in 1955, great advances have been made in the total educational scene in New Guinea. The formal educational background which a student teacher brings with him to his training program is vastly different today from what it was in 1955. The course of training is now two years instead of one for most students. Similar advances have been made in the modernizing of the student's traditional society. This modernization has changed his culture so much and so rapidly that educators and scholars such as Margaret Mead, who have a deep understanding of the needs of New Guinea and its struggles as it moves towards nationhood, plead for teachers to become more aware of the wider New Guinea culture and for teacher preparation programs to consider this aspect of the child's and teacher's background in order "to give the new teacher a sense of the pupils he will teach."[1]

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[1]Margaret Mead, "Anthropology and Education," Papua and New Guinea Journal of Education, V, No. 4 (June 1968), 12.

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It is argued, however, that teacher education in New Guinea has failed to innovate and failed to keep abreast of the changing needs of the student and the changing conditions of his society. Teacher education in New Guinea is still regarded by many educators directly concerned with it as the training of young men and women to get their classes step-by-prescribed step through the factual material of a syllabus. In many respects this has resulted in teacher education programs being an extension of the methods and content of existing secondary schooling with a little practical experience in the classroom added.

The greatest single weakness pointed out by those who are anxious to recast syllabuses is too great a preoccupation with subjects as logically ordered bodies of knowledge, and too little with the students as they are, and in the New Guinea situation as it in fact is.

The teacher educator cannot be held wholly responsible. He is trapped in a situation not of his particular making. He has been left in no doubt of what is expected of him by politicians, economists, and administrators: to furnish teachers who will help young people to move from the very simple culture of their parents towards a very complex culture in a few years.

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The staffs of the various New Guinea teachers colleges are continually in a dilemma about what the student should study and how he should study it. This dilemma is compounded by the rapidity of change in the curricula of primary and secondary schools--change which rarely considers the problems associated with teacher pre-service and in-service preparation. A recent survey of education in Papua and New Guinea has stressed this difficulty, a fact which has serious implications for teacher education programs:

> The most striking fact about territory curricula is the number of changes and the haste of their introduction. The discovery of competent teachers or their in-service training for competence, the provision of materials, especially for text books and other sources, have not, in general, preceded the introduction of new syllabuses. Just as importantly, teachers have not been given time to "live with" their courses, i.e., to master their content, find interesting and relevant new material, devise improved methods of teaching, discover the pace at which different elements may best be mastered, before the courses are scrapped for new ones.[1]

The dilemma is further compounded by the fact that primary teachers are required to teach all subjects. As a result, primary teacher preparation programs become fragmented and overcrowded. Students have little time to develop the ability to study on their own and are given no time to develop their own particular talents and interests.

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[1]University of Sydney, Adult Education Department, "Education in Papua and New Guinea," Current Affairs Bulletin, XLIII, No. 6 (February 10, 1969), 95-96.

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Even though there has been much discussion about what to teach and how the student should learn, the process of education within the colleges themselves has not changed to any great degree, and such practice as is conducted within almost all colleges is still repetito mater studiorum. Colleges continue to teach the primary school syllabus content. It is claimed that because of the students' previous inadequate education, and in order that they as teachers know what they are talking about, this "content" has to be taught. L. J. Lewis, Professor of Education in Tropical Areas, University of London, visited New Guinea in 1968. He commented in a personal letter ". . . a study on curriculum for teacher education in Papua and New Guinea is certainly needed and would be very worthwhile."[1] He referred to a statement he had made on the point of teaching syllabus content in colleges at a conference of teacher educators in Kenya in 1968:

> . . . these are attitudes which lead to attempting to do too much for the students and not trusting them to do things for themselves, with the consequential overloading of the time-table and the insatiable demands upon the time of the staff in preparation, instruction, supervision and exercise marking so that the latter have no time for reflection themselves. The answer to this aspect of the nature and content of the curriculum is to be found in determining what are the essentials as opposed to the

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[1] L. J. Lewis, in a personal letter to the writer, dated January 9, 1970.

> accidentals in the equipment of the teacher, and thereby applying a principle of limitation to the objective to be pursued.[1]

Dr. G. W. Gibson, Chief of the Division of Teacher Education in the New Guinea Department of Education, questioned the usefulness of current teacher education programs in New Guinea when he wrote: "Should we concentrate on generalizations and the development of understanding of the education process or on the development of teaching skills to meet the present needs in schools?"[2] He also raised the issue of college teaching methods other than the lecturing which appears to be the most nearly accepted and practiced method of imparting knowledge in New Guinea.

The purpose of this thesis is to advance recommendations which will lead to a possible redirection in curriculum planning in primary teacher education in New Guinea. These recommendations will be based upon the writer's experience and understanding of the nature of the teacher education task in New Guinea, the ideals of the Administration and the peoples of the developing New Guinea, and selected pertinent examples provided by educators in other countries.

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[1] L. J. Lewis, "The Nature and Content of Curriculum in Teachers Colleges," New Directions in Teacher Education, Proceedings of Second Kenya Conference 1968 (Nairobi, Kenya: East African Publishing House, 1969), p. 61.

[2] G. W. Gibson, in a personal letter to the writer, dated January 23, 1970.

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II. Definition of Terms

An understanding of the terms related to education in New Guinea is essential if one is to attempt to equate standards and programs there with those of the rest of the world.

The Territory of Papua and New Guinea is often referred to as "The Territory," but for the purposes of this thesis it will be referred to as New Guinea.

The Australian Government is responsible for the administration of Papua and, under the United Nations, for the administration of New Guinea. It has established an Administration comprised of various Departments which are responsible to an Administrator. The Department of Education is one department in the Administration. There is a Legislative Assembly of elected politicians. At this stage of New Guinea's development this Assembly has limited powers, though these powers are increasing as the country moves towards independence.

Education in Papua and New Guinea until 1970 has been organized as a dual system: Mission (comprised of the various missionary bodies involved in the formal education of the people of New Guinea) and Administration, with overall policy in the hands of the Administration's Department of Education.

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The New Guinea School System

1. Organization of Schools

Year of Grade Schooling				External Examination
13	Form VI	Senior High School		University Entrance
12	Form V			
11	Form IV	High Schools Second Stage	Technical Schools	Schools Leaving Certificate (Form IV)
10	Form III			Intermediate Certificate (Form III)
9	Form II	High Schools First Stage	Vocational Schools	
8	Form I			
7	Std. 6		Primary Schools	Standard 6 Primary Final Examination
6	Std. 5			
5	Std. 4			
4	Std. 3			
3	Std. 2			
2	Std. 1			
1	Std. Prep.			

2. Examinations: Form IV "Schools Leaving Certificate," Form III "Intermediate Certificate," and Standard 6 "Primary School Final Examination" are all public examinations on required subject matter set and graded under the auspices of the Department of Education in New Guinea.

3. Teacher Education Courses--as of 1969:

Course	Educational Prerequisite
Three-Year Secondary (Administration only)	Form 4
Two-Year Primary ("C" Course)	Form 3
Two-Year Primary ("B" Course)	Form 2
One-Year Infant ("A" Course, Mission Colleges only)	Std. VI plus Form 1
Three-Year Manual Arts (Secondary)	Form 4
Three-Year Home Economics (Secondary)	Form 4

III. Methodology

This study of the curriculum of primary teacher education in New Guinea is essentially a descriptive, analytical, and to some

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In the absence of statistical data on either past programs or future policies, current programs have been studied in the light of past and present curricula; policies as proclaimed by the Department of Education; and the writer's knowledge which comes from personal involvement for the past ten years in teacher education in New Guinea.

Further, similarities exist in the growth and development of formal education in English speaking Africa and New Guinea. Both areas are products of a colonial administration and have, as a result, an educational system which is more a replica of the educational system of the colonizing country than of the recipient country. In this sense education is a "foreign" system and has inherent cultural discontinuities.

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The examples of selected African countries in their quest for better teacher education preparation have been used to highlight these similarities, where they occur, and to point to possible solutions to problems raised. UNESCO has done much work in advancing educational practice in developing countries and its recommendations, also, have been considered. Probably the most important comparative development is the change in curriculum made in these developing countries to provide a more realistic education for the majority of primary school students for whom primary education is a terminal education. This has major implications for the preparation of primary school teachers.

A third area of research included in this study is that of the current thinking of selected American educators in the field of curriculum development and improvement in teacher education.

IV. Limitations of the Study

This study limits itself to primary teacher education in New Guinea, though many of the problems associated with primary teacher education are also to be found in programs preparing secondary teachers.

Any change made in programs of teacher education in New Guinea must consider national goals as exemplified and incorporated

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in the policies of the Department of Education. This limits somewhat any recommendation for radical change in current programs.

A further limitation to this study is the absence of authoritative writing on education in New Guinea.

V. Overview of Subsequent Chapters

Chapter Two will be a review of the literature including:

1. available current data on education in Papua and New Guinea from official reports and statements; journals, articles and other sources; independent surveys; anthropological and sociological studies;

2. materials from developing countries exemplified by English-speaking Africa; from UNESCO on teacher education; reports of educational conferences in Africa; and writings of educators concerned with children's learning in Africa;

3. literature from the United States of America on curriculum construction, development and design for teacher education.

Chapter Three presents background information to assist in understanding the New Guinea educational scene. The chapter is divided into four parts:

1. A brief Geographic, Historic, Economic and Cultural background of New Guinea to set the scene for an analytical discussion of existing school and college curricula in New Guinea and to provide a criterion for basing projected curriculum innovations;

2. A brief survey of two traditional New Guinea societies to serve as a vehicle of contrast between the traditional and modernizing societies;

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3. A discussion of education as a folk process and of the culture gap existing between the traditional and the emerging New Guinea cultures;

4. A brief survey of primary education in New Guinea including a discussion of the role of the primary schools and the variety of educational standards existing in schools.

Chapter Four concerns the professional education of the New Guinea primary teacher. The chapter is divided into two parts:

1. A brief review of the growth of teacher education in New Guinea including comment on the development of Mission teacher education. The development of curricula in teacher education is shown to explain current training programs and to indicate the framework in which any change must take place;

2. An outline of selected problems relating to curriculum in teacher education in New Guinea including: finance; socio-cultural factors; the need for professionalization of the teacher; how children learn; language and communication; instructional methods and media.

Chapter Five is concerned with curriculum for primary teacher education in New Guinea and offers some proposals for redirection of curriculum. The chapter is introduced by a brief summary of teacher education in New Guinea. A statement of the writer's concept of teacher education and his understanding of the process of curriculum change is included in the introduction.

Recommendations for redirection of curriculum in teacher education in New Guinea are made under three headings:

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1. Organization--at the policy-making level;

2. Organization--at the institution level;

3. College programs--curriculum content and process.

The proposals are then summarized in the form of a conclusion.

CHAPTER II

REVIEW OF THE LITERATURE

The review is divided into three sections:

I. Papua and New Guinea:

- A. Official reports and statements
- B. Journals, articles and other sources
- C. Independent surveys
- D. Anthropological and sociological studies

II. Developing Countries--Africa:

- A. Materials produced by Unesco on teacher education
- B. Reports of selected Afro-Anglo-American and Kenya Conferences
- C. Other Sources: Writings of educators concerned with African education
- D. Summary

III. Literature from the United States

- A. Curriculum design and construction
- B. Curriculum for teacher education
- C. Summary

I. Papua and New Guinea

A. Official Reports and Statements

The Department of Education's "Confidential Report of the Joint Working Party on Educational Policy," which was presented to

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the Administrator of Papua and New Guinea in 1968, contained the Department's policy and projections to 1972.[1] This was the source of information on education leading to the more comprehensive "Five Year Plan" mentioned next. It is a particularly valuable document and explains fully enrollment statistics, costs, buildings and administration of all Divisions of the Department for the extent of the "Five Year Plan."

The Report indicated that by 1977, if primary school enrollment targets are to be met, 1000 two-year trained teachers will be required annually to staff the schools.[2] In this regard Mission authorities were urged to consolidate further their smaller colleges "so that there will be fewer, better staffed, better equipped colleges from which better trained teachers will graduate."[3] It indicated that by 1972 the target for indigenous staff in teachers colleges, both Administration and Mission, is to number eleven. This represents no increase on the 1969 figures.[4]

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[1]Administration of Papua and New Guinea, "Confidential Report of the Joint Working Party on Educational Policy," Port Moresby, March, 1968. (Duplicated copy.)

[2]Ibid., para. 79.

[3]Ibid., para. 81.

[4]Ibid., para. 87.

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Another feature of this Report is that it outlined the preliminary considerations for nationalizing the educational systems (Mission and Administration) under one controlling authority. This will be referred to in Chapter Three.

The most informative document available on current plans and policies for New Guinea is the Programmes and Policies for Economic Development of Papua and New Guinea,[1] known as the "Five Year Plan." This document, although covering policy and planning for all sections of the Administration, clearly stated the long-term objectives for Education in New Guinea. In addition, it defined the present position in all Divisions of the Education Department and projected educational targets to 1972.

The document stated that primary education will be a terminal education for many students.[2] Primary school enrollment is to continue to increase by an estimated 41,000 children by 1972. It is planned to reduce the length of primary schooling from seven to six years beginning in 1970. This, it is anticipated, will allow more children to obtain a primary education and ". . . make maximum use

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[1]Territory of Papua and New Guinea, Programmes and Policies for Economic Development of Papua and New Guinea (Port Moresby: Government Printer, 1968).

[2]Ibid., p. 98.

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of the teachers available."[1] The program envisaged that ". . . local responsibility for the management and upkeep of primary schools will be increased" through self-help construction schemes.[2]

Other policy statements are made from time to time in the House of Assembly (elected representatives of the people but with limited decision-making powers), by the Director of Education who represents the Administration of Papua and New Guinea, and by the Australian Government. It is difficult to keep account of educational policy under these circumstances in a rapidly developing country such as New Guinea. The official Australian Government Yearly Reports for the Territory of Papua[3] and the Yearly Reports for the Trust Territory of New Guinea[4] also provide policy statements and statistics; but because of the rapidity of change in New Guinea, these statements and statistics are often out of date by the time they get into print.

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[1] Ibid., p. 99.

[2] Ibid.

[3] Commonwealth of Australia, Annual Report of the Territory of Papua for the Period 1 July 1965 to 30 June 1966 (Canberra: Government Printer, 1966).

[4] Commonwealth of Australia, Annual Report of the Trust Territory of New Guinea for the Period 1 July 1965 to 30 June 1966 (Canberra: Government Printer, 1966).

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Policy for teacher education is mainly the concern of the Chief of Division of Teacher Education who, through personal contact and circular letters, directs the work of the three Administration and twelve Mission colleges. One recent circular letter, entitled "The Development of Teacher Education,"[1] challenged teacher educators in New Guinea to review their pre-service and in-service programs. It made proposals for increasing the quality and output of teachers by increasing the length of the program to three years; raising the academic prerequisite for entry into training to Form IV; basing college programs on an accurate assessment of needs, conditions in the schools, the type of person entering training, and the type of college staff available; recruiting well-qualified and experienced staff; influencing local teachers to undertake advanced studies with a view to appointment in teachers colleges; undertaking studies of teachers during their early teaching years to determine the effectiveness of work done at colleges; increasing the number of staff and bettering facilities in colleges.[2]

Beginning in 1968, an annual conference of the Principals of the three Administration and twelve Mission colleges is held.

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[1] Papua and New Guinea, Department of Education, "The Development of Teacher Education," undated circular letter from the Division of Teacher Education, 1968.

[2] Ibid., pp. 10-13.

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The "Report on Conference of Teachers College Principals--Goroka, 1968,"[1] illuminated current practices and problems in the several colleges and pointed to possible changes in curriculum and methods within the individual colleges. The Report noted the Director of Education's introductory comment:

> . . . if we are to set our discussions against a realistic background we will need to remember:
>
> 1. The relationship between education and politics.
>
> 2. The fact that minimally qualified teachers may be necessary for many years to come. This would emphasise the need for in-service courses.
>
> 3. The need to know where we are going and why, in terms that make for appropriate action. What we do will be confused and uncertain if we lack clearly defined objectives.[2]

At the 1968 Conference of Teachers College Principals, Ernest Roe, Professor of Education at the University of Papua and New Guinea, advocated better staff in Primary Teachers Colleges. An interesting recommendation he made concerning college staff, and one which has not, apparently, received much attention by other teacher educators in New Guinea, is that of the great need for local (indigenous) staff for colleges. He said:

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[1] Report on Conference of Teachers College Principals--Goroka, 1968, Department of Education, Port Moresby, 1968. (Stencilled copy.)

[2] Ibid., p. 3.

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> A further problem faced by the Territory is the urgent need to have academically qualified primary teachers for teacher education who "know" the culture of Papua and New Guinea. Probably only indigenous staff are really capable of fully understanding the problems faced by Territory teachers. It seems essential to increase the number of such personnel even if their role is largely one of tutors or assistant lecturers. As colleges use more tutorials and small group discussions, so there will be an increasing need for such staff.[1]

Available for study to assist in developing an understanding of existing curricula in the light of older models are the Departmental Teacher Training Syllabuses, for 1950,[2] 1962 "A" Course,[3] and 1965 Two Year Course.[4] These syllabuses showed the content, method and organization of previous teacher training programs. The curricula for teachers colleges are now the responsibility of the

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[1] Ernest Roe, "Ideas Guiding the Development of University Courses in Teacher Education," Report on Conference of Teachers College Principals--Goroka, 1968, Department of Education, Port Moresby, 1968, p. 16. (Stencilled copy.)

[2] Papua and New Guinea, Department of Education, "Teacher Training Syllabus 1950," Port Moresby. (Stencilled copy.)

[3] Papua and New Guinea, Department of Education, Teacher Training Syllabus--One Year Course (Port Moresby: South Pacific Post Print, 1962).

[4] Papua and New Guinea, Department of Education, "Syllabus for the Two Year Course of Teacher Training," Port Moresby, 1965. (Stencilled copy.)

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individual college. Handbooks for 1970 of the Goroka[1] and Madang[2] Teachers Colleges and the 1969 Port Moresby Teachers College Handbook[3] have outlined the academic and practical aspects of current courses. These syllabuses and handbooks are used in Chapter Four to discuss the development of curricula in teachers colleges.

B. Journals, Articles and Other Sources

Generally, most of the writing done on education in New Guinea has been descriptive in nature. Perhaps the most recent authoritative writing is The Australian Journal of Education, March 1968, issue entitled "Education in Papua and New Guinea."[4] This issue of the journal is devoted entirely to education in New Guinea, and articles by experienced New Guinea educators cover a variety

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[1] Papua and New Guinea, Department of Education, Handbook, 1970: Goroka Teachers College (Port Moresby: Government Printer, 1970).

[2] Papua and New Guinea, Department of Education, Handbook, 1970: Madang Teachers College (Port Moresby: Government Printer, 1970).

[3] Papua and New Guinea, Department of Education, Handbook and Calendar: Port Moresby Teachers College (Port Moresby: Government Printer, 1969).

[4] The Australian Journal of Education, XII, No. 1 (March 1968).

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of topics from a historical survey by the Director of Education to "Current Directions and Future Challenges" by Ernest Roe, Professor of Education, University of Papua and New Guinea.

Two points raised by the Director of Education are pertinent to this thesis. First, discussing the ideal of a blending of cultures, New Guinean and Western, in New Guinea, he said:

> . . . there are many factors which preclude the realization of this idea in a viable educational programme. . . . It has, therefore, been necessary to abandon the idea of the educational programme "blending" the cultures. What we hope to do is to put before Papuans and New Guineans the choices from their own and western culture, so that they may choose ideas and values which enable them to live successfully in their own society.[1]

Second, specifically on teachers and teacher education, he stated:

> It would be foolish to assert that the relatively narrow and mechanistic approach to teaching necessarily adopted for the lowest level of teachers is satisfactory. Using teachers in this monitorial way has, however, laid a foundation for the next generation of students. In common with other countries, Papua and New Guinea has the problem in the immediate future of finding ways, by means of in-service training, either on the job or in institutions, to increase the flexibility with which teachers in the service can handle the requirements of a modern curriculum.[2]

An article in this journal by J. R. Prince, of the University of Papua and New Guinea, entitled "Science Concepts in New Guinean

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[1] K. R. McKinnon, "Education in Papua and New Guinea: The Twenty Post-War Years," The Australian Journal of Education, XII, No. 1 (March 1968), 6.

[2] Ibid., pp. 10-11.

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and European Children,"[1] which describes a survey of the conceptual development of selected Papuan and New Guinean school children, concluded:

> . . . in New Guinea the attainment of conservation of physical quantities is achieved by indigenous children considerably more slowly than by children of European origin. This finding is in line with those from other parts of the world, and is no doubt attributable to the different ranges of experience to which the respective cultures subject children reared in them. There is some evidence that the conceptual development of conservation does not necessarily generally occur in members of a little disturbed New Guinean culture, but that intruding western style education is responsible for conceptual developments which are in line with western thought patterns.[2]

(These findings are parallel with those of Greenfield in Africa, mentioned later in this chapter.)

There have been two recent Current Affairs Bulletins published by the University of Sydney entitled "Education in Papua-New Guinea"[3] and "Language in Papua-New Guinea."[4] The first of these gives a frank description of the present educational scene in New

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[1] J. R. Prince, "Science Concepts in New Guinean and European Children," The Australian Journal of Education, XII, (March 1968), 88-89.

[2] Ibid.

[3] University of Sydney, Adult Education Department, "Education in Papua-New Guinea," Current Affairs Bulletin, XLIII, No. 6 (February 1969).

[4] University of Sydney, Adult Education Department, "Language in Papua-New Guinea," Current Affairs Bulletin, XLIII, No. 7 (February 1969).

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Guinea, including a critical appraisal of teachers, and their preparation. Concerning this particular point, it was noted:

> . . . the trainees for the "A" Course are usually selected from those who have not shown themselves able to continue profitably their normal schooling. . . . It is not surprising that the teaching of the majority of "A" Certificate teachers--and there are fine exceptions--is stereotyped and often incompetent, especially in English and Mathematics.[1]

The second mentioned Bulletin discusses the role of English as a lingua franca and its possible replacement as a national language by "Pidgin English" or one of the many pure indigenous languages. The Bulletin commented that the problem of a national language is by no means settled, and it is likely to become more controversial as the country moves closer to independence. This has serious implications for teacher education in New Guinea.

Other writing of a general nature is to be found in the volumes of the Papua and New Guinea Journal of Education. First published in 1961 and issued at irregular intervals, it has become more regular in issue since 1967. Several articles by Dr. G. W. Gibson specifically on teacher education are relevant to this thesis. The titles of these articles are indicated in the footnotes.[2]

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[1]University of Sydney, Adult Education Department, "Education in Papua-New Guinea," p. 93.

[2]G. W. Gibson, "The Emphasis in Teacher Training--More or Less--Of What?" Papua and New Guinea Journal of Education, II, No. 2 (July 1964), 57-60; G. W. Gibson, "Let's Have a

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Margaret Mead wrote "Anthropology and Education," a short article in the Papua and New Guinea Journal of Education[1] in which she stressed the need for the new teacher in New Guinea to be given more opportunity to study his culture and the developing common culture, so that he will have a "sense of the pupils he will teach." She gave the example of teaching through the culture rather than about the culture. Her great understanding of New Guinea culture adds power and importance to her considered recommendations.

C. Independent Surveys

Two important surveys should be mentioned. They are the Report of the Commission on Higher Education in Papua and New Guinea,[2] also known as the "Currie Report," and the Report of the Advisory Committee on Education in Papua and New Guinea,[3] also

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Profession," Papua and New Guinea Journal of Education, V, No. 3 (February 1968), 36-41; G. W. Gibson, "The Future: Past or Prologue," Papua and New Guinea Journal of Education, V, No. 2 (September 1967), 44-51.

[1]Margaret Mead, "Anthropology and Education," Papua and New Guinea Journal of Education, V, No. 4 (June 1968), 12-15.

[2]Report of the Commission on Higher Education in Papua and New Guinea, Sir George Currie, Chairman (Canberra: Union Offset Printing, 1964).

[3]Report of the Advisory Committee on Education in Papua and New Guinea, W. J. Weeden, Chairman (Canberra: Union Offset Printing, 1969).

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known as the "Weeden Report." The Currie Report was the first major survey of education in Papua and New Guinea; and as a result of action on many of its recommendations, the University of Papua and New Guinea was founded in 1966, the Institute of Higher Technology in 1967, and the Goroka (Secondary) Teachers College in 1967. Among the recommendations for primary teacher education was the need for immediate action to upgrade teacher education courses and to raise the educational requirements as prerequisite for entry into training colleges. This upgrading resulted in an abandonment of the lowest level of teacher training (Course "A") in 1967 by all Administration colleges and several of the Mission colleges. All courses for these colleges then became of two years duration with one or two years of secondary education as a prerequisite for entry into training programs.

The Weeden Report surveyed the Administration and Mission educational structures within New Guinea and advised the Australian government on the feasibility of unifying the systems into a national system. This has since been done, and the Australian government and the Territory Administration have begun to act on many of the recommendations of the report.

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D. Anthropological and Sociological Studies

So far this review has been concerned directly with the formal educational system. In order to understand the traditional societies of New Guinea and the education they provided for their young, several anthropological studies have been used. Margaret Mead's famous study, Growing Up in New Guinea,[1] and her later study of the same people, New Lives for Old,[2] provide excellent background for understanding the traditional Manus culture. These two studies and the ones listed below will be discussed in Chapter Three.

The second traditional culture studied is that of the Orokolo of the Gulf District. Albert Maori-Kiki's autobiography, Kiki: Ten Thousand Years in a Lifetime,[3] as well as articles by the one-time New Guinea government anthropologist F. E. Williams found in Oceania,[4] and an unpublished Master's thesis by Dawn Ryan entitled

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[1]Margaret Mead, Growing Up in New Guinea (London: Pelican, 1930).

[2]Margaret Mead, New Lives for Old (New York: Mentor Books, 1956).

[3]Albert Maori-Kiki, Kiki: Ten Thousand Years in a Lifetime (London: Praeger, 1968).

[4]F. E. Williams, "Trading Voyages from the Gulf of Papua," Oceania, III, No. 2 (December 1932), 139-166; F. E. Williams, "Seclusion of Age Grouping in the Gulf of Papua," Oceania, IX, No. 4 (June 1939), 359-381.

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"Social Change Among the Toaripi, Papua,"[1] are used as references. Kiki, a native of Orokolo, lived his early boyhood in his traditional society and was later educated in the modern "westernized" society into which New Guinea is moving. He showed the contrast between the traditional ways of child rearing and education and the modern.

II. Developing Countries--Africa

New Guinea is a developing country and has many problems similar to other developing countries in the world. The writer believes, as a result of his studies on education in English speaking Africa, that parallels exist between the problems encountered in education and development in the various developing African countries and those found in New Guinea. For the purposes of this thesis, the African countries of Kenya, Uganda, Tanzania and Nigeria have been chosen to point out these parallels where appropriate to the New Guinea argument.

Three examples, at this stage, will help justify this belief on the writer's part. First, New Guinea has a serious primary "school-leaver" problem--a leaver who is ill-prepared to face the prospects of an agrarian life. This problem is due, in part, as will

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[1]Dawn Ryan, "Social Change Among the Toaripi, Papua" (unpublished M.A. thesis, University of Sydney, 1965).

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be seen in Chapter Three, to a curriculum which is irrelevant to the real needs of the student. This is also a problem for East Africa, as commented by Nyerere,[1] Sheffield,[2] Hanson[3] and Anderson.[4]

A second parallel can be found in the low academic qualifications level for entrance into primary teacher education programs. This low level of academic recruitment is responsible, in part, for the low status of primary school teachers and for the quality of education in primary schools. The World Confederation of Organizations of the Teaching Profession (W. C. O. T. P.),[5] Hanson[6] and Castle[7] have so commented on the East African scene.

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[1]Julius K. Nyerere, "Education for Self Reliance," Speech by the President of the United Republic of Tanzania, 1967, p. 10. (Duplicated copy.)

[2]J. R. Sheffield, ed., Education, Employment and Rural Development (Nairobi, Kenya: East African Publishing House, 1967).

[3]John W. Hanson, Imagination and Hallucination in African Education (East Lansing: Michigan State University, 1966), p. 6.

[4]John Anderson, "Primary School Leavers in Progressive Rural Areas in Kenya," Teacher Education, VIII, No. 3 (February 1968), 201.

[5]World Confederation of Organizations of the Teaching Profession, "Handbook for Raising Teacher Status in Africa," Naimey, 1964, p. 80.

[6]Hanson, Imagination and Hallucination in African Education, p. 24.

[7]E. B. Castle, Growing Up in East Africa (London: Oxford University Press, 1966), p. 163.

A third parallel is the influence of Western cultures on traditional ones. This influence is usually referred to as a "process" of modernization--a development from colonization. Nyerere,[1] Lewis,[2] Griffiths,[3] and Beeby[4] are but a few who have commented on modernization as it concerns East Africa.

Dean A. Babs Fafunwa, Dean of the College of Education at the University of Ife, Nigeria, commented:

> . . . information on teacher education and factors influencing learning materials are few and far between even from this end. One of our problems in Africa is the absence of an exchange of information bureau.[5]

This lack of compilation of research in Africa is a limiting factor in any organized study of the ways African children learn and how teacher education programs might best be planned so as to prepare young teachers to meet the needs of children.

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[1] Nyerere, "Education for Self Reliance," p. 2.

[2] L. J. Lewis, "The Learning Process and the Teaching of Science and Mathematics in Developing Countries," Teacher Education in New Countries, IX, No. 2 (November 1968), 123. Hereafter referred to as "Learning Process."

[3] V. L. Griffiths, "The Education of the Young in Rural Areas," Education, Employment and Rural Development, edited by J. R. Sheffield (Nairobi, Kenya: East African Publishing House, 1967), p. 309.

[4] C. E. Beeby, The Quality of Education in Developing Countries (Cambridge, Mass.: Harvard University Press, 1966), p. 79.

[5] A. Babs Fafunwa, in a personal letter to the writer, February 4, 1970.

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A. UNESCO

Probably one of the most reliable resources of current research and trends in teacher education in Africa is several Final Reports of UNESCO, notably the reports entitled Expert Committee on Teacher Education[1] and Meeting of Principals, Chief Technical Advisers and Language Teachers of Teacher Training Colleges in Africa Receiving Assistance from UNESCO.[2] Both these reports considered the importance of new approaches to teacher preparation in order to meet the needs of contemporary man and society. The first mentioned report addressed itself to the curriculum, organization, staffing and research in teacher education. The second report specifically is addressed to the problem of language teaching, linguistics and the preparation of language teachers in Africa.

Of the recommendations for teacher education made in these reports, the need for a broad basis of general studies in the education of all teachers and for a knowledge of the methods and values

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[1] United Nations Educational, Scientific and Cultural Organization (UNESCO), Final Report: Expert Committee on Teacher Education, ED/CS/177/6, Paris, 1968.

[2] UNESCO, Final Report: Meeting of Principals, Chief Technical Advisers, and Language Teachers of Teacher Training Colleges in Africa Receiving Assistance from UNESCO, ED/CS/32/1, Paris, 1967. Hereafter referred to as Final Report: Meeting of Principals.

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of science and its potentialities for human betterment are stressed as necessary in the general studies component of the curriculum.[1] In the area of professional studies, the recommendation was made "to ensure that the content of professional studies, especially in psychology and sociology, is relevant in level and approach to the realities of childhood and of family and community life in particular environments."[2] It was also considered that an interdisciplinary approach is fundamental to teacher education curricula,[3] and that the needs of children and the needs of society correspond to one another.[4]

Perhaps the most important curriculum organizational statement made, and one which emphasizes the interdisciplinary approach, was:

> All programmes of teacher education have to face the problem of reconciling the facts that at advanced levels knowledge takes the form of highly specialized subjects in fields of inquiry, whereas children experience the world as a unified whole and make their own selection from it, of the features which interest

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[1] UNESCO, Final Report: Expert Committee on Teacher Education, p. 17.

[2] Ibid.

[3] Ibid., p. 7.

[4] Ibid., p. 8.

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them most, and these by no means necessarily correspond to the adults' logical classifications of knowledge.[1]

B. Reports of Conferences

A second source of current research and trends in teacher education in Africa is the various reports of the Afro-Anglo-American (A.A.A.) Conferences held annually up to 1969, the last two reports being published in Teacher Education in New Countries.[2] The sixth conference, held at Accra in 1967, dealt with "Content, Method, and Organization of Teachers College Programmes for the Preparation of Primary School Teachers."[3] Of the several papers presented at this conference, one entitled "Cultural Values and Teacher Education in Africa,"[4] by W. Senteza Kajubi, Director of the National Institute of Education, Uganda, provides stimulation for thought. He said:

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[1] Ibid.

[2] Teacher Education in New Countries, formerly known as Teacher Education (London: Oxford University Press, published three times each year).

[3] Report of the Sixth Annual Conference of the Afro-Anglo-American Programme, edited by P. C. C. Evans (Oxford: A.A.A. Programme, 1968).

[4] W. Senteza Kajubi, "Cultural Values and Teacher Education in Africa," Report of the Sixth Annual Conference of the Afro-Anglo-American Programme, edited by P. C. C. Evans (Oxford: A.A.A. Programme, 1968), pp. 38-45.

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> An understanding of the social structure of the traditional African family could help towards the formulation of a social philosophy which will bridge the present gap between school and home.[1]

Concerning the need for education which promulgates the co-operative ideal rather than the individual, he said:

> The schools can encourage those activities which promote co-operative endeavour rather than individual gain, stress concepts of equality and the responsibility to give service which goes with any special ability, whether it be in academic pursuits or manual skills.[2]

His final statement implied the need for teachers to understand their society:

> Teachers need to have an appreciation and a deep understanding of the goals of their society, the ideals it has set before itself, and to reflect these values in what they teach and in the way they teach.[3]

The seventh A.A.A. conference, held at Dar es Salaam in 1968, was entitled "An Institute of Education and the Improvement of Primary Education."[4] This conference stressed the need for greater socialization of the school and the urgency for teachers to

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[1] Ibid., p. 41.

[2] Ibid., p. 42.

[3] Ibid., p. 45.

[4] E. Godfredsen, "Report of the Seventh Annual A.A.A. Conference, April 1968: An Institute of Education and the Improvement of Primary Education," Teacher Education in New Countries, IX, No. 3 (February 1969), 203-225.

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become more understanding of their society, and second, the need for more research and experimentation in primary education.

At the above conference, Professor Fafunwa is reported as having spoken out against the suggestion of subject specialists in primary schools. He commented: "Primary schools did not make a specialist of the child: an integrated curriculum demanded an integrated teacher."[1] He also claimed that curriculum development for schools should be the responsibility of the teachers college:

> Development proceeded best when the impetus came from the teachers themselves. He had seen many examples of curriculum development in Nigeria initiated by Ministries, but this was a continuous exercise which should not await direction from a Ministry. It was necessary to keep ahead in ideas and this could best be done through the teachers' colleges.[2]

This belief places great responsibility on teachers colleges to ensure that teachers develop an understanding of what curriculum improvement means.

The eighth A.A.A. conference at Nairobi in 1969 had as its theme "Teacher Education for Socio-Economic Change."[3] Several world authorities on education in developing countries, notably

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[1] Ibid., p. 213.

[2] Ibid., p. 223.

[3] "Report of the Eighth Conference of the Afro-Anglo-American Program, 1969," Teacher Education in New Countries, X, No. 2 (November 1969), 91-138.

Professors Harbison, Porter, Springer, Lewis, and Hanson, contributed to the conference, which reiterated the need for an education which is relevant to society's circumstances.

Professor Harbison commented:

> It is time to reject the notion that all education is necessarily a good thing. One must examine the relevance of what is being taught to the needs of society.[1]

He also questioned:

> Is there a place in the curriculum for an analytical study of local government, community development, organization of self-help programmes, and related activities?[2]

Professor Porter, Principal of the University College, Nairobi, discussing the need for primary teachers to be understanding of the traditional as well as the modern way of living and not to educate in a manner which will alienate a child from his cultural heritage, commented:

> . . . the responsibility for all this (educating) will fall very heavily on the teacher; hence the importance of his training for his role in contemporary society, both as an agent for cultural preservation as well as an agent for cultural innovation and transformation.[3]

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[1] Frederick H. Harbison, "Teacher Education for Economic Change," The Eighth Conference of the A.A.A. Program, 1969, Teacher Education in New Countries, X, No. 2 (November 1969), 100.

[2] Ibid., p. 104.

[3] Arthur T. Porter, "Teacher Education for Social Change," The Eighth Conference of the A.A.A. Program, 1969, Teacher Education in New Countries, X, No. 2 (November 1969), p. 112.

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The practice of preparing teachers in centers isolated from other social workers was criticized. Dr. Porter commented:

> Ultimately, our teachers should not be educated in the isolation of teachers' colleges. Colleges training teachers should also train other kinds of social workers.[1]

Two other sources of constructive comment on African teacher education are the reports of the first and second Kericho (Kenya) Conferences on Education in 1967 and 1968. The report of the first conference was published under the title Education, Employment and Rural Development.[2] Among the conclusions of this conference specifically relating to teacher education are those that relate to the need to raise the professional status of primary teachers and to the need for training colleges to give more attention to preparing teachers to play a role as community leaders, working with adults as well as teaching children, as part of their pre-service training.

The theme of the second Kenya conference was New Directions in Teacher Education.[3] This conference was more practical in that it dealt with basic issues of direct concern to teacher education. The address by Professor Lewis entitled "The Nature and

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[1] Ibid., p. 117.

[2] Sheffield, Education, Employment and Rural Development.

[3] New Directions in Teacher Education, Proceedings of the Second Kenya Conference, 1968 (Nairobi, Kenya: East African Publishing House, 1969).

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Content of the Curriculum in Teachers Colleges" provides some useful suggestions for innovating college programs. In the category of skill requirements these suggestions include:[1]

1. Provision to fit the teacher with competency in the communication skills to ensure real understanding and a capacity to respond to and elicit meaningful communication.

2. Attention to the skills of learning--how to ask questions, how to seek answers, where to seek answers, as these skills are crucial to continuous intellectual and professional growth.

3. The teacher must be put in the way of learning the skills of imparting knowledge, and not to rely upon any one "method" regardless of the situation.

In the category of knowledge requirements he recommended:[2]

1. Knowledge of the child, as an individual and as a member of society, as the recipient of family and social aspirations, and developing personal aspirations, is essential.

2. The teacher needs to be provided with knowledge of subject matter.

In the category of attitudes and values he recommended:[3]

1. The need to engender faith in the potential of the child.

2. The need to establish confidence in the teacher of his ability to guide the pupil in the learning process.

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[1] L. J. Lewis, "The Nature and Content of Curriculum in Teachers Colleges," New Directions in Teacher Education (Nairobi, Kenya: East African Publishing House, 1969), pp. 66-67.

[2] Ibid., p. 67.

[3] Ibid.

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Professor Lewis suggested that teachers should develop the ability to observe and analyze their society in meaningful terms of daily living. He said:

> If the teacher is to be able to respond in his teaching to the need of assisting pupils to understand something of the dynamism of the society to which they belong, then we must equip the teacher so that he may be able to respond, through continuous and systematic observation of the society, with sensitivity to the pupils in the school and their families in the neighbourhood as live, feeling human beings, persistently seeking to transmit the way of life they know and value whilst at the same time seeking to change it.[1]

The Conference reiterated the responsibility of colleges to further the student's knowledge of and involvement in his society. The Report stated:

> It has been stressed that the teacher in the future must be a leader, in every sense, in his community, with an understanding of the society he serves. If his awareness of this responsibility is not initiated in the college, the teacher may never realise his full potential in this essential role.[2]

C. Other Sources

Other African studies which directly concern teacher education programs are those dealing with the way adults and children learn. Margaret Mead and others, preparing the initial policy of UNESCO in the early 1940's on Fundamental Education,

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[1] Lewis, "The Nature and Content of Curriculum in Teachers Colleges," pp. 63-64.

[2] New Directions in Teacher Education, p. 20.

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called for a detailed study of the culture in order that an educational system be devised which would hold the allegiance of the people to be educated long enough to have some effect.[1] It is well known that the colonial powers in Africa failed to do this. Instead they transplanted their own metropolitan-type syllabus of studies, as well as their system of school education, into the African countries. A similar situation is to be found in New Guinea.

Several studies on the influence of ways of learning and child rearing have implications for teacher education programs. Danziger[2] discussed dependency and independency as they relate to personal initiative in students. The conservatism of a traditional society is something which cannot be overcome by schooling without careful teaching and planning. Danziger commented that the individual who has been consistently discouraged from personal initiative is likely to be in difficulties if initiative is suddenly expected of him as an adult.[3] In the past this initiative was not expected of students but was expected of them once they became teachers. He commented also that in many respects children in Africa are ashamed of their

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[1]UNESCO, Fundamental Education (New York: Macmillan, 1947), p. 162.

[2]K. Danziger, "Social Change and Child Training in Underdeveloped Areas," Problems of Transition, edited by J. F. Holleman (Pietermaritzburg: Natal University Press, 1964), pp. 103-125.

[3]Ibid., p. 103.

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old-fashioned parents; and the parents, in turn, complain that they no longer understand their children.[1] The rapid change in values and attitudes is disturbing to the solidarity of the traditional family.

Adam,[2] concerned with college methods of instruction, said:

> Student teachers will take back into schools the concepts of learning which they acquired in their Colleges. College teaching based on rote memorization of facts could damage the schools of that country for half a century.[3]

It is important that colleges be concerned with the educational value of their methods of instruction.

Other volumes by Beeby,[4] Curle,[5] Coombs,[6] Castle,[7] and Milton,[8] though not all specifically written about Africa, provide background to understanding the problems associated with the preparation of teachers in less developed areas. Most authorities

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[1] Ibid., p. 107.

[2] Roy Adam, "Study Methods in Developing Countries," Teacher Education, VIII, No. 1 (May 1967).

[3] Ibid., pp. 16-17.

[4] Beeby, The Quality of Education in Developing Countries.

[5] Adam Curle, Educational Strategy for Developing Societies (London: Tavistock Publications, 1963).

[6] Philip H. Coombs, The World Educational Crisis (London: Oxford University Press, 1968).

[7] Castle, Growing Up in East Africa.

[8] Alan Milton, Teachers Outside the Walls (London: Oxford University Press, 1964).

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stress the importance of the role of the teacher in social change and the need for teachers to be far more aware of basic causes of social change. As well an understanding of the ways by which the New Guinean was inducted, and in many cases still is being inducted, into his society is important for the teacher in New Guinea. Teacher education programs must, therefore, provide an education which will assist the teacher to gain a clearer knowledge of his place in the community.

D. Summary

The main requirements of teacher education in developing countries which become evident from the literature appear to be:

1. The need for primary teacher education programs to be relevant to the needs of the student in his society;[1]
2. The need to prepare the teacher for his role in his society, not to alienate him from this society. Teachers need to become aware of basic causes of social change.[2]

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[1]"Report of the Eighth Conference of the Afro-Anglo-American Program, 1969," p. 111; Commentary in Teacher Education, III No. 3 (February 1963), 178; UNESCO, Final Report: Expert Committee on Teacher Education, p. 3; Lewis, "Learning Process," p. 131.

[2]Lewis, "Learning Process," p. 131; C. E. Beeby, "Curriculum Planning," Report of the Fourth Commonwealth Education Conference, 1968 (London: Her Majesty's Stationery Office, 1968), p. 181.

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3. The need to educate the teacher rather than to produce a classroom taskmaster.[1]

4. The need for research into learning theory and child development in developing countries.[2]

5. The need for a multi-disciplinary approach to teacher education.[3]

III. Literature from the United States

A. Curriculum: Design and Construction

The literature reviewed in this section is limited to that which relates to the philosophical position of educators who believe in the humanizing element in education. Each author reviewed believes that, first and foremost, the teacher must be a unique person. Indeed:

> The teacher is the key figure in the process of guiding children in their experiences, for it is he who has direct and prolonged contact with them. The quality of these experiences rests largely on the kind of person the teacher is. His background, his insights, his sensitivity, and his effectiveness determine to

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[1] John W. Hanson, "On General Education for the African Teacher," Teacher Education, III, No. 3 (February 1963), 181.

[2] Lewis, "Learning Process," p. 131; UNESCO, Final Report: Meeting of Principals, p. 12.

[3] UNESCO, Final Report: Expert Committee on Teacher Education, p. 8.

> a great extent the caliber of the work accomplished in the school.[1]

This literature has been organized to lead from the philosophical, psychological view as espoused in Perceiving, Behaving, Becoming,[2] to a consideration of the contributions to curriculum construction of a number of educators, and then specifically of contributions to thought and practice in curriculum for teacher education.

Perceiving, Behaving, Becoming focuses directly upon implications for teachers and persons responsible for the teaching of teachers:

> Whatever we do in teaching depends upon what we think people are like. The goals we seek, the things we do, the judgments we make, even the experiments we are willing to try, are determined by our beliefs about the nature of man and his capacities. It has always been so. Teachers who believe children can, will try to teach them. Teachers who believe children are unable, give up trying or spend their days on a tread-mill, hopelessly making motions they never will expect will matter.[3]

Throughout the book are many suggestions for educators on the process of developing the "fully functioning person." These

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[1] George Sharp, Curriculum Development as Re-education of the Teacher (New York: Bureau of Publications, Teachers College, Columbia University, 1951), p. 2.

[2] A. W. Combs, ed., Perceiving, Behaving, Becoming: A New Focus for Education (Washington, D.C.: Association for Supervision and Curriculum Development, Yearbook, 1962).

[3] Ibid., p. 1.

suggestions are equally pertinent for teacher educators as they are for first grade teachers, for "to produce an atmosphere in which dignity and integrity are encouraged, we need teachers who, themselves, are given opportunities to be people of such character."[1]

The teacher needed is a person who understands that he is "creating self through experience."[2] He must also be a person who anticipates and is able to cope with changes as they occur.[3] If teachers are not to teach the way they were taught, then the experiences gained during a teacher education program must be the best and as rewarding as possible.

When Teachers Face Themselves[4] presents Arthur Jersild's philosophy that a teacher, to be able to understand and help others, must first understand himself. As he said:

> . . . the book . . . is concerned with the strivings, satisfactions, hopes, and heartaches that pervade the teacher's life and work. . . . It discusses concerns teachers feel they must face in their personal and professional lives when they examine the meaning of what they are and what they teach and when they seek to share the personal problems of their pupils.[5]

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[1] Ibid., p. 223.

[2] Ibid., p. 235.

[3] Ibid.,

[4] Arthur T. Jersild, When Teachers Face Themselves (New York: Teachers College, Columbia University Press, 1955).

[5] Ibid., pp. 1-2.

Two articles by Alice Miel are helpful in formulating a position concerning curriculum development. In "Reassessment of the Curriculum--Why?"[1] she explained the cyclical movement of trends in curriculum design and that "it is easier for us today to see that we do not have to give up content values, the learning of skills, or scheduled reading periods in order to achieve process values, appreciations, purposeful experience, and leisure time reading."[2] She considered an understanding of this movement, or pattern, would help by (1) pointing up the key matters which must be accounted for in a curriculum theory, and (2) helping the individual curriculum specialist decide upon his particular position.[3]

The second article, "Elements and Structure: A Design for Continuous Progress,"[4] develops the author's belief that curriculum constructors must plan not just for continuous progress of simple learning skills but for "the development of persons with the feelings,

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[1]Alice Miel, "Reassessment of the Curriculum--Why?" A Reassessment of the Curriculum, edited by Dwayne Huebner (New York: Bureau of Publications, Teachers College, Columbia University, 1964), pp. 9-23.

[2]Ibid., p. 13.

[3]Ibid., p. 23.

[4]Alice Miel, "Elements and Structure: A Design for Continuous Progress," A Curriculum for Children, edited by Alexander Frazier (Washington, D.C.: Association for Supervision and Curriculum Development, 1969), pp. 123-136. Hereafter referred to as "Elements and Structure."

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the social and conceptual skills, and the values that will help them play a noble part in a world moving from the twentieth to the twenty-first century."[1]

Miel cautioned against constructing a curriculum of various appealing bits and pieces. "We have to make sure that important elements are not missing, and that the elements have been structured into a mutually complementary and reinforcing whole."[2]

Related to eight stated assumptions on curriculum design, the author proposed the following six elements as essential for incorporation in a design for continuous progress of those to be educated:

1. Opportunity to acquire symbolic tools;
2. Opportunity for personal exploration, inquiry, experimentation and creativity;
3. Opportunity for exploration of organized disciplines;
4. Opportunity for co-operative inquiry and problem solving;
5. Opportunity for experiences in managing an environment, giving services and governing;
6. Opportunity to enjoy literature, the arts and physical recreation.[3]

Life Skills in School and Society[4] examines changing times and speculated on the capacities mankind will need in the future; then

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[1] Ibid., p. 136.

[2] Ibid., p. 123.

[3] Ibid., pp. 129-131.

[4] L. J. Rubin, ed., Life Skills in School and Society (Washington, D.C.: Association for Supervision and Curriculum Development, Yearbook, 1969).

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it converts these speculations into practical implications for curriculum construction. It is an approach which is concerned with the real needs of life. The authors considered the skills presently developed are "preparing youth for a world which never again will exist."[1] Rubin, in summarizing the contents of the book, commented: "Taken as a whole, the message of the writers is that there must be more to education than the mere acquisition of skills which allow one to be gainfully employed."[2]

The life skills promulgated are numerous, but are summarized by Rubin as:

> . . . the ability to think about the self and the society analytically; the ability to remain open, flexible, and tolerant of social change; the ability to exploit one's personal creativity in responding to life and in the use of leisure; the ability to interrelate effectively with other humans; and the ability to retain one's individuality and autonomy within the larger group.[3]

What is important is the consideration not only of what a person learns, but how he learns it. Of the writers, "none argues for a factless curriculum," but they did argue for "more attention to the skills which are most difficult to develop and less attention to those which are most easy to attain."[4]

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[1] Ibid., p. 154.

[2] Ibid.

[3] Ibid., p. 156.

[4] Ibid.

Experience and Education[1] represents John Dewey's belief that all genuine education comes about through experience. He cautioned that not all experiences are equally educative--some are miseducative. Pertinent to the question of curriculum for teacher education is Dewey's belief in the "new education":

> To imposition from above is opposed expression and cultivation of individuality; to external discipline is opposed free activity; to learning from texts and teachers, learning through experience; to acquisition of isolated skills and techniques by drill, is opposed acquisition of them as means of attaining ends which make direct vital appeal; to preparation for a more or less remote future is opposed making the most of the opportunities of present life; to static aims and materials is opposed acquaintance with a changing world.[2]

Dewey placed the responsibility on the teacher educator to ensure that each prospective teacher is allowed to develop--as a person and as a practitioner--in a way which is peculiarly personal. Each experience which a student has is to be meaningful in the context of his whole program of education.

In 1904 John Dewey wrote "The Relation of Theory to Practice in Education."[3] As the title suggests, Dewey discussed

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[1]John Dewey, Experience and Education (New York: Collier Books, 1963).

[2]Ibid., pp. 19-20.

[3]John Dewey, "The Relation of Theory to Practice in Education," The Third Yearbook of the National Society for the Scientific Study of Education, edited by Charles A. McMurry (Bloomington, Ind.: Public School Publishing Co., 1904).

the nature and aim of theory and of practice in education. The value of this work for teacher education is that it elaborates on, and presents solutions to, the age-old problem in teacher education of what kind of practical experiences should be given the student teacher. He believed "practical work should be pursued primarily with reference to its reaction upon the professional pupil in making him a thoughtful and alert student of education, rather than to help him get immediate proficiency."[1] Theoretical studies, he advocated, should be linked with the student's past experiences. He said: "He [the student] must accordingly have in his own experience plenty of practical material by which to illustrate and vitalize theoretical principles and laws of mental growth in the process of learning."[2]

Dewey proposed that the student teacher should receive a laboratory-type introduction into the art of teaching. This would begin with guided observations of children and their interaction with a teacher and conclude when the student teacher is able to take full responsibility for the learning of a class of pupils.

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[1] Ibid., p. 15.

[2] Ibid., p. 17.

Developing a Curriculum for Modern Living[1] is a comprehensive text on curriculum design with many examples for school programs. The authors believed that "a curriculum in which the learner and society are brought into relationship is one in which the daily life concerns of children and youth are seen as aspects of persistent life situations with which all members of society must be able to deal."[2] They firmly believed that any curriculum must take into consideration the individual, how he matures and the way he learns. The way he learns is governed by his maturity, experiential background and his purposes. "Society provides the framework within which children and youth live and learn, and inevitably affects what they bring to school and the ways they put their school experiences to work."[3]

The implications in this volume for teacher education curricula point to a careful consideration of cultural values, societal needs, the learners' backgrounds, as well as the psychological conditions of how people learn to become humane.

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[1] Florence B. Stratemeyer, Hamden L. Forkner, Margaret G. McKim, and A. Harry Passow, Developing a Curriculum for Modern Living (New York: Bureau of Publications, Teachers College, Columbia University, 1957).

[2] Ibid., p. 117.

[3] Ibid., p. 26.

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New Priorities in the Curriculum[1] presents what the author considered to be the components of a curriculum which strives to develop process-oriented people. Berman defined a process-oriented being as ". . . a person [who] has within his personality elements of dynamism, motion, and responsibility which enable him to live as an adequate and a contributing member of the world of which he is a part."[2] Her view of the curriculum, rather than having a "traditional" subject base, has as its base the human process skills of:

1. perceiving: the stimulus for man's behavior;
2. communicating: the sharing of personal meaning;
3. loving: human experience as co-responding;
4. knowing: the metamorphosis of ideas;
5. decision making: the present as a turning point;
6. organizing: the systematizing of human experiences;
7. creating: reaching for the unprecedented;
8. valuing: enchantment with the ethical.[3]

The bodies of knowledge which form a large part of traditional subject areas are considered as inquiry-based approaches to the life-process of "knowing"--that is, how to know, a process which is future-oriented.[4] If people are to be helped to become

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[1] L. M. Berman, New Priorities in the Curriculum (Columbus, Ohio: Charles E. Merrill, 1968).

[2] Ibid., p. 9.

[3] Ibid., pp. ix-xii.

[4] Ibid., p. 11.

teachers of children through a professional course of training, then such a training program must aim for the development of persons "able to handle themselves and the situations of which they are a part with adequacy and ease. Such persons are the contributors to as well as the recipients of society's resources."[1]

In designing curriculum, process is a method of teaching. "Teachers will constantly be looking for ways to link process skills to what they are teaching . . . the concept of process determines the focus, content, and methodology."[2]

This concept leads to a consideration of the thesis in Process as Content,[3] "that process--the cluster of diverse procedures which surround the acquisition and utilization of knowledge--is, in fact, the highest form of content and the most appropriate base for curriculum change."[4] The authors were concerned primarily with methods of instruction. They considered ". . . teaching strategies at best are an approximation. They vary with the style of the teacher,

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[1] Ibid., p. 10.

[2] Ibid., pp. 180 and 185.

[3] J. Cecil Parker and Louis J. Rubin, Process as Content: Curriculum Design and the Application of Knowledge (Chicago: Rand McNally and Company, 1966). Hereafter referred to as Process as Content.

[4] Ibid., p. 1.

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with the characteristics of the learner, and with the nature of the knowledge at stake."[1] For them content used as a basis of curriculum design has been misused and, as a result, ". . . present curriculum is an amalgamation of piecemeal attempts to rectify particular conditions here and there."[2] In this way each new theory or new knowledge has been added to an already unwieldy content area of a discipline without significant change in the basic structure of the curriculum.

The authors pointed out that the transmission of information serves little purpose if a discrimination is not made between knowing something and knowing what it is good for. They also considered that a curriculum must be designed which will ". . . provide the student with an opportunity to develop his capacity for the intake of evidence"[3] and that ". . . a preoccupation with processes does not negate the desirability of being informed, or of forming significant conceptualizations, or of learning through inquiry, machine, or lecture, or even of mastering skills through drill."[4]

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[1] Ibid., p. v.

[2] Ibid., pp. 6-7.

[3] Ibid., p. 12

[4] Ibid., p. 11.

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The authors presented three models of curriculum design as examples of the engineering of a process-centered curriculum. The third model, based on interdisciplinary learning, tends to lessen the influence of a subject-matter discipline approach which is indicative of the first and second models, and is more in keeping with the basic tenet of "process as content."

B. Curriculum for Teacher Education

The Study of Teaching[1] is the culmination of four years of work by the Commission on Implications of Recent Research in Teaching of the Association for Student Teaching. The several contributors to the volume have introduced a variety of research which has been done and is being done on teacher education in the U.S.A. It also includes the contributors' ideas about teacher education in the light of their research.

The reports of two studies have been selected as pertinent to this thesis. First, Martin Haberman[2] proposed a program

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[1]Dean Corrigan, ed., The Study of Teaching (Washington, D.C.: The Association for Student Teaching, 1967).

[2]Martin Haberman, "The Study of Teaching Related to Other Dimensions of Teacher Education: A Proposal," The Study of Teaching, edited by Dean Corrigan (Washington, D.C.: The Association for Student Teaching, 1967), pp. 19-30. Hereafter referred to as "The Study of Teaching."

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which includes six areas of study derived from observing the performance of successful teachers:

1. the nature of subject matter,
2. the nature of children,
3. the nature of the educational setting,
4. the nature of learning,
5. the nature of teaching,[1]
6. the nature of the self.

He indicated in the form of a model how this kind of a program, once its content had been decided upon as a result of analyzing teachers' behaviors, could be taught to students. His approach of "beginning with an analysis of teaching behavior is diametrically opposed to the present practice . . . where it is assumed that if a student studies educational foundations, learning and teaching methods, he will naturally gain the knowledge and attitudes needed to perform successful teaching behaviors."[2] Haberman advocated meaningful laboratory experiences which will allow the student opportunities for practice and experimentation, and a unified course which does not separate knowledge about learning and teaching from one another.

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[1] Ibid., p. 17.

[2] Ibid., p. 24.

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The second report is by Dorothy McGeogh and Margaret Lindsey.[1] They discussed a study done at Columbia University on the implications of the use of a system for analyzing verbal teaching behavior in the guidance of student teachers in supervisory conferences. The three major assumptions underlying the study are:

1. Student teaching provides significant opportunities for learning effective teaching behaviors.
2. Ability to analyze one's own behavior can contribute to the ability to make desired changes in such behavior.
3. The supervisory conference affords an opportunity to help the student plan for changes which he sees desirable.[2]

Supervisory conferences became the organizational key for the disseminating and analysis of teaching behavior. Students and supervisors both were able to analyze their own verbal interaction in conferences, and the pervasiveness and varieties of the differences in teaching styles became evident. As a result, more effective communication between student and supervisor allowed for greater change in student teaching behavior.

The idea behind the supervisory conferences or counseling sessions is central to the personalized approach to teacher education

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[1]Dorothy McGeogh and Margaret Lindsey, "Supervisory Conferences and the Analysis of Teaching," The Study of Teaching, edited by Dean Corrigan (Washington, D.C.: The Association for Student Teaching, 1967), pp. 63-69.

[2]Ibid., p. 65.

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currently in operation at the R & D Center for Teacher Education[1] at the University of Texas. It is considered there that their "macro-teaching" approach (as opposed to "micro-teaching," which is an approach to teaching oriented towards teaching-behavior and the development of competencies) ". . . simply recognizes that different teachers have very different ways of evoking child learning and it encourages each teacher to become increasingly skilled in his own particular way of doing it."[2]

As a result of intensive "feedback" counseling sessions, research findings on this program have shown:

1. students who received the feedback in varying combinations showed positive change in openness to experience . . . and they increased in realistic self-confidence when faced with classroom problems;

2. their openness did transfer to their treatment of pupils;

3. they showed more discriminating judgment and greater autonomy in conceptualizing and resolving school-related problems;

4. their feelings towards other people, including children, showed increased warmth and positiveness.[3]

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[1]Robert F. Peck and Oliver H. Brown, R & D Center for Teacher Education Report Series No. 1 (Austin, Texas: University of Texas at Austin, undated), p. 3. Hereafter referred to as R & D Center for Teacher Education.

[2]Ibid., p. 3.

[3]Ibid., p. 7.

A Reassessment of the Curriculum[1] is the compilation of a series of papers presented to a conference at Columbia Teachers College in 1963 by a group of selected educators. The papers cover a wide spectrum of areas of curriculum. Florence Stratemeyer, in her paper "Implications for Teacher Education," summarized the major concerns and recommendations specifically related to teacher education made by the several speakers. The conference saw the knowledge of most worth to be:

1. Knowledge of the structure and methodology of a field;
2. Knowledge of what is involved in the moral use of knowledge;
3. Knowledge about feelings.[2]

Stratemeyer considered emphasis on these areas of knowledge would lead to:

1. "Methods" courses focused on principles rather than techniques only;
2. Work relating to the methodology and technology of teaching centered on understandings and skills basic to guiding development of
    (a) concepts and basic generalizations,
    (b) skills,
    (c) values,
    (d) appreciations (relating to aesthetics and empathy building);

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[1]Dwayne Huebner, ed., A Reassessment of the Curriculum (New York: Bureau of Publications, Teachers College, Columbia University, 1964).

[2]Florence Stratemeyer, "Implications for Teacher Education," A Reassessment of the Curriculum, edited by Dwayne Huebner (New York: Bureau of Publications, Teachers College, Columbia University, 1964), p. 90.

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3. The concept of "possibilism" (Lerner) in operation:
   What might have happened . . .
   What could happen . . .
   What action should be taken if . . .[1]

She also saw the need for an integrated structure in the teacher education program where each of the three areas of curriculum (general education, specialization, and professional education) would contribute to:

> the acquisition and control of knowledge . . . to such goals as understanding the synthesizing and integrative properties of knowledge, acting on principle and in terms of an examined intellectually grounded value system, developing intellectual curiosity and becoming acquainted with resources for continuing inquiry and how to use them.[2]

Two other recommendations made by Stratemeyer in summary were:

1. Curriculum for pre-service teacher education should lead the student toward an understanding of the rationale behind curriculum and change. "There is need for the teacher and for the teacher-to-be to know the why for the action he takes";[3]

2. There is a need for the student to be helped to build a "rational set of values--a personal and professional value system--with courage to act on them."[4]

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[1] Ibid., p. 91.

[2] Ibid., p. 92.

[3] Ibid., p. 95.

[4] Ibid.

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Arthur W. Combs wrote in The Professional Education of Teachers: A Perceptual View of Teacher Education:[1]

> . . . the really important changes will only come about as teachers change. . . . It is at the source of supply--in our teacher preparation programs--that review and innovation are most critically called for if we are to bring about the improvements we need in education.[2]

Combs suggested that teacher education must help prospective teachers become better people in the psychological sense of the term. He drew a distinction between scholars and professional practitioners when he said:

> The education of the scholar is essentially directed towards content: the acquisition, organization, and understanding of information. The goal of the practitioner is the effective use of knowledge. For the scholar, content is crucial. For the practitioner, application is the heart of the task. . . . The responsibility of the teacher-education program is the development of professional workers, persons who can be counted to act upon knowledge as well as to have it.[3]

Combs believed ". . . a good teacher is first and foremost a person, and this fact is the most important and determining thing about him," and second, ". . . he has competence."[4] Specifically,

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[1]A. W. Combs, The Professional Education of Teachers: A Perceptual View of Teacher Education (Boston: Allyn and Bacon, 1965). Hereafter referred to as The Professional Education of Teachers.

[2]Ibid., p. v.

[3]Ibid., pp. 25-26.

[4]Ibid., p. 6

he suggested that an effective teacher education program should help the prospective teacher become well informed, become an accurate perceiver of others, develop a positive concept of the self as a professional person, become an accurate perceiver of educational purposes and how learning occurs, and discover personal methods which will enable him to be an effective teacher.

Working with Student Teachers[1] is a guide for all teacher educators. It is very much a handbook on all aspects of student teaching, but it is particularly useful as a stimulator in understanding the part practice teaching plays, or should play, in the total program of teacher education. The authors recommended a closer liaison and co-operation between the school and the college. The common elements of teacher education programs were discussed under the headings: general education; specialization; and professional education. As this thesis is concerned with the curriculum of teacher education, it will be of benefit to reflect upon these components in light of the authors' suggestions.

The general education component should:

1. assist each student in the development of physical and mental well-being;
2. help each student master the art of communication;

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[1] Florence B. Stratemeyer and Margaret Lindsey, Working with Student Teachers (New York: Teachers College, Columbia University Press, 1958).

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3. aid each student in deepening his understanding of our culture, its institutions and values, its relation to other cultures of the world--past and present--its current problems and its future hopes;
4. help each student acquire the values and sensitivities which contribute to intelligent citizenship in a democracy;
5. provide each student with opportunities to acquire basic acquaintance with the bodies of human knowledge as they relate to understanding, meeting, and dealing effectively with social and personal problems.[1]

The component of specialization is a group of related courses and other experiences in an area or areas of the student's choice.

The third component, that of professional education, is made up of "those planned experiences dealing directly with the teaching-learning process and the teacher's work related to the guidance of that process."[2] Included in this component was a systematic study of:

1. human growth and development;
2. the nature of the learning process;
3. the selection and organization of curriculum experiences;
4. history and philosophy of education;
5. general and special methods of teaching.[3]

Throughout each component and each section within the components, professional laboratory experiences, the authors considered, are to be an integral part of the program. They said:

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[1] Ibid., pp. 25-26.

[2] Ibid., pp. 27-28.

[3] Ibid., p. 28

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> A very significant laboratory experience for future teachers is their observation and analysis of teaching and learning as carried on in their own college classes. This is just as true in general education courses as in other aspects of the college program.[1]

The Workshop Way of Learning[2] provides an example of the kind of laboratory experience of which Stratemeyer and Lindsey spoke. The book explains in detail an earlier (1950) experiment at Wayne State University of a workshop way to in-service education of teachers. The workshop had as its goal the provision of an environment where individuals and groups of people could learn from one another and help each other in solving common problems. Such an experience of intensified human relations as a method of social learning through interaction reinforces the feeling that there needs to be more of this kind of teaching in pre-service teacher programs.

A volume which deals directly with the question of how teachers are taught is The Preparation of Teachers.[3] The authors were convinced of two things: first, that most teachers consider

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[1] Ibid., p. 35.

[2] Earl C. Kelley, The Workshop Way of Learning (New York: Harper and Brothers, 1951).

[3] Seymour B. Sarason, Kenneth S. Davidson, and Burton Blatt, The Preparation of Teachers: An Unstudied Problem in Education (New York: Wiley & Sons, 1962). Hereafter referred to as The Preparation of Teachers.

teaching as putting material (facts and skills) into children rather than developing the process skills to which Louise Berman referred;[1] and second, that teacher training programs reinforce this conception through the students being taught in a manner which implies that they have little to contribute to the educating process.

They advocated that students should experience two seminars. The first would allow the student to experience the complexities of the observational process and at the same time would assist in inculcating an attitude of inquiry towards self and others. The second seminar would be an observational process associated with a course in educational psychology where students could observe, question and discuss principles and problems raised in lectures and textbooks.

C. Summary

> It is possible to distinguish three main groups of aims relating to the student, firstly as a person, secondly as a scholar and prospective teacher of children, and thirdly as a citizen in society.[2]

It would be beneficial at this point to summarize the ideas of some of the foregoing writers under the three headings suggested

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[1] Berman, New Priorities in the Curriculum, p. 10.

[2] L. W. Shears, "The Curriculum of a Teachers College," The Preparation of Teachers in Australia, edited by J. A. Richardson and James Bowen (Melbourne: F. W. Cheshire, 1967), p. 101

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above, as these influence greatly the recommendations made in Chapter Five.

The Development of the Student as a Person:

1. The selection of the right people for teachers is crucial as a basis for teacher educating.[1]

2. Programs of teacher education must provide experiences which will enable the student to grow to understand himself and his relationship with others. Important in this regard is the widening of the perceptual world of the students.[2]

3. The developing of an awareness of one's self is helped through supportive staff-student and student-student contact in Seminars and Workshops which aim to liberate the student's capacity by developing new perspectives and habits of critical thinking.[3]

4. The need for the student to build a rational set of values with courage to act on them.[4]

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[1]Combs, The Professional Education of Teachers, pp. 68 and 73.

[2]Ibid., pp. 18-19, 77; Miel, "Elements and Structure," pp. 129-131; Jersild, When Teachers Face Themselves, p. 1; Earl C. Kelley, "The Fully Functioning Self," Perceiving, Behaving, Becoming: A New Focus for Education, edited by A. W. Combs (Washington, D.C.: Association for Supervision and Curriculum Development, Yearbook, 1962), p. 10; Dewey, "The Relation of Theory to Practice in Education," pp. 20-21.

[3]Sarason, Davidson, and Blatt, The Preparation of Teachers, p. 99; Peck and Brown, R & D Center for Teacher Education, p. 7; Kelley, The Workshop Way of Learning, p. 109.

[4]Stratemeyer, "Implications for Teacher Education," p. 95.

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The Student as a Scholar and as a Prospective Teacher of Children:

1. The most scholarly knowledge a teacher can gain is the understanding of human growth and development for the primary goal of teaching is the growth of self in the student.[1]

2. An understanding of the way children learn and of the forces which influence learning is essential for all teachers.[2]

3. Teachers should understand the purpose behind curriculum design and of the kinds of skills being developed in various curricula types.[3]

4. Knowledge of content in academic disciplines (subjects) is an essential part of the general education of teachers. As these content areas provide the student with a live demonstration of the subject being taught, the manner in which they are presented should be educationally sound. This is the concept that method is a process.[4]

5. Selection of the content to be taught depends on three current factors: the information explosion; changing social needs; changing concepts of what information is pertinent.[5]

6. The subjects (disciplines) component of teacher education programs must be introduced and developed in such a way

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[1]Combs, The Professional Education of Teachers, pp. 71-72; Stratemeyer and Lindsey, Working with Student Teachers, p. 54.

[2]Stratemeyer and Lindsey, Working with Student Teachers, p. 54.

[3]Miel, "Elements of Structure," p. 136; Berman, New Priorities in the Curriculum, pp. 180 and 185; Stratemeyer, "Implications for Teacher Education," p. 95.

[4]Stratemeyer and Lindsey, Working with Student Teachers, pp. 25-26; Combs, The Professional Education of Teachers, p. 40; Parker and Rubin, Process as Content, p. 12.

[5]Combs, The Professional Education of Teachers, p. 40.

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that their interrelatedness, as opposed to their separateness, is evident.[1]

7. Laboratory-type experiences assist in introducing the student to the art of teaching. These experiences should allow the student time to analyze his own behavior in order that he might change this behavior, if desirable. Counseling sessions and Supervisory Conferences could help in this regard.[2]

8. Observations of the dynamics of a classroom are helpful in developing a teacher's understanding of human motivations and behavior. Observations, as such, should focus on the implementation of educational principles rather than on techniques and devices.[3]

9. Courses in methodology or practical studies should aim at developing in the student a personal way of teaching.[4]

10. A type of apprenticeship experience at the end of a student's professional preparation is a method of preparing teachers for the practical aspect of their profession. This kind of experience will introduce them gradually into the classroom environment.[5]

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[1]Dewey, "The Relation of Theory to Practice in Education," pp. 23-24.

[2]Ibid., p. 17; Stratemeyer and Lindsey, Working with Student Teachers, p. 167; McGeogh and Lindsey, "Supervisory Conferences and the Analysis of Teaching," p. 65; Peck and Brown, R & D Center for Teacher Education, p. 7; Haberman, "The Study of Teaching," p. 24.

[3]Stratemeyer and Lindsey, Working with Student Teachers, p. 356.

[4]Dewey, "The Relation of Theory to Practice in Education," p. 15; Peck and Brown, R & D Center for Teacher Education, p. 3; Combs, The Professional Education of Teachers, pp. 4-5 and 98-111.

[5]Dewey, "The Relation of Theory to Practice in Education," pp. 28-29.

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11. A teacher education program should provide experiences which will assist the student master the art of communication.[1]

The Teacher as a Citizen in Society:

1. Teachers need an understanding of the social order and its relationship to the history and problems of man and society.[2]

2. The student teacher needs to become involved in society as part of his growth process.[3]

3. An understanding of society enhances the understanding of the child, for society influences what the child brings to school with him and, in turn, influences the manner in which he will put to work what he learns in school.[4]

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[1]Stratemeyer and Lindsey, Working with Student Teachers, pp. 25-26; Combs, The Professional Education of Teachers, p. 48.

[2]Combs, The Professional Education of Teachers, p. 86.

[3]Ibid., p. 89.

[4]Stratemeyer, Forkner, McKim, and Passow, Developing a Curriculum for Modern Living, p. 26.

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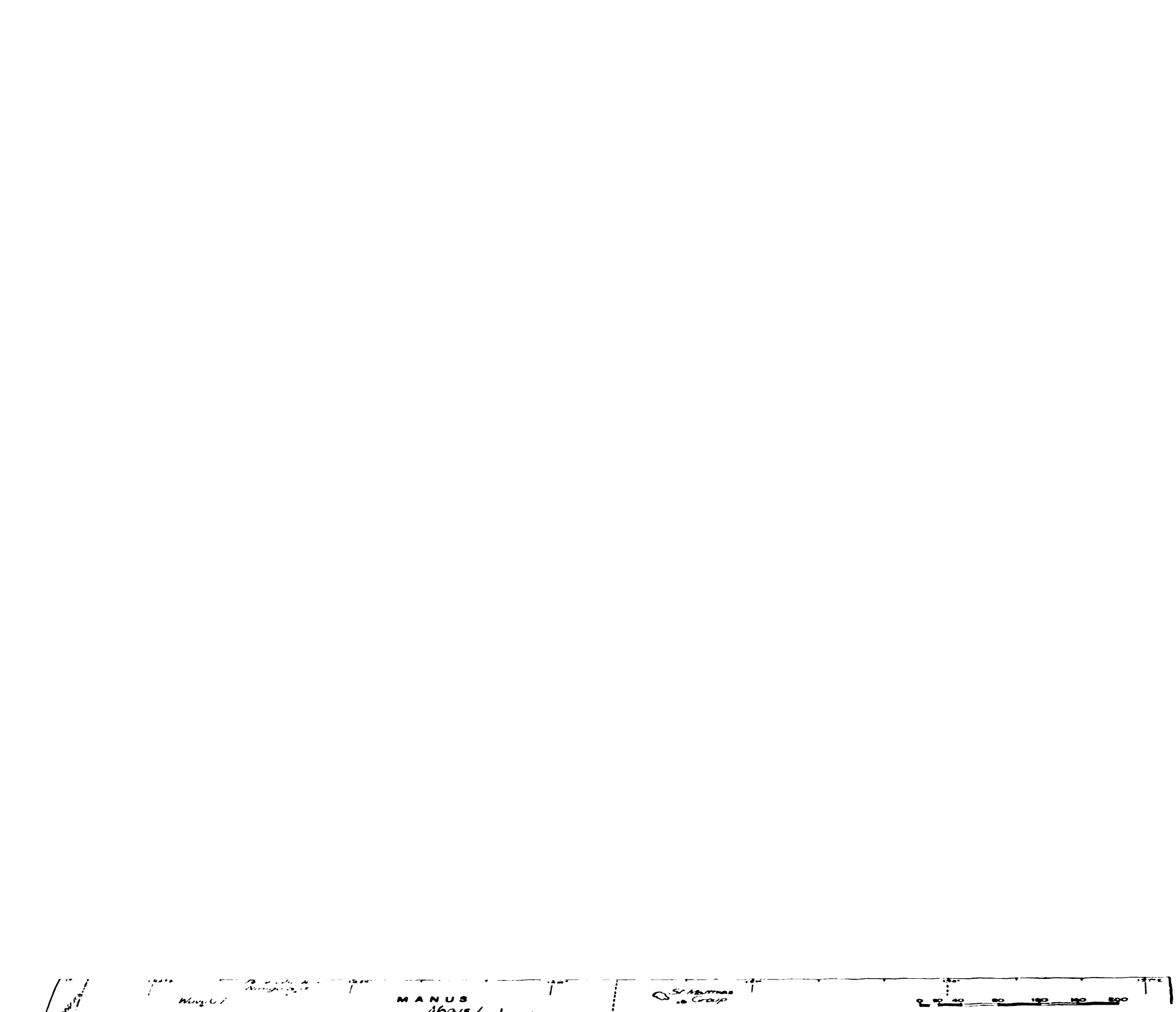
CHAPTER III

BACKGROUND TO UNDERSTANDING OF THE NEW GUINEA EDUCATIONAL SCENE

I. Geographic, Historic, Economic and Cultural Background of New Guinea

A. Geographic Background

The Territory of Papua and New Guinea comprises the eastern half of the island of New Guinea and about 600 other smaller islands stretching for more than 1200 miles from east to west and 750 miles from north to south. The mainland portion, which accounts for approximately 85 per cent of New Guinea's total land area of some 183,500 square miles, is for the most part rugged, with high mountains to 14,000 feet, with fertile valleys, great rivers, extensive forests and large swamps. The coastal plain around the mainland and adjoining islands averages less than ten miles wide. Mountains rise steeply from the narrow coastal belt and stretch the whole length of the islands. These mountains form an effective rain barrier, which results in the greater part of New Guinea experiencing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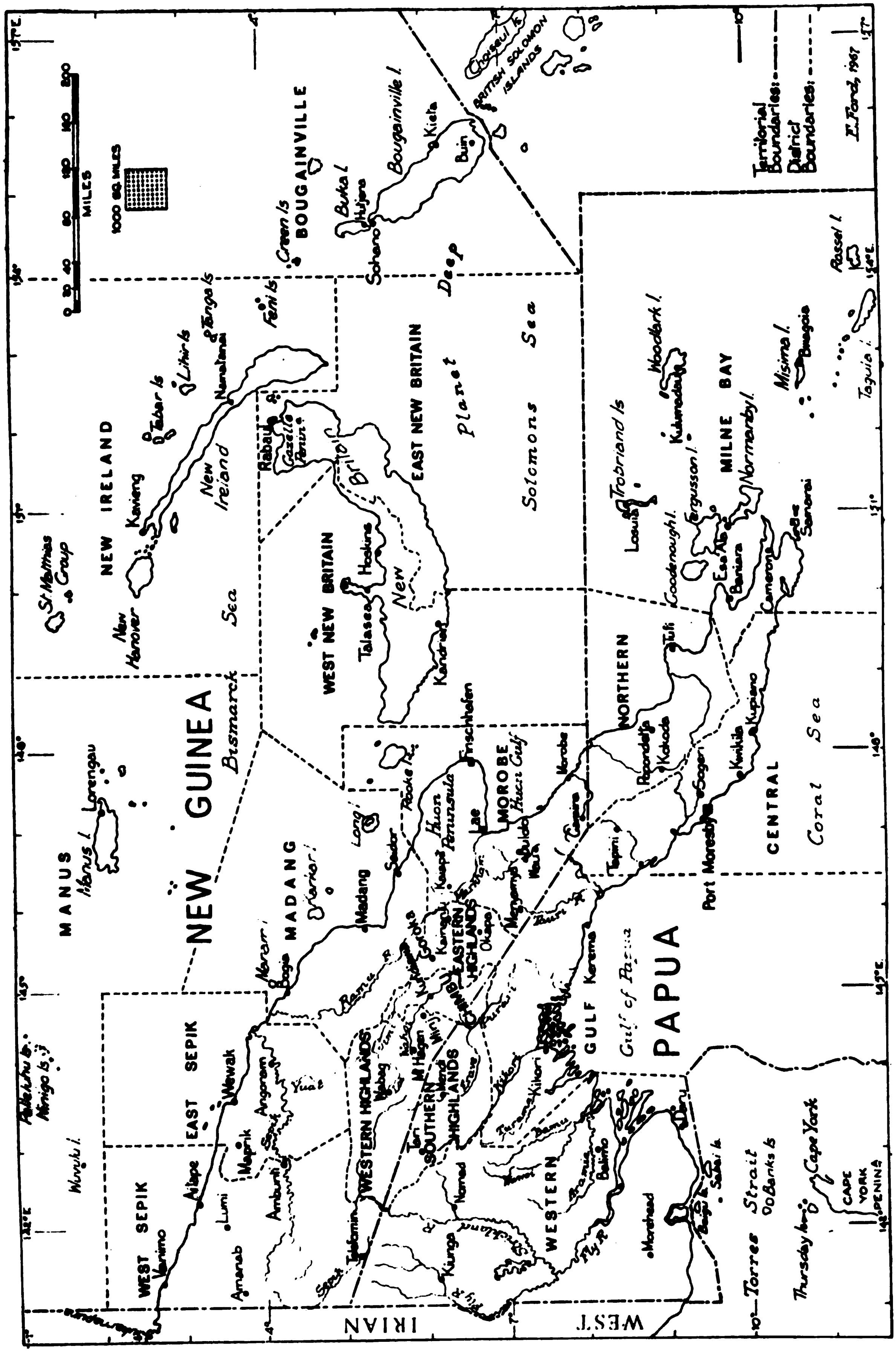
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annually a "wet" and "dry" season, depending on the direction of the prevailing wind. To a great extent this seasonal condition controls the agricultural pursuits of the local inhabitants. The ruggedness of the mountains has also been the main factor in the lack of development of adequate transportation facilities which would assist in the development of the hinterland. Most areas still rely on the airplane for the transportation of cargo.

New Guinea lies between two and twelve degrees south of the equator, thus giving it a tropical location. However, the mountainous nature of the topography causes wide variation in temperature, which in turn affects vegetation. The Highlands experience temperatures which daily range from 40-80° F. coastal regions experience extremely high humidity and temperatures normally between 70-90° F. Rainfall varies from over 200 inches to as low as 40 inches each year in a few areas.

B. Historic Background[1]

Little is known of the history of New Guinea before white people made contact with the islands' inhabitants. Brief contacts were made with traders from Portugal and Spain in the early 1500's.

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[1]Much of the historic information is taken from P. Biskup, B. Jinks, and H. Nelson, A Short History of New Guinea (Sydney: Angus and Robertson, 1968).

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Britain made contact with the area in 1700. Trading with Europeans and Chinese who sought beche-de-mer increased in the region in the 1800's. In 1884 Britain annexed southeastern New Guinea, which then became a British Protectorate. The same year Germany annexed the northern half of the island. British New Guinea was handed to the Australian Government in 1901 and was renamed Papua--a word of Malay origin meaning "fuzzy hair." German New Guinea was handed to the Australian Government in 1920 by the League of Nations to manage as a Trust Territory.

With the exception of missionary influence, which began to permeate New Guinea in the 1870's, and the spasmodic attempts by Australia to develop selected areas, little was done to develop New Guinea until World War II brought into focus the extremely important strategic fact that New Guinea was a buffer to Australia from invasion from the East. Intensive and concentrated development of New Guinea began in 1946 with the conclusion of wartime activities in the area.

C. Economic Background

In common with all developing countries, New Guinea suffers from a shortage of the capital assets required for development. The demand for roads, bridges, ports, communications, housing,

education and a wide range of other facilities continually presses on both the financial and physical capacities of the Administration of New Guinea. A great potential supply of manpower, however, exists for expanding the monetary sector, though increasing indigenous participation in the cash economy is limited by a number of factors, of which the most important are:

1. Insufficient inducement to overcome traditional work-leisure preferences.
2. Lack of sufficient cash employment opportunities, particularly in areas where the potential for commercial crops is limited.
3. Inadequate information on existing cash employment possibilities.
4. Lack of sufficient education or training to take advantage of employment opportunities.
5. Difficulties of movement arising from poor or too-expensive communications.[1]

The fourth factor listed is important for educators to consider. The 1966 census sheds some light on the educational standards of the indigenous population. At that date about 30,000 people, including children in schools and students in training institutions, had received a full primary education, or higher, in schools teaching English. About 14,000 had some secondary education; and 33

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[1]Territory of Papua and New Guinea, Programmes and Policies for Economic Development of Papua and New Guinea, p. 7.

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had received tertiary education, although only 2 were university graduates. This general level of education of the population as yet represents a slim base for economic and social development for over two million people.

If the economic development of New Guinea is to proceed as envisaged by the Administration's current policy, the main guidelines according to Administration policy statements would appear to center on the need to increase the nation's overall productivity; to marshal labor resources; build domestic markets; ensure that incomes do not outstrip increases in productivity; encourage saving; stimulate investment; and speed up the rate of indigenization of the economy.[1]

D. Cultural Background

The Territory of Papua and New Guinea is lightly populated with 2.2 million indigenous and nearly 35,000 non-indigenous people. The four Highlands districts contain 39 per cent of the total population at densities ranging from 30 to 60 persons per square mile. By contrast the large Western District is sparsely populated, with only 1.5 persons per square mile. There are over 700 different language

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[1] Ibid., p. 120.

groups in New Guinea. The three main languages spoken are English, Pidgin English and Police Motu, with some 650,000 or 45 per cent of the population having the ability to communicate in one or more of these languages.[1]

The chief characteristics of the social structure are:

1. the prevalence of a subsistence economy with a limited range of difference in individual wealth;
2. the recognition of bonds of kinship with obligations extending the family group;
3. generally egalitarian relationships with an emphasis on acquired rather than inherited status;
4. a strong attachment of the people to their land.[2]

Most people are agriculturalists engaged in growing food to meet their needs. A few produce crops for sale. The staple food crops vary with the location. Taros, yams, and sweet potatoes, all starchy root crops, are grown throughout New Guinea. Highland people live mainly on a diet of these foods, supplemented with the occasional pineapple, banana, fresh or tinned meat. Coastal people have a wider range of fruit and fish to supplement their preponderantly starchy diet.

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[1] Commonwealth of Australia, Annual Report of the Territory of Papua for the Period 1 July 1965 to 30 June 1966, p. 9.

[2] Ibid.

II. A Way of Life--Two Traditional Societies

A general outline of the peculiarities and customs of two geographically separate groups of people--the Manus and the Orokolo of the Gulf of Papua (see map on page 72) are presented as examples of the diversity of cultural patterns found within New Guinea. This diversity, caused by some six hundred of these cultures, provides educators in New Guinea with an extremely taxing educational problem. There is considered no common ethnic or cultural denominator to begin curriculum planning in New Guinea schools.

The following two traditional societies no longer exist in the form in which they are reported, as the process of modernization has made change inevitable. The traditional and the modern in society now exist side by side.

A. Manus

The Admiralty Islands, of which Manus is the largest, are situated in the northeast of New Guinea, some 250 miles from the mainland coast. Anthropologist Margaret Mead has spent a lifetime studying the people of Manus, particularly the Peri ethnic group, and

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much of the information on traditional Manus child growth is derived from her studies.[1]

In the Manus family the father took the principal role. Children were allowed to give their emotions free play and to interest themselves in whatever play they desired. Play was not structured as a "learning situation." Rather children learned to cope with their surroundings, for the rigorous way of life demanded that children be as self-sufficient as early as possible:

> . . . the stumbler is berated for his clumsiness, and, if he has been very stupid, slapped soundly in the bargain.[2]

Mead found the Manus children were healthy, with sharp senses and quick, accurate perceptions. The children gave little recognition to the arts of leisure, conversation, storytelling, music and dancing. Their religion was ethical--a spiritualistic cult of recently dead ancestors who supervised their descendants' economic and sexual lives and were the arbiters of right and wrong, acceptable and unacceptable.[3]

Early education, such as learning to walk and to talk, was repetitive in kind. Adults would spend many hours patiently repeating

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[1]Mead, Growing Up in New Guinea.

[2]Ibid., p. 30.

[3]Ibid., p. 15.

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words, games and skills to children who would, equally patiently, repeat these actions. A favorite game was that of imitation--of gesture and movement. Drumming, singing and dancing were also learned through imitation. During childhood proficiency at handwork was limited. Children were not shown, and themselves showed little inclination to learn, how to carve, weave or repair.

It is important to note the effectiveness of imitation and repetition in the education of the children of Manus, for through such education the Manus child became steeped in the traditions of his people. It was his way of being inducted into his cultural heritage.

Mead summarized Manus life as follows:

> The village scene is accordingly strangely stratified--through the all-powerful, obstreperous babies, the noisy, self-sufficient, insubordinate crowd of children, the cowed young girls and the unregenerate, undisciplined young men roistering their disregarding way through life. Above this group comes the group of young married people--meek, abashed, sulky, skulking about the back doors of their rich relations' houses. Not one young married man in the village had a home of his own. Only one had a canoe which it was safe to take out to sea. Their scornful impertinence is stilled, their ribald parodies of their culture stifled in anxious attempts to master it, their manners hushes and subdued. Above the thirty-five-year-olds comes a divided group--the failures still weak and dependent, and the successes who dare again to indulge in the violence of childhood, who stamp and scream at their debtors, and give way to uncontrolled rage whenever crossed. [1]

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[1] Ibid., p. 157.

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B. Orokolo of the Gulf of Papua

The Gulf District is located in central Papua. A large portion, about half, of the district is coastal along the Gulf of Papua, though the District stretches inland to the Southern and Eastern Highlands. Most of the information of the Orokolo comes from the autobiography of Albert Maori-Kiki[2] who, as a child, lived for a time with his mother's inland tribe and later lived with his father's coastal tribe. These two tribes lived less than 100 miles distant from each other.

The life inland at that time was hard and frugal. Most of the inland tribes were nomads, who spent about six months in one place and then moved to new hunting grounds. They had few belongings, few clothes, no permanent style house, no domestic animals except dogs which were used for hunting. They relied on quick-growing crops, such as sweet potatoes, and on wild game, such as pigs, cassowary birds, eggs, snakes and lizards, for food. The average family consisted of two children.

The major excitement for these nomadic people was being constantly on the watch-out for enemy activities, "pay-back" killings and warring with their neighbors. Usually the village leader was the

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[1]Maori-Kiki, Kiki, Ten Thousand Years in a Lifetime.

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man who had killed the most people. His was leadership by right. There was much magic and ritual associated with war and revenge. Young children were taught this magic at an early age. Kiki said:

> War was ever present in our minds. My first and only toy was a miniature set of bow and arrows. We little boys used to practice shooting at a rolling paw-paw that represented a running pig, and we would carve crude images from bark or wood and play at shooting a man. [1]

Education, for hunting, killing, gardening, fishing, building, making weapons, learning the lore of the tribe, simple medicines, was conducted by parents and elders. Girls learned from their mothers how to make string bandages to set broken bones, to cook, to fish and to garden. The more secret things, such as men's dances, magic, stories and charms, history and the power of ancestors, rituals associated with all aspects of life, were learned by the boys during their initiation ceremonies.

In contrast, life on the coast among the Orokolo was easier and more peaceful. Villages were larger and fixed in location. The coastal people were richer in food, shell-money, pigs and fowl. For many years the people of Orokolo had traded with the Motuans of the Port Moresby area, though it was always the Motuans who came to Orokolo as they, traditionally, were seamen. This resulted

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[1] Ibid., p. 16.

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in greater cross-fertilization of cultures. The trade arrangement was known as the "Hiri."[1]

In Orokolo it was the man's job to garden while the woman pounded sago palm to obtain edible supplies of sago for family consumption, as well as to provide a surplus for barter with the Hiri. Men fished for big fish from canoes in deep water, while the women wove nets and fished in shallow waters. Much of the magic of Orokolo involved the sea and fish. Williams[2] told of the "sea hevehe" (sea spirit) which was identified usually with enormous living fish. There were elaborate rituals or initiation ceremonies to denote stages of growth of children--especially male children. Ryan[3] and Williams[4] wrote in great detail of the ceremonies of the Elavo (men's houses) and how the activities of the ceremonies permeated the whole life of the people. Williams stated:

> Its (elavo) inmates were left almost entirely to their own devices, and had a thoroughly well-fed, lazy time of it. The task set before them was the unexacting one of growing. . .[5]

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[1]The voyages of the Hiri have been documented by F. E. Williams in Oceania, III, No. 2 (December 1932) entitled "Trading Voyages from the Gulf of Papua."

[2]Williams, "Trading Voyages from the Gulf of Papua," p. 144.

[3]Ryan, "Social Change Among the Toaripi, Papua."

[4]Williams, "Seclusion of Age Grouping in the Gulf of Papua," p. 360.

[5]Ibid.

The Orokolo considered song and dance important in their culture and integral with each initiation stage. It was likely that a good deal of exchange of song and dance with the Motuans accompanied the exchange of clay pots for sago at each expedition of the Hiri.

The two tribal cultures which made up Kiki's early life were vastly different--one nomadic by necessity, poor in worldly goods, beset by fears and warfare--and the other a stable, coastal tribe with highly organized trading contacts with distant people, less afraid of warfare, primarily because they were so great in numbers, rich in food and less rigid and narrow in the demands of their traditional religion. These two tribes were, relatively speaking, neighbors, though they had very little in common.

III. Traditional (Folk) Education

A. Education as a Folk Process

The two examples of traditional life just given provide insights into the habits and customs of the New Guinea people and assist in formulating an idea of traditional or "folk" education.

Folk education is a real education, though when compared with "Western" type education, it is limited in its objectives. No matter how primitive the society's cultural elements are, the child has to learn these elements from others. Education, even in the

most backward culture, is the indispensable process by which parents and elders hand on to the young what their elders handed on to them.

Folk education is as intrinsically conservative as is the traditional culture into which the young are being inducted. The aim of this education, then, is to conserve the culture and to prepare the young, by formal and informal methods, to live in it.

Each culture has its own patterns of formal and informal education. The pattern used by the Manus described by Margaret Mead is quite different from that of the people of the Orokolo. The Manus, for example, let their children roam about unchecked. Learning how to do simple tasks was unimportant. The learning of such tasks came soon enough with the responsibility of marriage. On the other hand, the Orokolo gradually initiated their young into their society, and each stage was marked with ceremonies and acclaim.

Much of folk education is oral.[1] History and legends are told with great care and are repeated many times so that they will be memorized. Repetition and imitative play are essential to

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[1] The implication of this fact on Western-type education in Tanzania is commented on by Idrian N. Resnick: "On a priori grounds alone, then, a visual pedagogy should be less efficient than an auditory one as a method of communication." (Idrian N. Resnick, "Prescriptions for Socialist Rural Education in Tanzania," Rural Africana, IX (Fall 1969), p. 18.)

learning, as exemplified in the Manus method of teaching children how to speak. There is usually no form of continuous education such as modern schooling. Instead, formal education, in most traditional cultures, is given at various predetermined age levels, each level culminating in a ceremony of some kind indicating successful learning by those being initiated.

Folk education being non-literate has no written form, though there may be some form of pictorial recording. This makes the accumulation of knowledge beyond the range of individual experiences difficult.

Professor Castle stated of folk education: "Its most obvious characteristic was its capacity to prepare children for living in a community."[1] The New Guinea primary education is obviously not doing this, as will be discussed in Chapter Four. Perhaps "modern" educators can learn something from traditional educators and be able to rectify some of the present cultural discontinuities existent in primary education.

It is necessary, in order to appreciate fully the stage of transition reached between the traditional cultures and the aspirations of "emerging" New Guinea, to consider what might be called the "culture gap."

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[1]Castle, Growing Up in East Africa, p. 44.

B. The Culture Gap

The two cultures of New Guinea, the one that is still largely the New Guinea tribal culture, and the one toward which the country is moving, are, in reality, far apart in time and condition. Whereas the traditional or tribal culture is predominantly a non-literate, handed-on culture, which educates its young in its own image against change, the "Western" type culture into which the New Guinean is being inducted is innovative and literate, enabling the minds of men to be extended beyond the knowledge of their parents.

The major difference in these two cultures affecting educators is the fact that the modern, or Western culture educates its young in schools which make available the knowledge contained in a literate society. Schooling prepares children by giving them the intellectual tools for discovery and change.

Inevitable tensions have arisen in New Guinea because of change brought about by modernization. For example, one writer, discussing the change in attitude of the Abelam (Sepik River people), said:

> The old, non-Christian, non-educated men look back to the days before the whites came as "the good old days" when there was plenty of food for everyone, because every man cultivated his gardens according to the established methods of his ancestors, which included the use of spells and magical ritual. The young

> men of today, they say, sit around and do nothing and expect good crops to come up in their gardens.[1]

It will be seen later in this chapter that not only does the setting up of a school system lead to great change and consequently tensions in the societies, but also adopting curriculum content and methodology foreign to the cultures to which it is given also creates problems which have ramifications for the social, economic and political life of the newly emerging national culture. Margaret Mead, talking of the need of a teacher to seek an understanding of New Guinea cultures, their languages and ways of reflecting, said:

> . . . once the New Guinea child loses his capacity to say: "This is the way we say it, this is the way they say it," he is very likely to become rigid and frightened. To any question that he is asked, he does not react by using his head and thinking, but he simply tries to find the "right answer." This, of course, prevents him from attacking a new problem, or even conceiving of the idea that there might be a problem to which no one yet knows the answer.[2]

IV. Education in Papua and New Guinea

A. General Survey

Prior to World War II schooling in Papua was left solely in the hands of the various Missions established there. In the Mandate

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[1] J. Whiteman, "Change and Tradition in an Abelam Village," Oceania, XXXVI, No. 2 (December 1965), 105.

[2] Mead, "Anthropology and Education," pp. 14-15.

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Territory of New Guinea most of the education was Mission sponsored and although there were some Administration schools begun by the Germans, these could be numbered on one hand. At the end of World War II, the Administration of New Guinea began to organize schools as part of their post-war rehabilitation program. An Education Department was begun in 1946 with the appointment of a Director. When he took up his appointment, there were very few educational facilities for him to direct and a very limited number of indigenous people who could claim a general education at any recognized level. It can be said, though, that formal education really began with the creation of the Education Department in 1946.

Non-Administration schools conducted by the Missions quickly re-established after the war, aided by the absence of competition from Administration schools. As a result, a dual system of education has developed. Up to the mid-1950's the education system comprised:

Village Schools	4 years
Village Higher Schools	4 years (Standards 3 to 6)
Central Schools	3 years (Standards 7 to 9)

Much of the schooling was based on an Australian type curricula until the late 1950's, and it is only in the last ten years that any great effort has been made towards localizing the various curricula.

At present the school system is organized on the basis of a seven year primary program followed by a four year secondary program, which may then be followed by a two year secondary higher program or a preliminary year at the University. The education system is still essentially a dual system in which the Education Department directly administers one section, the staff of which are members of the public service. The other section is controlled by the various Mission bodies conducting schooling, though the Education Department controls the registration and standards of their teaching staff. Financial aid is given to the Missions based on the number of certified teachers registered. These grants are paid to the Church authorities as a general grant for assisting educational effort, not directly to the teachers as salary.

In 1969 a committee, under the chairmanship of Mr. W. J. Weeden, was formed by the Australian Government to investigate the possibility and desirability of uniting the Administration and Mission systems of education in New Guinea. Their recommendations, made in the report entitled Report of the Advisory Committee on Education in Papua and New Guinea, were accepted by the Administration of New Guinea in 1970 and are presently being implemented.[1] The

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[1]Department of Education Director's Newsletter, confidential document dated February/March, 1970.

effects of the recommendations will be far reaching in the years to come, but at this stage it is too early to assess or to prophesy on these effects.

B. Education Policy

The broad objectives of educational policy include:

1. the political, economic, social and educational advancement of the peoples of the Territory;
2. the blending of cultures;[1]
3. the voluntary acceptance of Christianity by the indigenous people in the absence of an indigenous body of religious faith founded on indigenous teaching or ritual.

To achieve these objectives it is necessary to:

1. achieve mass literacy in a common language;
2. stimulate interest in and assist progress towards a higher standard of living and a civilized mode of life;
3. teach what is necessary to enable the people to cope with political, economic and social change;
4. blend the best features of indigenous culture with those of other societies;
5. provide a full range of primary, secondary, tertiary, technical and adult education for all classes of the community.[2]

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[1] Adopted by the Administration from the ideals of F. E. Williams, written in his The Blending of Cultures: An Essay on the Aims of Native Education (Port Moresby: Government Printer, 1951).

[2] Commonwealth of Australia, Annual Report of the Territory of Papua for the Period 1 July 1965 to 30 June 1966, p. 131. These aims were defined by the then Minister for Territories in 1956.

A current official statement on educational aims reads:

> The long-term objective of the educational programme is to provide a comprehensive educational system, covering the whole Territory, under which primary education will be available to all who have sufficient ability to make adequate use of it. In the short-term, progress towards the aim of making primary education available to all will be limited by the available resources . . .
> At the primary level, the objective in qualitative terms is to provide an adequate basis for the future economic, political and social activities of the people. For a number of years to come, limited resources will mean that the majority of children attending primary schools will not be able to proceed to secondary schools. The primary course will therefore provide a suitable preparation for the rural life that most of them will lead. At the same time, it will provide the scholastic grounding needed for those who will be going on to secondary and tertiary education.[1]

The above extracts defining the aims and objectives of education lead to a consideration of the specific roles of the primary school, and, subsequently, of primary education in the total educational program. The second quotation contains pertinent statements defining certain changes in emphasis in the Administration's interpretation of the broad statement on educational policy made by the Australian Government. Universal primary education remains a goal, but it is doubtful if it will be reached for some years to come. The imbalance of educational opportunity between primary and secondary education has become accepted as inevitable. It can be

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[1] Territory of Papua and New Guinea, Programmes and Policies for Economic Development of Papua and New Guinea, pp. 98-99.

implied that the Administration favors the educating of an elite for educational development and general economic and political viability.

C. Primary Schools

1. Their Role. --In order to clarify the role of the primary school in New Guinea, an examination of what the primary school is actually doing would be helpful. This examination can be summarized as follows:

a) The advent of Western-type schooling is assisting in the breaking down of tribal barriers which have hindered attempts to unify the societies within Papua and New Guinea. Through the introduction of studies of other cultures, of themselves and of the ethics behind co-operation, children, and indirectly their parents, are learning to become more tolerant of others and to develop a pride in their own country.

b) Primary education is providing a large number of children with an education; but as mentioned before, this education is not universal.

c) The primary school is attempting to lay the foundation for a common language for New Guinea. The language chosen by the Australian Government is English. There is a carefully planned program of language teaching in operation in all but the poorest of Mission schools.

d) There is an attempt to teach the benefits of good health and hygiene. Health education has met with counter forces from village and tribal customs, and it will take some time for traditions in health and allied matters to lose their power.

Two features of the primary schools, though educationally negative, need to be mentioned in this discussion of the role of the primary school:

e) The primary school is looked upon as the first step of an educational ladder leading to secondary and to tertiary studies, though the educational authorities have stated otherwise. "Primary education, as currently conceived, is not in itself a terminal education."[1] As a result, the majority of primary pupils are being subjected to a preparation which has little relevance to their post-school needs.

f) As a direct result of static teaching methods, primary school children are seldom challenged to think or approach problem-solving in a rational way. Poorly educated and inadequately trained teachers who rely on long-established methods, programs and content, are loath to change and innovate in their

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[1] Papua and New Guinea, Department of Education, Syllabus for Primary "T" Schools, Revised Edition (Port Moresby: Government Printer, 1967), p. 1.

teaching methods. Any suggestion to do so provides a threat to their feelings of security.

The officially stated aim of primary education for indigenous children is:

> . . . to provide them with an education closely related to the present circumstances of their lives, but which will prepare them for the rapid changes resulting from contact with more developed people.[1]

The report went on to state:

> The curriculum is designed to fit the children of the Territory for life in a rapidly changing society--a society in which technical innovation and social changes are going on hand in hand. The core of the curriculum is training in the basic skills of communications and mathematics. Considerable attention is given to the provision of a wide range of experiences of the modern world and its social institutions. The curriculum includes gardening, nature study, manual arts, art and music.[2]

Such aims are easily stated but difficult to achieve. The following aims or objectives for primary education in New Guinea are, in the writer's opinion, better suited to the country and the existing conditions there:

1. Primary education is to be self-contained and complete, but at the same time enabling the child to make further progress. Those for whom it is terminal should be able to grow and develop in response to their environment.

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[1] Commonwealth of Australia, Annual Report of the Territory of Papua for the Period 1 July 1965 to 30 June 1966, pp. 134-135.

[2] Ibid., p. 135.

The inculcation of an attitude towards change which would enable the child to recognize the desirability of change in his society is an important aspect of primary education.

2. To provide opportunity for intellectual development including the acquisition of functional literacy and numeracy, through the blending of studies and activities which will encourage a lively and heuristic approach to the acquisition of knowledge.

3. To provide opportunities for the child to study his relationship with his neighbourhood, his society and his culture, so that he will develop an appreciation of his cultural heritage. Much of this study will be concurrent with the activities hinted at in paragraph 2.[1]

2. Location. -- Table 1 on page 98 indicates the percentages of school age children receiving schooling in the various Districts in New Guinea. Indicated also is the number of primary schools, both Mission and Administration, in each District. From this table two negative features of the total educational program stand out, namely:

a) the imbalance of educational opportunity between districts of New Guinea;

b) the sporadic pattern of school location.

It is evident that approximately 50 per cent of all children of primary school age in New Guinea are receiving no education at all. For example, 74 per cent of the Highlands and New Guinea

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[1] "Report of the Seventh Annual A.A.A. Conference, April 1968: An Institute of Education and the Improvement of Primary Education," Teacher Education in New Countries, IX, No. 3 (February 1969), 208.

District	Estimated School Age Children*	Administration		Mission		Number of Primary Schools	
		Primary Enrollment	% School Age Children	Primary Enrollment	% School Age Children	Administration	Mission
Western	11,800	2,967	23.44	4,042	34.25	15	30
Gulf	10,650	3,012	28.28	4,520	42.44	15	47
Central	25,400	10,954	43.12	9,642	37.96	42	88
Milne Bay	17,600	3,517	19.94	8,562	48.63	29	84
Northern	12,050	2,493	20.68	4,083	33.88	15	36
S. Highlands	40,250	3,443	8.55	4,533	11.26	25	41
E. Highlands	38,600	5,358	13.90	4,060	10.51	33	40
Chimbu	28,850	3,573	13.30	4,932	17.15	25	38
W. Highlands	52,550	4,538	8.63	11,494	21.87	30	85
West Sepik	18,250	1,873	10.26	5,050	27.67	16	42
East Sepik	28,750	4,999	17.38	8,917	31.01	34	67
Madang	26,100	5,462	20.92	10,992	42.11	28	80
Morobe	39,150	6,687	17.08	8,818	22.52	45	89
W. New Britain	9,000	1,112	12.35	7,277	80.85	10	53
E. New Britain	19,700	8,566	43.47	12,680	64.36	28	83
New Ireland	8,200	2,491	30.37	6,676	81.41	22	83
Bougainville	13,600	1,690	12.42	13,148	96.67	13	125
Manus	4,100	1,969	47.80	2,656	64.78	20	47

*Please note: "Estimated School Age Children" are 1968 figures.

Coastal districts' 6-to-12-years-of-age group are not enrolled in or attending a primary school.[1] That some areas are less developed economically than others accounts, in part, for the imbalance in educational opportunity between districts. This matter poses not only an educational problem, but a political one as well.

The degree of geographic accessibility and the length of Westernized contact provide a reason for the variation between numbers of children receiving primary education and those not receiving it. Some areas, such as the Gazelle Peninsular of New Britain, have had Western contact for over eighty years, and as a consequence have developed a fairly extensive system of physical communications, which has allowed the development of an adequate school system. In the less geographically accessible districts, however, where communication is difficult, educational opportunity has been slow to spread.

In summary, organized and systematic schooling is less than twenty-five years old. It could be argued, if one considers the history of the Department of Education, to be less than fifteen years old. Even so, the rate of change in the New Guinea society is so rapid that the educational system has already become unwieldy and outdated.

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[1]University of Sydney, Adult Education Department, "Education in Papua-New Guinea," p. 83.

3. Variety. -- Though there is a prescribed syllabus of studies for all indigenous primary schools in New Guinea, it is considered the only aspect of primary education which is standardized. The difference most noticeable is the variety in school buildings. These vary from the modest weatherboard structure with an iron roof found in towns, Mission stations and in the older "Europeanized" areas, to structures found in most villages made wholly or in part from local materials.

School furnishings vary from the "modern" two-student desk of wood on an iron frame to undressed, raw bush material frames seating from six to eight pupils. In nearly all cases, even in the main towns, there is a dearth of storage space for school supplies and the teachers' equipment. This, for the teacher, is a disheartening factor, for carefully prepared aids and models soon deteriorate under tropical conditions in buildings, few of which are weatherproof.

Apart from the seating and storage accommodation mentioned, the educational equipment found in primary schools also varies from school to school and location to location. It is difficult to know where the responsibility for supply and maintenance for educational equipment lies. Expensive and useful equipment is found deteriorating in schools through misuse and lack of teacher care.

4. Curriculum. --The Syllabus for Primary "T" Schools has been set by the Department of Education at Port Moresby since the early 1950's. Early syllabuses were of a metropolitan kind based on the (then) syllabus for primary schools in Queensland. Since then there have been several revisions of the primary syllabus, the most notable and progressive in 1962, and the latest in 1967. The latest report from the Primary Division of the Department of Education indicates that curriculum changes are under way in Religious Education, English, Mathematics, Health, Science, and Social Studies.[1]

Since 1962 there has been a marked increase in the number of primary school leavers who are forced, because of lack of openings in secondary schools, to return to village life. There is a need, then, for a drastic reviewing of the present syllabus to ensure that it caters more effectively to the needs of these students.

Though the syllabus is fairly prescriptive in the content to be taught and in methodology, the standards of work achieved in primary schools are as varied as are the abilities of the teachers implementing the syllabus. It is unfortunate that the Primary Final Examination--an examination taken by all Standard Six pupils to

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[1]Papua and New Guinea, Department of Education, "A Brief Summary of the Primary Curriculum Committee Meeting Held at Konedobu from 23rd-26th February, 1970." (Stencilled copy.)

decide entry into secondary and vocational schools--has become the governing factor for nearly all primary school experiences. As a result, Standard Six has become a year of academic "drive," where preparation for the now highly competitive examination has monopolized teaching and learning. Preparation for this examination has even filtered down into Standard Five. Teachers are morally obliged to coach for the examination. Failure, or a low pass, means the end of schooling for pupils. In 1969 at least 60 per cent of all pupils sitting for the examination had the door of future schooling closed to them.[1]

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[1]Papua and New Guinea, Department of Education, "Primary Final Examination Secondary Selection," circular letter dated July 31, 1969, p. 3.

CHAPTER IV

THE PRIMARY TEACHER AND HIS PROFESSIONAL EDUCATION

I. Teacher Education in New Guinea

A. A Brief Review

Teacher education in New Guinea has moved a long way since the first officially organized training program began in 1955 as a result of an Administration Education Ordinance brought into effect that year. Prior to that date only 17 trained teachers (a one-year "C" Course) had received an organized form of training. In 1955, 110 students about Standard 8 level were in training in seven centers in New Guinea. This was the beginning of the "B" Course of training. Practical teaching and school management received the greatest emphasis in this course. Later an "A" Course of training --a one-year course at Standard 6 academic level--for infant teaching was introduced into all colleges, Mission and Administration. Into this avenue of training went most of the student teachers.

One of the results of the 1955 Education Ordinance was that the Missions began for the first time to train teachers along departmentally accepted lines in order to receive government financial aid. An early method of payment of this aid was one of payment by result (academic), and later by per-capita grant according to the numbers of pupils enrolled. Since 1954, government subsidy has been paid according to the qualifications of the teachers employed by the Missions. This money was paid to the Missions to use for education where they saw the need. For several reasons, the most pressing being financial, the Missions consequently were impelled to undertake formal, organized teacher training.

Some Mission teacher training was in operation before 1954, but this early training was predominantly theological. The actual teacher training component of such courses of training was sketchy, to say the least, for pastoral work received much the greater emphasis. Many small centers of training sprang up in different parts of New Guinea. Some of these Mission centers had a few as five students; the large centers have numbered up to 150 students.

In the past, much work has been duplicated, not only between the various Mission and Administration colleges but within them. The staff has been, generally speaking, inadequate, not always qualified for the task nor suitable for it, and in all cases overworked.

Some of the larger Missions have now amalgamated their smaller training colleges, and the Administration has confined its training to three large colleges at Port Moresby, Goroka, and Madang. This has resulted in a more organized and intense training program, greater specialization on the part of the staff, and a saving in finance.

Not a great deal of organization was present in the early courses, even though there was a teacher training syllabus printed first in 1950 and then in 1954 for the three courses then in operation. The courses were:

1. Course "A": to qualify trainees for teaching in Village Schools . . . classes 1 and 2 in which children learn to read and write in the vernacular, but children study English as their second language . . . for Mission colleges only.

2. Course "B": to qualify teachers for work in Village Higher Schools (Standards 3 to 6) . . . English is taught throughout the school . . . the minimum prerequisite standard of general education . . . Standard 9.

3. Course "C": . . . is the normal teacher training course for fully qualified native teachers . . . prerequisite standard of general education is the completion of second year secondary school. [1]

A description of the current programs was presented in Chapter One. It is difficult to equate New Guinea standards with

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[1] Papua and New Guinea, Department of Education, "Syllabus of Work for Teacher Training," Port Moresby, 1954, p. 1. (Stencilled copy.)

Australian ones, but it is generally recognized that the grading systems are equivalent.

B. Development of Curriculum

In order to appreciate fully the method of teacher preparation currently being used in most colleges in New Guinea, one must be aware of how this method developed. In 1954 the Department of Education "Syllabus of Work for Teacher Training" had the following to say about the Course "A" method of teaching the village school curriculum:

> It will be noted that no time whatever is allowed for the study of general subjects, apart from Method of Teaching. It has happened in the past that in some native schools where students were prepared for service as teachers, the whole time was spent in ordinary school work, and little or no training in teaching technique or supervised teaching practice was given. No doubt it was felt that the basic attainment of the trainees was at such a low level that they could not profit by lessons in the Art of Teaching. As a result trainees went out to teach in village schools with little to guide them but their recollection of procedures used by their own teachers.[1]

It went on further to say:

> As the present course is intended for students who have completed the primary school course (Std. 6), it is laid down that the whole 25 hours per week is to be spent on professional training. For ten hours per week trainees will be taken through the entire curriculum for village school, in all subjects, and

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[1] Ibid.

> will concurrently refresh their memories on details of subject matter and learn the method of teaching the particular topic. Emphasis throughout must be on classroom technique rather than subject matter.[1]

The weekly allocation of time for the Course "B" was as follows:[2]

1)	Theory of Education	1 hour
2)	School Management	3 hours
3)	Method of Teaching Primary Curr.	10 hours
4)	Demonstration & Criticism Lessons	1 hour
5)	Supervised Practice Teaching	4 hours
6)	Blackboard Practice & Drawing	1 hour
7)	Method of Teaching Handcraft	1 hour
8)	Method Teaching P. T. & Sport	2 hours
9)	Method Teaching Gardening	1 hour
10)	Method Teaching Singing	1 hour
	Total	25 hours

The Course "C" allotment of time was nearly the same as for Course "B." The statement was also made that "Supervised Teaching Practice is the central core of the whole programme of teacher training."

Revised syllabuses developed from the 1954 "Syllabus of Work for Teacher Training" were produced in 1962 for the one-year course, and in 1963 and 1965 for the two-year courses. The several extracts below will show trends and emphases current in the early 1960's and the present time:

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[1] Ibid.

[2] Ibid., p. 2.

> The present curriculum for the 2 year course of teacher training for students who hold passes at Form 2 or above, endeavours to advance the training done in the 1 year course, where almost the whole effort of the course is given over to understanding and perfecting methods of the simplest kind applicable to the Preparatory, 1 and 2 Standards in the Primary "T" School.[1]
>
> The 2-year course allows considerable expansion on the work of the 1-year course, which is restricted almost wholly to method.[2]
>
> . . . because of the differences in ability of the personnel selected for the two courses, the time-tabling for the 1-year course will allot much more time to the development of skills, and the raising of attainments, than to what might be called, broadly, cultural development. . . . Hence the allocation of time to method in individual subjects may be considerably less (in the 2-year course) than in the 1-year College, and the balance of time should be available for curriculum growth, leadership training, sport, etc.[3]

It is obvious from these extracts what the emphases in teacher training were: emphases of necessity--a natural part of a growth pattern in an educational system which began from nothing. If, as Beeby[4] said, educational systems have stages through which each system moves in order to achieve a more meaningful education, then the development of teacher education and education generally in New Guinea is normal and logical.

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[1] Papua and New Guinea, Department of Education, "Syllabus for the Two Year Course of Teacher Training," p. 1.

[2] Ibid.

[3] Ibid., p. 3.

[4] Beeby, The Quality of Education in Developing Countries, Chapter 4.

The kinds of teacher training programs outlined are of the "tram-line" variety, as Beeby called them, where ". . . the teachers are carefully prepared to perform in every detail special pre-selected tasks."[1] These programs have proved extremely effective in raising standards (Beeby's Stage 2 teaching) in many places, but do not necessarily improve the teacher's practice outside the specific courses for which he had been trained.

Generally, the teacher education programs today still devote considerable time to methods of teaching. The "content" taught is the content the students will later teach in their classes. Often it is taught in the manner the students are expected to use in their own teaching. Even though the educational system grew out of the Australian system, this practice is contrary to what is the case in Australian teachers colleges, where content, as a discipline, is taught as an academic exercise and not always related to the students' future teaching.[2]

Many staff members of the various colleges have grown up with the system. They see that method is important. It was so in the past when poorly educated teachers had to leave college with

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[1] Ibid., p. 110.

[2] Shears, "The Curriculum of a Teachers College," p. 103.

everything they needed for their future teaching, for they received little help once they were in the field. Copious detailed programs of work were distributed and drilled during training. Adherence to these programs and methods promulgated by the training personnel was the rule.

Teachers prepared this way are, on the whole, against change. They have not been challenged to think or to reason, and so, when faced with the need to change (as is so in any advancing educational system), they find it a difficult, if not impossible, thing to do. The emphasis on method is, however, slowly beginning to change.

II. Common Problems Relating to Curriculum in Teacher Education

Specific problems associated with primary teacher education in New Guinea and how these problems affect curriculum construction and development will be discussed in this part.

In the absence of clearly stated aims of teacher education in New Guinea, it is necessary to look to UNESCO for ideas on what might constitute the aims of teacher education in a developing country. UNESCO stated:

> The purposes of a teacher education programme should be to develop in each student his general education and personal

> culture, his ability to teach and educate others, an awareness of the principles which underlie good human relations, within and across national boundaries, and a sense of responsibility to contribute both by teaching and by example to social, cultural and economic progress.[1]

In short, teacher education is a study of the process by which others are helped to realize their potentialities.

A second definition necessary is that of curriculum. Curriculum, for present purposes, is defined in a wide sense, in the manner of Dr. C. E. Beeby, to include all the experiences provided by the teacher education institution in the process of teacher preparation. It covers four aspects:

1. A statement of the aims of teacher education;
2. A statement of the content of courses and choices (that is, available alternatives) that the learner will be required to experience;
3. A statement of the method, or methods, that are most likely to achieve these aims;
4. A statement of the method of evaluation.[2]

Beeby also said that curriculum cannot be separated from textbooks, inspection policies, examinations, specialist field staff in schools, or even from buildings, equipment and finance.[3]

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[1]UNESCO, Final Report: Expert Committee on Teacher Education, p. 3.

[2]Beeby, "Curriculum Planning," p. 138.

[3]Ibid.

Little material has been published on teacher education in New Guinea in the form of results of curriculum innovations, of problems in curriculum development, or of research. Lack of continuity of staff in colleges has resulted in lack of stability of personnel necessary for effective research. The majority of staff, although genuinely concerned with their programs and their students, tend to "play it by ear." Neither has there been any real study done of the new teacher and the difficulties he encounters during his first year of teaching. Such studies and research would greatly assist those responsible for curriculum in teacher education in devising more effective and comprehensive programs to meet present educational needs as well as those of the foreseeable future.

In the meantime, from the somewhat confused and conflicting patterns of primary teacher education currently in operation in Mission and Administration teachers colleges, the following problem areas are considered by the writer (in consultation with Dr. H. H. Penny, Curriculum Advisor for Teacher Education in New Guinea) common to New Guinea and need the most urgent attention:

1. Finance;
2. Socio-cultural factors;
3. The need for greater teacher professionalization;
4. How children learn;
5. Language and communication;
6. Instructional media and method.

A. Finance

Little is to be gained from considering proposals for change in teacher education unless they are accompanied by a realistic understanding as to where, and how, the finance for them is to be found. Increasingly heavy expenditures have been made on education in New Guinea since World War II, with the initial object of getting increasing numbers of children into schools at a reasonable starting age. In more recent years, education at secondary and tertiary levels has received increasing emphasis. The 1966 census showed that about 30 per cent of the indigenous people have attended school; and of these, only 0.2 per cent have received a reasonable standard of secondary education.[1]

In 1968-69 the budget for New Guinea provided $A20 million ($US22 million) for education. This amount represented 16.7 per cent of the entire New Guinea budget. The allocation of $A20 million was for the general education of 222,000 school pupils and for teacher education. From this allocation, $12.8 million was taken for payment of teachers' salaries. It has been estimated that the Five Year

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[1] Territory of Papua and New Guinea, Programmes and Policies for the Economic Development of Papua and New Guinea, p. 98.

Development Program in education will cost $A150 million.[2]

It is obvious from these figures that finance for school education in New Guinea is severely limited. It is not likely to be increased to any noticeable extent in the next few years.

New Guinea is now caught in the educational quantitative-qualitative dilemma that many developing countries are currently experiencing. The previous Administrative policy of universal primary education, though not attained, has left the educational system bottom heavy. The monies appropriated for secondary education in 1968-69 were only 28 per cent of the total education funds. As most of the secondary teachers in New Guinea are expatriate, a large part of this amount was required for teachers' salaries. The shortage of finance for expansion of secondary education has resulted in the continuance of an unbalanced educational system in New Guinea.

Though expansion in primary education is now controlled, the demand for more education from those not receiving schooling is increasing. With the advance of self-government, education is assuming a political flavor, and pressure is being placed on educational authorities to expand their educational coverage. As the supply of expatriate teachers is diminishing, due in part to the lack of

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[1] Figures extracted from the Department of Education, Territory of Papua and New Guinea, Confidential Report dated March, 1968.

security offered now with the position, the implications for indigenous teacher education are serious. How to prepare a sufficient number of teachers, academically able and professionally capable, within the limits of available finance, is the problem. Like other developing countries, New Guinea is caught in the unprecedented demand for, and inadequate supply of, teachers. Any increase in the number of teachers trained would mean an increase in the overall expenses of teacher education. However, as the salary for indigenous New Guinea teachers is much lower than for expatriate teachers, this expense would be more than offset in the long run, for the increase in the number of indigenous teachers would create a decrease in the number of expatriate teachers required for primary education.

B. Socio-Cultural Factors

From a societal point of view, the major educational problem in New Guinea is that educators are using a highly sophisticated tool, that of organized schooling, of a highly sophisticated Western culture, to bring about rapid change in what is perhaps one of the most primitive group of cultures in the world. Even though the various New Guinea tribal cultures had their own methods of educating their children, as is evident in the examples outlined in the previous chapter, such methods cannot compare in complexity with the

organized form of schooling recently introduced into the country by the Australian Administration.

At the present time the cultures of New Guinea are changing so rapidly that the values and beliefs people hold are in a state of confusion. This confusion is further heightened by the school curriculum which, in general, teaches a value system markedly different from the traditionally indigenous one. The prime example of this confusion is encountered in the teaching of science. Western science and medicine frequently challenge the traditional attitudes, basic assumptions and concepts long held by a traditional society. Professor Lewis, discussing problems encountered in school science programs, argued that ". . . science, and being a scientist, is at least as much a matter of attitudes and assumptions and concepts as of knowledge and skills" and that ". . . any educational programmes planned to produce scientists and technicians in non-Western societies will need to be as actively concerned with the assimilation of scientific outlooks, interests, habits and basic concepts as with the acquisition of knowledge and skills."[1]

The student teacher comes to college having risen through the formal education system outlined in Chapter Three. He comes from a home background which is, in the modern sense, culturally

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[1] Lewis, "The Learning Process," p. 123.

impoverished and lacking in many of the formal and informal aspects of education commonly found in the homes of children and youth in literate societies. It is impossible in the Western world to keep abreast of new knowledge. It is even more impossible for a teacher who comes from an environment such as just described. Yet, as Professor Hanson pointed out, the teacher is the most readily available intellectual leader for dealing with problems associated with the dissemination of knowledge at the local level, and the community of teachers should ideally be the most promising community in which to deal with intellectual problems on a broader level.[1]

The poverty of the socio-cultural background from which most of the student teachers come is a major problem for teacher education in New Guinea, and for that matter in most developing countries. Can, or should, a teachers college curriculum hope to combat inadequacies in students caused by cultural deprivation and inadequate schooling, and at the same time prepare them for their role as a teacher of children?

C. The Need for Professionalization of the Teacher

The lack of a professional ideal amongst teachers in New Guinea is understandable if one considers the quality of the teacher

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[1]Hanson, "On General Education for the African Teacher," p. 184.

preparation program for "A" Certificate teachers and the fact that approximately 80 per cent[1] (over 2,000) of the present teachers in primary schools in New Guinea have received this Course "A" training. Though this course of training is being phased out of the system (it is now only found in certain Mission colleges), the fact that such a large number of its graduates are teaching in schools, and will be teaching for some years to come, unlikely to receive any worthwhile further training or education, unlikely to receive promotion, and most likely to be posted for work in the poorer, less attractive areas, poses the major problem in the educators' quest for professionalization of teaching.

The dilemma of quantity versus quality has direct influence on professionalization of teachers. Government economic policies causing this dilemma play an important part in deciding on numbers of teachers, length and type of courses, staff, and so on. The financial implications underlying any discussion of quantity and quality in teacher preparation were discussed earlier in this chapter. It is important here to remember that the selection of teachers for training, the quality of training, promotional prospects, the kinds of schools, the availability of in-service programs, all are crucial

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[1]McKinnon, "Education in Papua and New Guinea: The Twenty Post-War Years," p. 10.

to any consideration of advancing professionalization amongst teachers.

It is generally felt that the length of preparation alone is not the sole criterion for quality and professionalism. Dr. G. W. Gibson, discussing the tendency to make courses more professional by lengthening them, considered in 1964, as a result of a survey of the views of teachers and students in a two-year course, that raising the standard of teacher training in New Guinea was largely a matter of improving the quality of present courses by attracting better qualified applicants into colleges, rather than by lengthening courses.[1] Much, then, depends upon the level of previous education and upon the quality of human resources available for training.[2]

History has contributed to what is considered an inferior role accorded primary school teachers.[3] There is a widespread feeling in Australia, and becoming evident in New Guinea, that primary teachers are inferior to secondary teachers, and they, in turn, are inferior to college teachers. This has been largely the result

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[1]Gibson, "The Emphasis in Teacher Training--More or Less--Of What?" p. 60.

[2]UNESCO, Final Report: Expert Committee on Teacher Education, p. 5.

[3]Ibid., pp. 5-6.

of the role the university has played in preparing secondary teachers, the preparation of primary and infant teachers being left to lesser academic institutions such as Teachers Colleges or Normal Schools. UNESCO has commented as follows:

> . . . [the] tendency to create other types of teacher education institutions has been facilitated by the increasing professionalization of teacher education, and by the desire of governments to be in direct control of teacher education so far as general policy is concerned. . . . It was noted that pedagogical institutes, independent of the universities, are often better able to meet the special needs of developing countries, in particular by adapting teacher education programmes to the immediate social, economic and technological needs of these societies as they develop and to particular environments.[1]

There can be no doubt that teachers' colleges have increased in professionalization over recent years, but there still remains the notion that a university education is the pinnacle. In New Guinea there is a failure to recognize the fact that student teachers are tertiary students and should be treated as such. It can be argued that, because many students currently preparing for primary teaching have not completed their secondary education, and therefore are not tertiary students, they cannot possibly cope with a real tertiary level training. This may be so, but these same students are of comparable age, have potential, and are being recognized as prospective teachers by the Administration through the payment of a teacher-in-

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[1] Ibid., p. 6.

training allowance. As such they have the right to demand a tertiary-styled training which will better prepare them to be responsible and progressively minded teachers whose self-image has been fostered rather than neglected.

Groundwork for the development of maturity as a teacher is the prime goal of teacher education programs. This cannot be achieved through a narrow curriculum which produces classroom technicians rather than wise teachers. Dr. Gibson said:

> . . . teachers have been left behind in the revolution that has transformed practically every sector of developed economies over the past fifty years. Being unable to demonstrate that, in relation to the members of professions with higher quality training programmes, they are doing a sufficiently better and more efficient job than they did in the past, they have been unable to claim a due share in professional upgrading. . . . Professional training alone is important, but not sufficient. It is only one aspect of the matter, albeit the one most commonly discussed. Teachers can only function professionally to the extent that their role is professionalized. What needs promotion is the professional core of the teacher's role, the guiding of learning, not the peripheral tasks of drilling, conveying information, and so on.[1]

This imperative clearly applies to the New Guinea teacher.

D. How Children Learn

Very little has been written of the way New Guinea children (or adults, for that matter) learn. There have been some

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[1]Gibson, "Let's Have a Profession," pp. 37-38.

anthropological reports published in journals such as Oceania which portray aspects of day-by-day living and child-rearing in particular isolated communities in New Guinea. Such portrayals are usually small portions of what often are complicated reports, couched in anthropological terms not understandable to the average reader. As few indigenous teachers would be able to comprehend such reports, an important question emerges as to what exactly is the learning theory promulgated in teachers colleges and used by teachers, and how relevant is it to the New Guinea educational scene?

When observing older teachers in action in the classroom, their teaching methods indicate that earlier programs of teacher preparation taught, either directly or indirectly, the theory that teaching was merely transmission: teacher tells, pupils learn; that pupils learn through repetition; and the test of the effectiveness of learning is the ability to reproduce correctly what has been learned by repetition. Even if this theory were not espoused in exactly these terms, it was practiced by those responsible for teacher preparation as evinced in the total training programs.

The method of learning by rote memorization is traditional. "The whole pattern of traditional education in Africa and Asia supports the memorization of the spoken words of the teacher."[1] The

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[1]Adam, "Study Methods in Developing Countries," p. 15.

teacher, thereby, feels justified in using rote memorization methods of teaching. This form of traditional education is auditory, whereas Western-type education is visual--relying on the written word, the seen experiment, the drawn diagram, the pictures of a world present and past.[1] Dr. I. N. Resnick, writing on Tanzanian education, claimed that one reason for the failure of Tanzanian formal education is that it is visually oriented in the Western fashion and not auditory in the African tradition.[2]

A similar situation exists in New Guinea, and it can be argued that the system of school education there, being Western in orientation and therefore visual, is less effective than it could be. However, if educators in New Guinea continue to regard formal schooling in the way it is regarded in Western societies, and they continue to teach subjects and subject matter which are products of a modern Western world, then a continuance of reliance on auditory methods of education will be less than adequate.

Considerable diversity of opinion exists amongst Western educators at the moment as to how children, in Western societies, best learn. Dr. H. H. Penny once said:

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[1]Resnick, "Prescriptions for Socialist Rural Education in Tanzania," p. 15.

[2]Ibid., p. 16.

> . . . experimental behaviourists have, more or less, rejected such terms as "insight" and "appreciation" in their effort to obtain "scientific" objectivity. Their learning theories conform in varying degrees to the S--R model. There is S, the stimulus, which because regarded as physical can be quantified. There is R, the response, which because identified as physical can also be quantified. Little or nothing is said of the intervening -- except in neurological or other physical terms.[1]

It is probable that theories based on the S--R model work, but it is questionable whether they educate those upon whom they operate. Some experiments of the behaviorists[2] confirm that prolonged periods of routine practice in, for example, computation or handwriting, reduce rather than improve accuracy. This is particularly relevant to schools in New Guinea, where children are required by their teachers to repeat, in what appears to be an endless chorus, multiplication tables, spelling, reading,. in fact most of their lessons. It is far more important in New Guinea for the teacher who seeks to educate to hold fast to theories of learning which include the processes of developing insight, appreciation, observation, exploration, experimentation and creation.

It is common knowledge that in certain North American Indian peoples, competition in educational fields is foreign to their culture and tradition, and American teachers for quite some time

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[1]H. H. Penny, in a lecture presented to teachers, Goroka Teachers College, January, 1969.

[2]H. J. Klausmeier, Learning and Human Abilities (New York: Harper and Row, 1964), pp. 368-369.

failed to modify their teaching methods to accommodate this particular cultural trait.

> "They are without initiative," the exasperated white teachers would say . . . all those Indian boys and girls who show signs of actually accepting the demands of their educators and of finding delight and satisfaction in excelling in school activities . . . are drawn back to the average level by the intangible ridicule of the other children. [1]

Traditional societies are basically co-operative societies where work and play are geared directly towards the survival of the society. Western societies, on the other hand, emphasize and encourage the individualistic instincts of mankind. Schooling, as a product of Western society, generates individual competition. In New Guinea the question, "How can learning theorists advocate a psychology of learning for New Guinea which has competition as its underlying tenet?" must be asked.

How do children learn? It does not necessarily follow that the way they learn as described by educational psychologists in Western cultures is the way they learn in so-called primitive cultures such as New Guinea. [2] Dr. Margaret Read spoke in 1955 of the lack

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[1] E. H. Erikson, Childhood and Society (New York: Norton, 1950), p. 115.

[2] UNESCO, Final Report: Expert Committee on Teacher Education, states: ". . . it is evident that much that is taught in child development is not directly related to the circumstances of childhood in the country concerned," p. 9.

of knowledge of the influences on child growth and development and how they learn in traditional societies.[1] Organized studies of child learning in New Guinea are only now beginning to be considered by the staff of the Education Faculty of the University of Papua and New Guinea.

It is likely that certain aspects of the theories of learning espoused in Western cultures are applicable to human development in New Guinea, although it is difficult even in Western cultures to agree that any one theory is without question. The theories of learning which expatriate educators take for granted, especially those educators who influence student teachers, should be checked for relevance, lest wrong information, reinforced, does irreparable harm to countless numbers of children in schools.

Students in teachers colleges are encouraged to study children during their periods of practice teaching. They are encouraged to observe children and to gather data on them which they later analyze. The ability to analyze data presupposed a theory of human development derived from a sound knowledge of the psychology, sociology and history of their culture. Student teachers in New Guinea are, obviously, not yet ready for such analyses, and child

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[1]Margaret Read, Education and Social Change in Tropical Areas (London: Thomas Nelson & Sons, 1955), p. 38.

study exercises in the manner in which they are given, that of undirected child observation and then analysis of observations, serves little worthwhile purpose.

E. Language--A Problem of Communication

New Guinea is a linguistically fragmented country of some seven hundred different languages. The geography of the country has precluded all but the most spasmodic interaction between linguistic groups. This lack of communication has hindered the development of nationalism through a common national language. The vernacular language most aptly and efficiently serves a traditional culture in that it meets the needs of a static society. However, in New Guinea a national language is needed which will suit a rapidly changing culture and promote communication within the country as well as with the outside world.

The policy of the Administration of New Guinea through its Department of Education was such that English became the common language of instruction and communication.[1] This policy was reinforced by the Currie Report, which said:

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[1] Commonwealth of Australia, Annual Report of the Territory of Papua for the Period 1 July 1965 to 30 June 1966, p. 134.

> The gateway to knowledge of the outer world, and even to the rational understanding of the local world, must be in a world language, and in the local context that language must be English.[1]

The teaching of English in New Guinea as a means for communication has been only moderately successful. The Currie Report commented: ". . . only a very few indigenous people have attained real facility in the use and comprehension of English."[2] The Report gave three reasons for this lack of acquiring a facility in the use of English:

1. . . . the inherent difficulty of exchanging terms, concepts and thought processes, developed over centuries, between two radically different cultures, poles apart in social structure, economic basis, and historic evolution--and expressing themselves in languages which have no faintest family relationship.[3]

2. simply inadequate teaching of the teachers;

3. a following of Australian syllabuses which do not come to grips with the critical question: what sort of English is needed?[4]

There has been much discussion in education in developing countries as to the place of the vernacular in early education.

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[1] Report of the Commission on Higher Education in Papua and New Guinea, p. 49.

[2] Ibid.

[3] Ibid.

[4] Ibid., p. 50.

Professor Castle, commenting on this aspect of education in the East African context, said:

1. It is undesirable that a pupil should have to change from one language to another as a medium for learning more often than is absolutely necessary.

2. Languages are best learnt when used as a medium of learning other subjects rather than in formal language lessons.

3. School time-tables should not be overloaded with languages.

4. A distinction has to be made between learning a language as a lingua-franca and its use as a teaching medium. There is no inherent conflict between the two.

5. The local vernacular can take children no further than the rudiments of literacy, but it is important for preserving contact with home and tribal customs.

6. At an early stage in his schooling a child must learn English if he is to have any chance of proceeding to post-primary education.[1]

Teaching in the vernacular has several disadvantages in linguistically fragmented New Guinea. Professor Johnson raised a question which is particularly relevant to language in education:

> Can a Papuan or New Guinean vernacular which is geared to a traditional pattern of society and culture, or a pidgin whose linguistic structure represents an amalgam of the linguistic structures of some New Guinea vernaculars, adequately develop the processes of thought and the concepts of the differing culture and society which will be the framework of the child's later education?[2]

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[1] Castle, Growing Up in East Africa, p. 205.

[2] Francis C. Johnson, "The Role of English in Papua and New Guinea," Papua and New Guinea Journal of Education, V, No. 3 (February 1968), 20.

The results of a series of language teaching experiments in East Africa reported by Professor Castle show that it is possible to teach a child English from his first year in school.[1] This task calls for skillful, insightful teaching. In the past in New Guinea much of the teaching in English has consisted of drill-type, rote memorization lessons, with very little real understanding taking place. Material which is presented in a foreign language must be meaningful and related to the child's environment. If the material is not meaningful, then the burden of learning becomes too great for the student.

This is the background through which students entering teachers college have progressed. The question now raised is: How can his college course assist him with his own ability at communication and equip him for his language teaching role in the primary school?

It cannot be assumed that the student, on entering college, is fluent in all aspects of English language. Often the reverse is true; his use of English and his reading ability are limited. A recent study by the University of Papua and New Guinea on the abilities of college students showed:

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[1] Castle, Growing Up in East Africa, pp. 207-214.

1. The pace of aural and reading comprehension is very slow and the degree of comprehension frequently limited.

2. Students are learning in a second language and the sheer mental effort to do this takes its toll of energy so that the amount of new material effectively mastered must be limited.[1]

Another factor which impinges on the college student's lack of ability at communication in English is the dearth of reading materials of any kind available in their homes. The Currie Report noted:

> The avidity with which recently literate people often fasten on any scrap of print can soon be frustrated if there is not a good supply of single and inexpensive things to read, and there seems little point in spreading reading skills if they are to wither away for lack of sustenance.[2]

It is reasonable to say that most teacher educators in New Guinea find they have a language communication problem in teaching college students. Very often students are unable to comprehend what the college teacher is trying to explain. When the teacher attempts to simplify his language, he often simplifies the concepts he is teaching to a degree where the object of his lesson, an increase in understanding, is lost. The student, however, is capable of greater understanding than his ability at communication in English will allow.

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[1]University of Papua and New Guinea, "Educational Deficiencies of Tertiary Level Students," undated bulletin, Port Moresby, paragraphs i and ii.

[2]Report of the Commission on Higher Education in Papua and New Guinea, pp. 52-53.

Since the student's academic career is going to make use of the English language, developing an ability at communicating in English is essential.

F. Instructional Methods and Media

1. Instructional Methods. -- The picture painted earlier in this chapter of the primary school teacher is not an encouraging one. The raising of standards of excellence in teaching becomes doubly difficult when so many ill-educated and inadequately trained teachers remain in schools teaching children in their early, but crucial, learning years. The consequences of this neglect during a child's foundation years can be traced through his education.

The teaching methods of most indigenous teachers in New Guinea, as mentioned before, are formal to the extreme. It was the way they were taught. These teachers can readily understand the theory that repetito mater studiorum and consequently accept this method of teaching, for such methods go back to their own traditional culture. The teaching of quantities of factual information is a relatively easy process (provided the teacher knows the facts that he is teaching), and also relatively easy to test for student retention. However, the realization that, as Martin Tarcher said: "Facts are significant only as they are evaluated and placed in meaningful

relationships with past knowledge and experience; only when they help expand the intellectual framework of the learner,"[1] is difficult for all but the very best of teachers to comprehend.

This study is not advocating that colleges in New Guinea eliminate "Methods of Instruction" courses from their curricula. On the contrary, the writer has great respect for the assistance such courses can give young teachers, especially those who are unsure of themselves and their task. But it is the position of this study that good teaching is a matter of constantly using one's judgment and modifying or adapting generalized rules to suit particular applications. Tarcher said:

> When so much importance is placed upon rules, they are bound to become routine. And following a routine long enough almost necessarily results in accepting it without question, as the very best way, the only way to perform a task. Soon the very functions which the rules intended to serve are forgotten, and the means--the rules themselves--become the end.[2]

Dean Scarfe aptly described methods of teaching as:

> . . . not simply techniques of managing a classroom. They involve the whole outlook, attitude and style of the teacher and require profound knowledge of children, parents and society; of history and philosophy; and the value and purposes of a special subject in the total education of future citizens. A method is an applied science and an applied art; it cannot be reduced to a

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[1]Martin Tarcher, Leadership and the Power of Ideas (New York: Harper & Row, 1966), p. 119.

[2]Ibid., p. 108.

> technology, for human artistry was never that. Moreover, it is a pioneering, creative adventure seeking to add to the sum total of human ingenuity, skill and culture.[1]

Teacher educators are faced with the dilemma between preparing students for the kind of teaching they feel teachers should be doing and the kind that, as teachers, will surround them and which they will be expected to imitate. This poses the very difficult and complex problem of attempting to do two things at the one time--to educate the student through courses that will enlarge and enrich his mind and, at the same time, prepare him to teach efficiently the materials in the school syllabuses that happen to be current. As syllabuses are constantly undergoing revision and sometimes total change, any course which prepares teachers to teach to only one syllabus is doomed to failure.

2. Media.--Professor Hanson said:

> Propounding of educational philosophy or even inauguration of new syllabi without the simultaneous provision of suitable educational materials can merely result in producing a schizophrenic and (if intellectually alert) cynical teacher.[2]

The recent history of education in New Guinea is not without examples of curriculum change which has preceded the production

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[1]N. V. Scarfe, "Some Principles of Teacher Training," Journal of Education: University of Hong Kong, No. 19 (1961), p. 3.

[2]Hanson, "On General Education for the African Teacher," p. 187.

of media necessary for its implementation. Such discrepancies on the part of planners not only mar the effectiveness of programs, but also do irreparable harm to the stability and morale of the teachers in schools.

Educational media needs to be prepared specifically to cater for local needs. The scarcity of material and aids available in some areas of the curriculum has caused staff and students to use texts, pictures, and other media which were prepared for an entirely different set of circumstances. Not only is this applicable to textbooks, but it also concerns the use of art, craft and physical education media. It is commonplace in New Guinea schools to find that art is not taught because the teacher has not received supplies of paint from the educational stores. The fact that most localities in New Guinea have a ready source of "local" ochres and color pigments, which have been used by the people there for centuries, has been ignored. Teachers fail to see the reciprocity of media. They tend to categorize media into subject compartments and do not realize that one aid might assist in the teaching of several subjects.

It is anticipated that for some time to come the financial state of the Department of Education in New Guinea will be such that the production and purchase of manufactured media will have to be rationed according to predetermined priorities. As a consequence,

the Department will be unable to experiment with expensive media such as teaching machines, or to supply each school with movie or still projectors.

CHAPTER V

CURRICULUM FOR PRIMARY TEACHER EDUCATION IN NEW GUINEA--SOME PROPOSALS FOR REDIRECTION

"Curriculum development is directional, seldom final."

Florence Stratemeyer

I. Introduction

The previous chapters have shown that New Guinea is presently in the midst of rapid transformation from a traditional to a modern society. The process of modernization in New Guinea has not been smooth and the present stage of cultural transition has seen the growth of cultural discontinuities which have affected all sectors of New Guinea life. One of the chief agents of this modernization has been the development of a formal educational system. The formation of schools in the Western tradition has necessitated formal preparation of teachers, also in the Western tradition, to teach in these schools.

Schools, of necessity, have become change agents in a dynamic society. They often teach values which are in opposition to many of the ones held by "traditional" New Guinea. Hence, as Professor Lewis said of developing cultures, ". . . a dichotomy exists between schools and communities they exist to serve, and the teacher is involved in bridging the dichotomy."[1] This has led to an increasing awareness of the importance of teachers and of sound teacher education curricula in the total program of cultural transformation.

The role of the teachers college is changing. Curricula are certainly changing. The essence of the curriculum problem in teacher education in New Guinea is that if students are to be equipped for their job of preparing young people to live effectively in a rapidly changing culture strongly influenced by Western values, then they need to be educated, not only to a reasonable mastery in the subjects taught in schools, which, in part, represent Western values, but more importantly, towards an understanding of the process of the change which is taking place in their culture and of its implications for the future of their society.

A teacher education curriculum consistently related on the one hand to the present situation, or situations in New Guinea, and

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[1]Lewis, "The Nature and Content of Curriculum in Teachers Colleges," p. 57.

on the other to the experience and capacities of the students would be far different from those now being taught. It would also be inappropriate to the task imposed upon the schools by political and economic exigencies.

The proposals for redirection of curriculum in teacher education made in this chapter are based upon the concept that teacher education is a process of planned growth. The following six factors have been utilized in the development of this concept:

1. A value system is individual and unique. Part of one's value system is individuality of the self, as Earl Kelley has said:

> . . . the self consists of an organization of accumulated experience over a whole lifetime. . . . The self has to be achieved; it is not given. . . . Since the self is achieved through social contact, it has to be understood in terms of others.[1]

2. One is able to and should evaluate one's value system. As Jersild has stated:

> A teacher cannot make much headway in understanding others or in helping others to understand themselves unless he is endeavoring to understand himself. If he is not engaged in this endeavor, he will continue to see those whom he teaches through the bias and distortions of his own unrecognized needs, fears, desires, anxieties, hostile impulses, and so on.

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[1]Kelley, "The Fully Functioning Self," p. 9.

[2]Jersild, When Teachers Face Themselves, pp. 13-14.

Jersild summed up why self-understanding is so vital when he commented: ". . . a teacher's understanding of others can be only as deep as the wisdom he possesses when he looks inward upon himself."[1]

3. Feedback from others brings clarity to one's perspective of one's self-concept. Jersild asserted:

> In a group, a person may be helped to see his anger, fear, and protective devices as others see them. The way others express themselves or respond to him may help him perceive in a new and self-revealing light some of the evidences of shame, self-effacement, anxiety, vindictiveness, and other outcroppings of deep-seated attitudes of which ordinarily he is not aware.[2]

4. Values and self-concept can be changed. Developmental psychology believes in the power of the human being to grow and of the human capacity for self-repair.[3]

5. Behavior is based on one's values and self-concept. Behaving and learning are products of perceiving. We behave according to how we perceive a situation. The process of education is fundamentally a process of change in the person's perceptual field.[4]

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[1] Ibid., p. 83

[2] Ibid., p. 85.

[3] Ibid., p. 12.

[4] Arthur W. Combs and Donald Snygg, Individual Behavior (Revised edition; New York: Harper and Row, 1959), p. 366.

6. The nature of the self is such that a person does not have to be taught in order to learn. Maslow believed:

> In the normal development of the normal child, it is now known that most of the time, if he is given a really free choice, he will choose what is good for his growth. . . . This implies that he "knows" better than anyone else what is good for him. . . . This force is one main aspect of the "will to health," the urge to grow, the pressure to self-actualization, the quest for one's identity.[1]

A. Factors in Curriculum Change

Any form of change is a process which concerns people. This process begins when people see the need for change. In education such change usually implies the construction or alteration of programs of studies, usually referred to as "curriculum." Unfortunately, as change evolves, many educators forget that:

> Programs depend for their origination and implementation upon people. Advice and decisions are made by people. Plans and purposes are generated by people.[2]

When this human element in change is forgotten, the process becomes one of implementing a sterile, usually prepackaged, bundle of facts and figures. Real curriculum change, therefore, implies

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[1] A. H. Maslow, "Motivation and the Growth of the Self," Perceiving, Behaving, Becoming: A New Focus for Education, edited by Arthur W. Combs (Washington, D.C.: Association for Supervision and Curriculum Development, Yearbook, 1962), p. 83.

[2] Carleton W. Berenda, "What Is Man?" Educational Administration--Philosophy in Action, edited by R. E. Ohm and W. G. Monahan (Oklahoma: University of Oklahoma, 1965), p. 17.

not only change in a written program, but also change in people's thinking.

Every teacher-educator approaches a curriculum with his own preconceptions, presuppositions and ideas of what he deeply desires for the development of teachers, irrespective of the curriculum. This does not imply that the curriculum as such is unsatisfactory, though this might be the case. What it does imply is that a curriculum means different things to different people. What curriculum means is influenced by what people deeply want.

This thesis does not aim to present a model curriculum for primary teacher education in New Guinea. Indeed it cannot, for as Combs said: "Teacher-education programs, like teachers themselves, need to serve local needs and purposes."[1]

The following ideas are presented in the form of proposals for redirection in curriculum. Each proposal has been elaborated to include a possible way, or ways, in which such a proposal might be implemented. These are recommendations made as a result of the writer's study of curriculum in teacher education and his knowledge of existing curricula in New Guinea. If accepted, they can and should be modified by those responsible for curriculum in the individual teachers colleges.

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[1]Combs, The Professional Education of Teachers, p. 112.

II. Recommendations for Redirection of Curriculum in Teacher Education in New Guinea

The following proposals for redirection of the curriculum for primary teacher education in New Guinea are made under the headings:

A. Organization--at the policy-making level;
B. Organization--at the institution level;
C. College Programs--Curriculum content and process.

There is a degree of overlapping between all proposals made, especially those under the headings B and C. This cannot be avoided if a college program is to contain an element of unity in its approach to its task.

A. Organization--at the Policy-Making Level

1. It is proposed that students be able to choose between preparing for Infant Teaching (Standards Preparatory, I and II) or Primary Teaching (Standards III, IV, V, VI). This choice should be made by the student in consultation with his advisor during his first year of college education.

It is almost a physical and mental impossibility for students to be "educated" (which often means "prepared") to teach children from Standards Preparatory to VI in two years. Australia does not try to do so in three years, nor the United States in four. It is not suggested here that each student selects a grade or standard level and specializes his training in this level, but rather he should be

permitted to choose between early primary (infants) or later primary teaching. Such a provision, as suggested, would affect the transfer and posting of teachers in that attention would need to be given to the "age level" for which the teacher has been prepared. This is really a minor administrative problem.

If this proposal were to become policy, it would mean some internal (to the college) reorganization of courses and experiences. Greater in-depth study of the child and his curriculum could be made which could result in better prepared teachers for both infant and primary standards.

2. It is proposed that in order for student teachers to become more understanding of their society and its problems, they be encouraged to visit and work in the various government and church sponsored social agencies, such as Maternal and Child Welfare and Youth Organizations.

This proposal would necessitate some inter-departmental approval and organization. Specific organization would be the responsibility of the college and the social agency. A reciprocal agreement between the teachers college and other training institutes which prepare social workers could be arranged.

3. It is proposed that, as soon as possible, all programs of teacher education be of three years duration instead of the present two years.

This added third year could take the form of an extended internship in the schools, thereby overcoming, in part, the shortage of teachers, as well as avoiding any great increase in costs. The kind of internship envisaged would be similar to that conducted in some American institutions[1] where, during the last year of the teacher preparation program, the intern has full control of a class of children. At the same time he receives constant assistance from specially selected consultants. During this internship the intern is paid four-fifths of a beginning teacher's salary, the other fifth going as part of the consultant's salary.

This kind of program, the writer considers, could be implemented in New Guinea. It could be started in and near the larger towns where communication by road is easy, thus enabling consultants to move freely between interns. The present Senior Officers' Course[2] could be geared toward the preparation of suitable consultants.

4. It is proposed that the selection of student teachers for training be more rigorous.

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[1] The Education Intern Program (E.I.P.) of Michigan State University is an example.

[2] The Senior Officers' Course is a six-month program for selected teachers who show ability and promise as future administrators. They are prepared in this program for a supervisory role in the schools.

The criterion for entrance to teachers college should no longer be a failure to progress to the next step of formalized academic schooling, nor an inability to enter into occupations of a student's first or second preference for employment.

A program in the United States which appears to be of benefit in helping high school students appreciate the role of a teacher, and later in deciding on a career as a teacher, is one where high school students gain academic credit as a Student Teacher-Aide. Such a program would be of benefit to high school students in New Guinea and would assist them in deciding on a career as a teacher. It could also assist the secondary school authorities when called upon to make recommendations for candidates for teacher preparation.

B. Organization--at the Institutional Level

1. It is proposed that programs no longer be organized on the basis that the first year of a program be concerned solely with preparing teachers to teach the lower primary standards (Preparatory, I and II) and the second year for upper primary standards (III, IV, V, VI).

Instead, it is proposed that the first year be aimed at the general education of the student teacher and the second year at professional education. Both terms, General Education and

Professional Education, will be discussed more fully later in this chapter.

2. It is proposed that an interdisciplinary approach to curricula, where the aim--the development of the student as a person--becomes the center, or primary goal, of all courses.

It is suggested that this proposal would result in each of the subject disciplines and all of the activities contained in the total program being geared toward this aim. It is also hoped that such an approach to curricula organization would lessen (generally speaking) the tendency for subject specialists to insulate themselves from the other aspects of the total program and lessen their indifference toward the pedagogical needs of the student teachers.

It is to be noted that not all members of a college staff are equally effective as advisors to students or as supervisors of practice teaching. But it is also to be understood that staff, like students, have strengths, and these individual strengths can be of benefit to a college program if utilized properly. An interdisciplinary approach, as envisaged, would allow for more effective staff utilization.

A college program could be divided as follows:

1st year: a course of studies which aims at expanding the general education of the student;

2nd year: a course of studies which aims at developing a professional teaching ability in each student.

A course in General Studies could include:

a. the development of an understanding of the self;
b. an in-depth study of child growth and development;
c. a study of society and the individual in his society;
d. an exploration of specific areas of knowledge (subjects).

A course in Professional Studies could include:

a. a study of the needs of the learner in New Guinea;
b. a study of how these needs might be met through formal schooling--that is, the process of education;
c. a study of the curriculum for primary schools and possibilities for its implementation;
d. practical experiences in schools.

3. It is proposed that programs of teacher education be made adaptable to changing societal demands and that this ability to adapt be passed on to student teachers.

The rate with which new knowledge is being made available in the world is so rapid that much of what was taught to the student teachers when they were in school is now obsolete. This is particularly the case in New Guinea, where the difference between their traditional society and their emerging one is much greater than between the Western world of fifty years ago and the Western world of today. A changing world requires teachers who are capable of adapting to change and who are able to interpret this change to their pupils.

4. It is proposed that college programs in New Guinea be organized in such a way that student needs are more effectively met through a more flexible curriculum.

Current practices in primary teacher education in New Guinea demand that each student participate in the same program and gain the same credit for successful completion of this program. (Students are allowed some choice in the form of electives, but the requirements in these are also fixed by the colleges.)

As each New Guinea college numbers under 400 students, it should not be difficult to organize flexibility for individual planning into existing programs.

5. It is proposed that all aspects of the college curriculum be based upon the needs of the teacher in the New Guinea society.

Too often, in the past, principles and practices have been adopted without adaptation from cultures foreign to New Guinea.[1] This only adds to the cultural confusion existing in New Guinea. Adaptation of material will necessitate educators becoming better informed of the New Guinean, his society, and how he grows, develops and learns. It is urgent that educators undertake research into aspects of schools and schooling so that their educating will be the best possible.

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[1] It would appear this is still the practice in some teachers colleges. The writer recently received, from one prominent college, a copy of prescribed reading material in the subject "Education." This material had been taken directly from an American teaching journal. No attempt had been made to "localize" its content.

6. It is proposed that colleges consider the possibility of using a team-teaching approach to program organization in selected aspects of their total program.

If, after weighing the advantages and disadvantages of team-teaching, the college decided upon adopting this method of organization, some experimentation and demonstration would be needed to determine the effectiveness of the method in the local situation.

7. It is proposed that the college staff be required to work closely with schools for part of each year.

It is particularly important that the staff keep their thinking relevant to existing conditions in schools and in the larger New Guinea society. Too often in New Guinea the staff of colleges only enter primary schools to supervise practice teaching. Their task on these occasions is to observe and analyze the teaching behavior of their student-teachers. It has been pointed out throughout this thesis that the needs of the New Guinean and his country are changing very rapidly and that schools are in the forefront of this change. The college staff, therefore, should assume responsibility some time each year for active participation in the work of the primary schools. They should also be available to act as curriculum consultants and for in-service education of teachers when requested. In this way each staff member will be better able to organize his courses so that they are more realistic (in relevance, level and

approach) to the needs of the teacher as a student and during his first crucial year of teaching.

Each year there are a number of new staff members for colleges recruited from Australia who have had no experience teaching in New Guinea schools. These new staff members should be encouraged (even required) to orientate themselves in a practical way to the existing New Guinea educational scene.

8. It is proposed that provision be made in the college curriculum for vacation, camp-type experiences during the extended Christmas vacation. The purpose of these camps would be to assist in developing the student's awareness of himself and his society.

Such a vacation camp proposed could take place during the Christmas vacation which falls at the end of the first year of the college program. Students who live within easy transporting distances from the college could conduct camps in their home villages. Other students could be gainfully occupied in a number of camp centers in the larger towns where accommodation and facilities are more readily available. These experiences could form part of the program's requirements in developing an understanding of the society. Preparation for these camps could be done during the first year of the college residential course.

Supervision of these student activities could be shared with trained social workers outside the Department of Education and

other personnel who normally work with the villages and townspeople. The major role for the college would be in preparing the student for the activity.

C. College Programs--
Curriculum Content and Process

1. It is proposed that the foremost aim of each college program be the development of the student as a person.

The qualities which characterize an "adequate" person cannot form the "content" of any one course of instruction, but as goals they must permeate all courses and activities throughout the entire program. Students should be allowed and encouraged to explore their feelings and relationships toward others and toward ideas presented, so that a personal meaning might be obtained for each situation.

In keeping with the ideas of Jersild, there should be some time set aside each week when students can meet together in groups with an understanding staff member to discuss the strivings, satisfactions, hopes and heartaches that pervade the teacher's life and work. Such a regular meeting could be organized to allow the student to discuss freely his problems and satisfactions.

2. It is proposed that, in the implementing of college courses, other methods beside lecturing be used.

It is crucial in teachers colleges that all teaching be varied in approach. This will ensure that teachers-to-be are

exposed to the process of education under a variety of conditions and methods.

The approaches to instruction used could include the team-teaching organization mentioned earlier in this chapter; seminars and tutorials; lectures in large groups followed by tutorials; workshops; independent study projects; panels and debates. Utilizing a variety of approaches will help alleviate the current over-reliance in New Guinea on the formal lecture-type method in a highly structured classroom situation. The development of "Life Skills" and "Process Skills" advocated by some educators can only be achieved if students themselves experience them, for it is well known that student teachers will take back into schools the concepts of learning which they acquired in their colleges.

3. It is proposed that teacher education programs emphasize the importance of teachers gaining an understanding of the New Guinea society--its problems and aspirations.

As each teacher is, culturally speaking, an active change agent in New Guinea, it is vital that he becomes aware of his role in a rapidly changing culture and that through this understanding he is able to prepare children for their present and future roles. Activities which colleges could organize to assist the student gain an understanding of himself in his society could include:

a. Several workshops which aim to explore the past, present and future cultures of New Guinea;

b. An extended community study which aims to give an understanding of the New Guinea society and the change taking place within it.

In both "a" and "b" above, the role of and change in music, dance, art, dress, food, and occupations in cultures can be examined. There is no shortage of local (New Guinean) resource people to assist in this examination.

c. Guest lectures and seminars by prominent and knowledgeable people who really understand the people of New Guinea and their customs;

d. Visitations to local industries and governmental enterprises;

e. Planned vacation activities which would include camps, summer recreation schools, drama and sporting clubs, and the like.

4. It is proposed that college programs provide for greater student involvement in the affairs of the community.

This involvement in the local community, it is hoped, will lead to an involvement in the wider New Guinea society.

In New Guinea the teacher is more often than not a leader in the community in which he teaches. A perusal of the names of New Guineans in top administrative positions in the Administration of Papua and New Guinea and in the Legislative Assembly will show that of the number many are, or were, teachers.

Community activities in which the college could be associated include:

a. Working with families and children in the neighborhood of the college;

b. Assisting in Play Centers for children who are not in school or are unable to enter school;

c. Assisting in Youth Clubs and similar organizations which attempt to interest youth during their leisure time;

d. Assisting with Maternal and Child Welfare clinics;

e. Assisting in voluntary agencies which care for the sick;

f. Assisting with Adult Literacy Classes on a voluntary basis and literacy classes for school leavers;

g. Assisting in Pre-School classes in areas where they exist;

h. Participating in organized social work programs;

i. Participating in the various Church social organizations;

j. Assisting in the formation and training of musical groups and choirs.

Organization of this aspect of the teacher preparation program would vary with the individual college, but the activity should be sufficiently

emphasized to show its importance in the total program. Credit towards certification could be given in some manner, and the experience gained should be linked with the more formalized activities in the program. These experiences would be, in essence, a Field Laboratory, where principles and practice are merged together. Activities, such as those outlined above, would assist in the development of the teacher's role as a leader in his community.

5. It is proposed that college programs provide realistic experiences which will lead the student toward a better understanding of child growth and development in New Guinea.

The comment made by the UNESCO Committee on Teacher Education in Developing Countries is particularly relevant to teaching in New Guinea. It said:

> . . . it is evident that much that is taught in child development is not directly related to the circumstances of childhood in the country concerned and is presented in the form of factual knowledge which may be of no direct use to the teacher. . . . What is required is rather that the student should actively be involved in procedures of inquiry through which he can develop concepts and skills related to his practical needs.[1]

Such a conceptual development as indicated in this statement, which would lead to the development of skills in catering for the needs of the growing child, is vital for the New Guinea teacher.

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[1]UNESCO, Final Report: Expert Committee on Teacher Education, p. 9.

In order to involve the student actively in learning about children, the following experiences could be organized into college programs:

a. A well-grounded course given in human growth and development which is based on (i) the student's own knowledge and experience of growing children (themselves, siblings and neighbors) and (ii) what they can discover through actual study children in the Demonstration School, Practising Schools, during their observation and practice teaching sessions. The findings of individual and group studies could be shared in seminars at the college when, with the help of the college teacher, some logic and form could be applied to these findings, similarities and differences brought to light with discussion centered on how the teacher might be able to enhance this growth and development.

b. Coupled with "a" above would be a series of observations (field experiences) spread over a year which would aim to develop an awareness of the physical, intellectual and social growth of the child which has taken place over a defined and observable period of time. Factors which influence this growth would be noted and assessed.

c. Visits to local hospitals and child welfare clinics would be included in this area of study. Often in villages these clinics are of a peripatetic nature and could easily occur during practice teaching sessions and students would be able to experience child welfare at the village level.

d. The colleges, in conjunction with the University of Papua and New Guinea, should attempt to study, in a systematic way, the growth and development of the New Guinea child. Their findings should be correlated and published for all educators to use. This kind of study which is longitudinal in nature could be spread over a number of years, involving the active participation of staff and students alike.

6. It is proposed that college programs attempt to define what constitutes learning theory in the New Guinea setting.

The development of a learning theory in New Guinea would require an exploration of how the New Guinea child learns, not only in the New Guinea school as it is presently conceived, but also how he learns to manipulate his before-school and out-of-school situations to meet his individual needs. This kind of study would be closely linked with the learning of growth and development outlined in "5" above.

It could be argued, using a theme of Danziger,[1] that when a person speaks of growth and development of the New Guinea child, it is not that he believes New Guinea children are inherently different from other people. But it makes sense to believe that there may be different norms, differences in motivational patterns and important differences in child and adult attitudes which arise precisely because of the different circumstances in which he grows up. The great diversity of cultural patterns in New Guinea makes the kind of study recommended all the more important and urgent. The differences between formalized schooling and the traditional New Guinea modes of inducting their young into their culture have been emphasized in Chapter Three. It is necessary now to find out the best way to teach the New Guinea child. Research similar to that done in Africa outlined in Chapter Two could include the areas of:

a. analytic perception and categorization;

b. the use of language (vernacular and English) in formulating and solving problems;

c. the development of conservation skills, seriation and discrimination skills.

The study of how people learn and the development of theoretical concepts from the findings of such a study require intensive

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[1]Danziger, "Social Change and Child Training in Underdeveloped Areas," p. 119.

and carefully planned scholarly research. This research could best be undertaken by the University of Papua and New Guinea and the staff of the various teachers colleges working in liaison with the University. Students could help in this research, given guidance and encouragement. Through this kind of involvement they would be made aware of the possibilities and implications of research upon their task as teachers.

7. It is proposed that the policy of each college be directed toward the development in each student of a personal approach to teaching.

Such a policy implies, for most colleges in New Guinea, that set lesson plans and procedures which each student is expected to use be abandoned, or at least greatly modified to allow for the inclusion of individual perceptions of the teaching task.

This approach to the development of methods of teaching involves the student in a great deal of trial and error experiencing in order to find his own best ways of teaching. In The Professional Education of Teachers, Combs[1] has suggested appropriate guidelines for developing a personal approach to teaching. A teacher education program might include the following experiences: Rich opportunities for involvement with students and with teaching; concurrent

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[1]Combs, The Professional Education of Teachers, p. 99.

opportunities to plan for such experiences and to discover the meanings of them after they have occurred; an atmosphere that actively encourages and facilitates self-involvement and personal discovery. In New Guinea these experiences could include the following:

a. Regular weekly visits to schools for observations and for experiences with children. The student could be considered a teacher's aide and assist with material distribution, playground duties, reading and other group work, and any other activity which places him in contact with children. This contact could gradually be extended to teaching tasks which will help the student develop his art of communicating with children. Such tasks could include story-telling, music, craftwork, physical education.

b. Seminars and tutorials to plan and follow-up visits with children should be scheduled. If the experiences mentioned in "a" (above) are planned on a regular weekly basis with the co-operation of the classroom teacher, then the student-teacher would be able to plan activities in advance for the following session. The experiences gained at these encounters at schools could be shared in seminars at college when the student is encouraged to reflect and discuss his actions.

c. A close liaison between schools, the college and the community could result in organizing frequent extracurricular experiences such as sport carnivals, picnics and field trips which could involve the college student.

d. A series of curriculum laboratories which could be the core of the college "Methods" program would enable the student to experiment with ways of teaching, with equipment and materials. These laboratories or workshops would aim at unifying a student's approach to teaching and not aim at conformity to any one method.

e. The college library should be made a resource center where students in their various activities could use all the equipment available in the college and in the schools.

8. It is proposed that courses in "Method of Teaching" adopt an interdisciplinary approach.

This approach is opposite to the presently conceived one--that of teaching how to teach the several subjects required in a school curriculum. Primary student teachers in New Guinea are given instruction in how to teach art, craft, the various sections of English as a foreign language, social studies, mathematics, science, music and physical education. There is very little attempt to reduce the number of "methods" of teaching or to coordinate aspects which are similar in nature.

An interdisciplinary approach,[1] as it is envisaged, would reduce the degree of fragmentation apparent in the present programs. A theme, for example, "Teaching which encourages learning by discovering," could be explored in each of the subject areas. Other "methods" such as those which encourage independent study and inquiry learning could similarly be explored. In this manner the common elements of learning would be emphasized and from these elements the role of the teacher in the learning process be clarified.

9. It is proposed that college programs place greater emphasis than is presently being done on the development of the skills of communication.

This development can come about only if students are given the opportunity and encouragement to communicate. Effective communication also requires that the person knows and understands well what he is trying to communicate.

The proposal demands the encouragement of student interaction in every aspect of the college program. The development of

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[1] This approach to learning how to teach does not negate the value of systematically developing an understanding of the disciplines. One school of thought on teaching considers that subjects should be taught in a manner similar to the way the scholar in that subject develops his knowledge and understanding. However, as Combs said, ". . . it is a fallacy to assume that the methods of the experts either can or should be taught directly to beginners. . . . Nor is it true that the way to become expert is to do what the expert does." (Combs, The Professional Education of Teachers, pp. 4-5.)

certain verbal skills could be planned for in specific courses and in other experiences such as drama, debating and in language programs. However, the most effective method of improving communication is through the development of student self-understanding, of his role in society and his purpose in teaching. As this method is, in effect, the sum total of the whole teacher education program, all parts of the program must become responsible for the development of communication skills.

10. It is proposed that practical teaching experiences be designed for the two-year program as follows:

    Year I. --Regular weekly contact with children be arranged for at least half the year on an informal basis. The student would be encouraged to interact with the teacher and children and, as his confidence in being with children increases, he be encouraged to take a more active part where he feels himself adequate.

    Year II. --(a) Two practical teaching sessions of one and two weeks duration respectively be planned. These sessions would be arranged at intervals in the Professional Education course. They would aim at increasing gradually the student's confidence at handling the classroom situation and at improving his methods of teaching. There would be less emphasis (than is presently the practice) placed on criticism of lessons taught and more emphasis placed on the positive elements of student development. Seminars and tutorials which are of a counselling nature are important during this early development of the student's teaching style.

    Year II. --(b) An extended period of internship of approximately fourteen weeks (representing the final school term each year), during which time the student would gradually

assume full responsibility for the organization of learning in his class. This can be in the form of an apprenticeship, where once the student's confidence and ability become apparent, he is given added responsibility. Principals of schools and classroom teachers have an important role to play in this type of internship, as college tutors usually have to share their counselling services between several schools and a number of students.

III. Conclusions

This thesis has attempted to explore considerations which should guide the design of a curriculum for primary teacher education in New Guinea. A number of proposals have been made which identify specific areas which the writer considers need some adjustment. Whatever adjustment is made will need to consider specific local conditions and the ability, interest and confidence of the individual college staffs, for they are the people ultimately responsible for interpreting and implementing a curriculum.

Current teacher education programs in New Guinea have been described in this thesis as approaching a new phase in their development. Most teacher educators know all to well that student teachers in New Guinea cannot cope with the courses they "ought" to have if they are to teach reasonably well the "Western" kinds of school subjects--English, mathematics, science, social studies, and so on. They also know what is expected of them: that they

prepare New Guinea students to teach those subjects approaching an Australian standard.

The difficulties are formidable. They are aggravated by a too-rapid turnover of staff, particularly in the Administration colleges. Many teacher educators know little about the New Guinea cultures or of the aspirations of the people. Even if the teacher educator were to know well what his students were capable of, and what is most needed, he has to work under the constraints imposed from within New Guinea and from without.

Some of what has been said may appear to be pessimistic. The writer would prefer to call it realistic to say that much more radical curricular changes are needed than are likely to be practicable. Yet there will be much gain from every serious attempt, not just by the expert, to prepare a teacher education curriculum for the colleges of New Guinea, to provoke and help staff members themselves to come to an understanding of the principles of curriculum construction.

The following is a summary of the main recommendations made in this thesis:

1. The Department of Education in New Guinea consider the following:

    a. All programs of primary teacher education be of three years' duration with the added third year becoming a year of Internship.

b. All students entering a primary teacher preparation program be allowed to choose between Infant teaching (Standards Preparatory, I and II) or Primary teaching (Standards III, IV, V, VI).

c. Student-teachers be encouraged to participate in the work of the various social organizations throughout New Guinea and be given credit toward certification for this work.

d. Further exploring the possibility of changing its policy and methods for recruitment of personnel into the teaching service.

e. Secondary school students interested in teaching and in people be permitted to participate as a teaching aide on an elective basis in a new program for secondary schools.

2. a. College programs cease attempting to prepare students for lower school teaching during the first year of the two-year program and for upper primary teaching during the second year.

b. College programs aim to assist the student's General Education during the first year of the program and their Professional Education in the second year.

A college program in General Education to include:

i. the development of an understanding of the self;
ii. an in-depth study of child growth and development;
iii. a study of society and the individual in his society;
iv. an exploration of specific areas of knowledge.

A program in Professional Education to include:

i. a study of the needs of the learner in New Guinea;
ii. a study of how these needs might be met;
iii. a study of the curriculum for primary schools;
iv. practical experiences in schools.

3. An interdisciplinary approach to course structure be implemented which allows for a more direct consideration of the student as a person and his perceived role in his society, rather than emphasizing the importance of subjects as logically ordered bodies of knowledge to which students are required to relate.

4. College programs be implemented in other ways than by straight lecture methods. For example--team-teaching organization, seminars, workshops, laboratory and field experiences, independent study.

5. Colleges should explore the potential of a team-teaching approach to program organization which could allow for more flexibility and personalization in their planning and teaching.

6. College staff be encouraged to participate actively in interpreting and constructing the curricula of schools and in the in-service training of teachers.

7. College curricula to include more student experiencing of the affairs and aspirations of the developing New Guinea society and local community in order to assist in deeping the student's observations and analysis of his society in meaningful terms of daily living. Such experiences could include: societal projects, vacation camp activities in towns and villages, workshops, community studies.

8. Teachers colleges, in conjunction with the University of Papua and New Guinea, encourage research into:

   a. child growth and development in New Guinea,

   b. the influences of traditional culture upon the school and learning,

   c. the folklore, songs, art and dance of New Guinea.

9. a. Colleges aim to encourage each student to experiment with various approaches to teaching in order to develop a personal method of teaching.

   b. If "a" is to be achieved, colleges will need to place less reliance on set methods and "college approved" lesson formations.

   c. College programs aim to develop the student's skill in communicating through improving his self-understanding, his understanding of his society, his oral and written ability, and his purpose in teaching.

10. Although not actually made as recommendations in this thesis, the Department of Education should consider:

    a. The need for more New Guineans on the staffs of the various colleges throughout New Guinea;

    b. The need to increase the number of indigenous teachers in training in order to alleviate the shortage of adequately trained teachers in schools;

    c. The need for better designed media, texts, and equipment for use in schools and colleges in New Guinea;

    d. The need to encourage systematic research into the problems teachers face in schools, especially during their first teaching year.

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