

Implementing multilingual education in a country with 860 languages: Challenges for the National Department of Education in Papua New Guinea¹

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Abstract

Many arguments have been set forth against mother tongue education, while much research has been done to prove its relevance.

It is noted that educators, community leaders and government officials in countries all over the world are deeply aware of the sad state of education in their countries. In multilingual countries, people have linked educational problems with the fact that children begin school in a language they do not know. Some communities, and some countries, that wish to improve their educational systems are therefore pushing for the formulation of policies that encourage or allow the use of mother tongue or vernacular languages in the educational system.

In Papua New Guinea, government officials and educators have concluded that education in a second language, English, has not produced the kind of citizens the country requires both to maintain languages and cultures and to provide a workforce capable of carrying further the national aims of the country. For these reasons, the Department of Education, along with community leaders, have engaged in a restructuring of the national education system. This restructuring has meant that attention is paid to the development and maintenance of students' first language, with a gradual transition to English as they progress through the school grades.

This paper will present information about the new structure, as well as implications of providing mother-tongue education in a country with such a complex language situation, and some of the issues being addressed.

Introduction

Papua New Guinea (PNG), classified by the United Nations as a middle-income country, has a population of about five million people. Of these, it is estimated that over half are illiterate. The majority of Papua New Guineans lives in rural areas with traditional, village-based economic systems and is engaged in subsistence agriculture. The geography of the country makes transport and communication difficult.

The dilemma for education in PNG is that the education system has to provide a relevant education for many different sectors of society:

- 1) The 85% of the population who remain in rural communities and whose main source of livelihood is subsistence farming and small community-based commercial enterprises;
- 2) The 15% of the population who find formal employment in the slowly increasing government, business and service industries;

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- 3) The small number of children with the ability to perform at top international standards who will need an education that allows them to reach their full potential;
- 4) The small but growing group of landless urban youth who have no villages to return to and no prospects of formal employment in an urban situation, and who have the potential for bringing about political instability.

Why was the reform necessary?

Under the Australian administration, the purpose of education was to prepare an elite group of Papua New Guinean citizens to run the country after independence. However, over the years following Independence, political and educational leaders and community members became dissatisfied because they saw the system of education as

- Separating children from their culture and from community activities,
- Making children feel like failures who no longer valued village life, traditions and obligations,
- Starting in a language children did not speak,
- Creating unrealistic expectations in the children, their families and their communities concerning employment opportunities,
- Using a curriculum which was no longer relevant to the needs of Papua New Guinea and its people,
- Failing to prepare children to use resource development opportunities within their communities, and
- Failing to give all children opportunities to go school and to encourage children to stay in school.

In general, the education system in place at that time was not meeting the social, cultural and economic needs of the country, there was a high dropout rate, and the academic standards being reached were unsatisfactory. In addition, the costs of the education system were rising dramatically, beyond what the country could sustain. In order to address these issues, an educational reform process was begun.

The reform: what were the steps

Education reform in PNG did not happen overnight. There were many significant milestones that occurred over a period of 25 years, commencing in 1974 with the establishment of the Tololo Committee. Progress after this date was as follows:

1985	Matane Report
1990	Jomtien Declaration of Education for All (This declaration was signed in Jomtien, Thailand, and by signing this agreement, the Nation Government of PNG, along with other nations of the world, committed itself to providing Education for All)
1991	The Education Sector Study
1991	Conference of the Council of Education Ministers
1992	The National Education Reform Task Force,
1992,1994	National Education Council decisions made
1995	The Education Sector Resources Study,
1996	The National Education Plan completed, endorsed by NEC in 1997; revised and updated in 1999
1995 – 1998	Provincial Education Plans
1998, 1999	Ministerial Consultations
1998	World Bank Education Sector Study
1998	World Bank Cost Effectiveness Study

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1997	Department of Education Corporate Plan
1999	Technical Vocational Education and Training Corporate Plan 1999
1999/2000	National Skills Plan
1999	National Education Plan, Update No. 1
1999	National Education Plan Update No. 1
2000	Asia Pacific Education for All Conference, Thailand
2001	World Education for All Conference, Senegal.

The Matane Report of 1986 can be seen as the birth of the education reform, in particular the reform of the national curriculum. The National Goals, as expressed in the National Constitution, recognised the importance of:

- Integral human development
- Equality and participation
- National sovereignty and self-reliance
- National resources and environment
- Papua New Guinea ways

The Matane Report stated:

This philosophy is for every person to be dynamically involved in the process of freeing himself or herself from every form of domination and oppression so that each individual will have the opportunity to develop as an integrated person in relationship to others. This means that education must aim for integrating and maximizing: socialization, participation, liberation and equality.²

One of the Committee's main concerns was the lack of relevance of education for the majority of students and the lack of early childhood education opportunities in general. Committee members argued strongly for the development of an early childhood education program and, importantly, that the language of instruction should be the language spoken by the child. This meant, that instruction would be in any one of the over 800 languages that are used in Papua New Guinea. This was, and remains, a daunting challenge, but it was underpinned by a strong maintenance approach to PNG cultures and *ways of doing things*.³

The Committee's terms of reference were:

1. To examine critically the philosophy implied in existing plans and practices of the National Education System;
2. To determine if, and to what extent, this philosophy was consistent with the National goals and Directive Principles as expressed in the National Constitution
3. To determine whether this philosophy was carried out in educational activities and expressed in educational materials in the institutions administered by the National Education System
4. To analyse the implications of this philosophy for the future development of all sectors of the National Education System

The committee addressed these questions to the public:

1. What kind of citizen should we now be educating?
2. What kind of education is necessary to produce this citizen?

² Paulius Matane, et al. (1986). *A Philosophy of education for Papua New Guinea*. Port Moresby: National Department of Education.

³ Cf. Narakobi, B. (1980). *The Melanesian way*. Port Moresby: Institute of Papua New Guinea Studies.

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3. How can we improve the education system in order to provide this education?

After community consultation, the response to these questions pointed to the need for a new, reformed education system that would:

1. Strengthen children's identification with their culture and their community;
2. Develop their self esteem and confidence and encourage them to value village life, traditions and obligations;
3. Encourage more realistic expectations on the part of the children, their families and their communities;
4. Allow all children to go to Grade 8, more children to go to Grade 9 and 10, and more to Grades 11 and 12;
5. Use teachers more effectively and reduce the cost per student at all levels.

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In 1991, a comprehensive Review, known as the Education Sector Review, confirmed that:

1. Extremely high rates of attrition at the primary level were common throughout the country;
2. Rates of transition at the post-Grade 6 and Grade 10 levels were very low;
3. Curriculum was largely irrelevant to the learners' lives;
4. The entire system suffered from weak management and administration;
5. Resource allocations were declining while unit costs were rising;
6. There was a severe imbalance in the allocation of funding with higher education getting a disproportionately high share of funds at the expense of other sectors of education;
7. Universal primary education was unlikely to be achieved given the current framework of education.

The Sector Review concluded that continuing current practices would most likely not produce positive results and would be prohibitively expensive. Thus, an integrated package of strategies was developed which radically changed the education system in its structure and curriculum and which established a lower cost base at each level of education.

This Review translated the rhetoric of the Matane Report into reforms and strategies that reconstructed the education system to make it consistent with integral human development. If the Matane Report can be seen as being the birth of curriculum reforms, then the Sector Study was the birth of the restructuring of the education system. The Review opened with the statement that:

the education, which the vast majority of children who do not enter the formal employment sector receive, alienates them from the way of life of the people and does little to equip them with the knowledge, skills and attitudes necessary to contribute positively to community or national development (Education Sector Review, 1991).

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The education reform subsequently set out to address these issues, and to provide the possibility of education opportunities for all, in line with the Jomtien Agreement of 1990

Progressive steps of the reform

A National Education Reform Task Force, meeting throughout 1992 and 1993, considered ways to implement the recommendations of the Conference of the Council of Education Ministers, which had considered the implications of the Sector Study in 1991.

In addition, the National Executive Council developed a mission statement for the Ministry of Education. The Mission Statement had five main points:

1. To facilitate and promote the integral development of every individual;
2. To develop and encourage an education system which satisfies the requirements of Papua New Guinea and its people;
3. To establish, preserve and improve standards of education throughout Papua New Guinea;
4. To make the benefits of such education available as widely as possible to all of the people, and
5. To make education accessible to the poor and physically, mentally and socially handicapped as well as to those who are educationally disadvantaged.

The National Executive Council then assigned four national objectives to the Ministry of Education:

1. To develop an education system that would meet the needs of PNG and its people and would provide appropriately for the return of children to the village community, for formal employment, or for continuation to further education and training;
2. To provide basic schooling for all children as this becomes financially feasible;
3. To help people understand the changes that are occurring in contemporary society through the provision of non-formal education and literacy programmes; and
4. To identify the manpower development needs in the public and private sectors and to provide appropriate higher education, development and training programmes.

In addition to the national objectives, it was determined that education in Papua New Guinea must prepare citizens who

1. Have a strong moral value system that places emphasis on personal integrity, on the equality of all members of society, and on the importance and relevance of traditional values in modern life;
2. Are committed in their own personal development and view education as a continuing life-long process;
3. Are invested with a productive work ethic and a realization of the value of both rural and urban community development activities in the context of national development;
4. Are prepared for the realities of life in most communities; and
5. Are capable of providing a basis for effective further training for manpower needs.

In line with all of these findings, basic to the new reform curriculum was that it should

1. Start in a language the children already speak and improve their use of English;
2. Be relevant to the needs of Papua New Guinea;
3. Be developed in consultation with communities and provincial authorities to ensure its relevance to the needs of Papua New Guinea and its people;
4. Improve standards of education at all levels;
5. Prepare children to use resource development opportunities within their communities;

6. Use teaching methods that improve learning by allowing children to learn at their own pace.

Old and new structure compared

The reform involved the restructuring of the formal education system from the pre-primary level through to the upper secondary level. The reform was designed to address most of the systemic weaknesses and problem areas identified in the sector review. The differences between old and new structures are illustrated in the following model:

The Old Structure

Non-formal Tok Ples Pri Skul	
Community School	1
	2
	3
	4
	5
	6
Provincial High School	7
	8
	9
	10
National High School	11
	12

The New Structure

All children go to Elementary School for three years		Prep 1 2
Primary School	Lower	3
		4
	Upper	5
		6
Lower Secondary	Academic	7
		8
	Vocational	9
		10
Upper Secondary	Academic	11
	Technical	12

As we can see from the diagram, a major feature of the reform was the insertion of three years of formal education, commencing at age 6, in the language of the child's community. The main features of Elementary were:

1. It was to be a three-year formal education program in a language children speak;
2. The community was to decide the language of instruction;
3. Children would be able to learn more when schooled in their community language;
4. Local curriculum development was to take place with the help of the community;
5. Local production of curriculum materials would ensure their relevance to the community;
6. Introduction to oral English was to occur in the last half of Elementary 2;
7. The community in which the Elementary School was situated was to select the teachers, the Province was to appoint them as teachers, and the National Department was to undertake their training;
8. Training for teachers was to take place at Provincial or District level;
9. Teachers were to become members of the Teaching Service Commission;
10. Technical advice and support for teachers was to be provided through a number of strategies;

By 2004, it was anticipated that

- All children would be able to attend Elementary school, and

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- All schools would be as close as possible to where the children lived..

Elementary Education

Elementary Education became a part of the national education system when the Education Act was amended in 1995. Elementary Education refers to the first three years of formal schooling. Students enroll in Elementary Prep at age six and progress through Elementary Grade 1 and Elementary Grade 2. At Elementary 2, bridging to English commences with an introduction to *oral* English. Students continue with orality and literacy in the vernacular language into Grade 3 of the Lower Primary School.

Elementary schools were established as pilot projects as follows:

1. 1994, nine schools in Milne Bay Province.
2. 1995, schools in two areas in New Ireland Province
3. 1996, schools in a number of other Provinces
4. 1998, all provinces had Elementary Schools operating

Clear guidelines were established for communities wishing to plan and set up their own Elementary Schools. Availability of land was an issue: if on customary land, then the traditional owners had to agree to its use with an agreement signed by representatives of the community and the district authorities. Communities were required to fund and build their own school buildings if none were available. In addition, approved schools needed to be registered with the National Education system. A Board of Management was required as well as a local Curriculum Committee composed of community people. Teaching positions were to be created once the school was registered

The community was to propose personnel for training as teachers. Teachers were to be endorsed by the Provincial Education Board and selected for training by Staff Development and Teacher Education. The criteria for teacher selection was as follows:

1. Successful completion of 10 years of school education or other recognized qualification as acceptable to the Secretary for Education;
2. Thorough knowledge of and competency in local language and customs;
3. A mature and responsible attitude and behaviour consistent with the role of providing early education for children.

Communities wishing to participate in Elementary Education need an approved orthography for their particular language group since the language of instruction was to be that of the community in which the school was established. This was in keeping with the Philosophy of Education that stated:

Teaching young children in a language they do not speak or understand well, is to teach them to read and speak words only. It is more important to teach meaning than to teach children just to say words. Initial education in English restricts communication and therefore slows down conceptual development.

Therefore, Elementary education was to use the many cultures and language of PNG as its base. In this way, children could develop a sense of identity and pride in their own cultures and languages, which would be reinforced throughout their schooling.

A major surprise was the high take-up rate by communities around the country. It was anticipated that this sector of education would only be introduced following a lot of convincing

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by education authorities. The challenge is now seen as being to hold back the establishment of unplanned schools and ensuring an orderly implementation over time.

A positive impact of the Elementary program has been the provision of employment opportunities for Grade 10 graduates unable to continue into Grade 11. Of equal importance is the fact that the bulk of these opportunities are at the village level rather than in the urban areas. By the end of the Project, all provinces and all districts in the country had Elementary Schools with Elementary Preparatory, Elementary Grade 1 and Elementary Grade 2 classes.

Elementary teacher training

A key to the success of the Elementary sector has been the teacher training component. The Elementary Teacher Training Program started as a Pilot Project in 1994 to support the establishment of Elementary Schools across the country. In 1997, the AusAID-sponsored Elementary Teacher Education Support Project (ETESP) provided technical and funding assistance to meet teacher demands of the expanding Elementary Schools system.

The Teacher Training Course takes three years and leads to a Certificate of Elementary Teaching (CET), awarded by the PNG Education Institute. There are three components to the CET course:

1. Trainer Directed Training (TDT). This involves face-to-face instruction in each district for a period of six weeks at the beginning of each year. After this stage the trainees take up their teaching postings. During the year Cluster Workshops are held. A cluster refers to a collection of schools with a common language of instruction. At these workshops, teachers engage in joint planning and developing teaching resources.
2. Home study. Teachers are required to complete a series of Self Instructional Units (SIU's) during the teaching year.
3. Supervised teaching. During the teaching year, Teacher Trainers supervise teachers on a regular basis. The purpose is to observe their classroom performance, check on their SIU completion and provide advice and support. At least one visit a term is required from district-based Trainers. The community also has input into the assessment of the trainees.

Teacher Trainers are selected from practicing Primary School teachers who have expressed an interest in the Elementary program. They are required to undergo a two-part forty-week course. The first part is a twenty-week traditional residential program in which participants attend lectures and complete assessment tasks before returning to their provinces and districts to complete the Fieldwork part of the Certificate. When they complete the course they obtain a Certificate of Elementary Teacher Training. The year 2001 saw the inception of Elementary Inspections as those trainees who had fulfilled the academic requirements of the course were inspected in their first year of teaching.

Tangible outcomes of the ETT program are as follows:

1. Development and consolidation of the curriculum for the Elementary teacher education program – Certificate of Elementary Teaching (CET) and the Certificate of Elementary Teacher Training (CETT)
2. Development of about 140 orthographies for use in teaching vernacular literacy. The orthographies were developed through workshops conducted by SIL International (PNG). These orthographies add to those already in existence in the country.
3. Training and deployment of a teaching force of 9,271 Elementary teachers, including trainees to the end of 2002,
4. A supervision structure of 219 field-based Elementary teacher trainers, some of whom are also Inspectors as at the end of 2002.

Roles and responsibilities in supporting Elementary education⁴

Responsibilities for servicing Elementary Schools are shared by:

1. The National Department of Education;
2. The Provincial Departments of Education;
3. Non-Government organizations
4. Communities

The National Department of Education is responsible for:

- Teacher training and in-service
- Assistance to provincial staff and teachers
- Provincially based National Staff to assist the implementation of Education Reform
- Teacher certification and registration
- Teacher conditions as determined by the Teaching Service Commission
- Curriculum guidelines and assistance to local authorities with curriculum development
- Funding for the production and supply of curriculum materials
- Supervision and guidance of teachers
- Registration of schools

Provincial Divisions of Education are responsible for:

- Local training and in-service
- Support for the implementation of Education Reform
- Community awareness
- Planning
- Infrastructure development
- General administration
- Teacher's salaries

Provinces are responsible for budgeting for Elementary education as for other levels of education. The budget is to include Elementary teacher training allowances and teacher salaries for graduates.

Communities with Elementary Schools are responsible for:

- Support for Education Reform in their community;
- Owning and managing the school, teacher's houses and classroom through a Board of Management or an Elementary Committee;
- Deciding on the location of the school;
- Advising and assisting in curriculum development;
- Selecting the teachers for training;
- Deciding the language of instruction;
- Participating in Parents and Citizen days and school learning activities; and
- Providing security for the school, staff and children.

⁴ Cf. Malone, S. E. (1997). Conflict, cooperation and complementarity. A study of relationships among organizations involved in mother tongue literacy and pre-primary education in Papua New Guinea. Unpublished doctoral dissertation, Indiana University, USA.

Elementary School Curriculum

A national curriculum guideline was developed to aid curriculum development at the local level. Learning activities for each subject area are developed with the community to make sure they are relevant to local values, language and culture. The curriculum has the following characteristics:

- It emphasizes teaching in the children's own languages to improve their ability to explain ideas, solve problems and make decisions;
- It includes multi-grade teaching in order to 1) make annual intake possible in small schools and 2) allow children to progress at different rates;
- Uses an integrated, activity-based approach to teaching Language, Mathematics and Culture and Community;
- Introduces oral English in Elementary 2
- Provides for a three-and-a half-hour day with flexible time allocations
- Prepares children for entry into grade 3 in Lower Primary School.

In support of Elementary Curriculum development, several initiatives were undertaken. These included:

- Preparing material kits at the national level;
- Using local resources as teaching aids;
- Preparing teaching aids at the national level
- Placing provincial training teams
- Funding development and production costs through the Curriculum Development Division
- Designing an Elementary Teacher Training Course to train Elementary teachers
- Producing materials in all the languages chosen by the communities such as:
 - Locally written stories
 - Translated materials
 - Materials suitable for use in any language such as mathematics texts, Shell books, picture books

Providing teaching/learning materials is the responsibility of:

- Elementary teachers
- Community advisors
- Provincial trainers
- Officers from the Provincial Education Divisions
- Primary and Secondary school teachers
- Primary and Secondary school students
- Officers from the National Department of Education
- People from Non Government Organisations
- Contract writers
- Other technical advisors

Implications for lower primary classrooms of schooling in vernacular languages

With the introduction of vernacular languages in Elementary schooling, it was necessary to rethink the relationship between the students' first language and English as languages of instruction in the first three grades of the Lower Primary school (see figure, above).

This structure allows for the gradual introduction of English language and literacy across the Primary grades, while maintaining the use of the Vernacular for specific purposes throughout the grades.

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The introduction of this concept made it necessary to retrain many teachers in the lower grades. They needed to understand how to teach in the vernacular, how to teach English as a second language, and how to develop plans that include both languages in instructional tasks. This phase of the Reform is ongoing. One outcome of the new structure was that provincial staffing officers had to rethink their deployment of teachers so that staff who spoke a particular vernacular were assigned to the bridging classes (Grades 3 – 5) in primary schools in communities where that vernacular was spoken.

As with any innovative program, and in the case of such a radical reform across the whole education system, a number of issues have arisen and are mentioned briefly:

1. In a number of provinces, there was little control over the establishment of Elementary schools. While there are implementation schedules for setting up the schools in communities, some provinces took little if any notice of these schedules and set up schools anyway. Part of the reason for ignoring the schedules is the enthusiasm for vernacular language education in the provinces.
2. The model used to train Elementary School teachers is challenging conventional models of teacher training. This is mainly due to the fact that many education officers and others do not understand the orientation of Elementary Education, including the teacher education program.
3. Parental participation in the development of the Elementary curriculum is not well understood and curriculum committees that are an integral part of Elementary schooling at the school level are often seriously short of funds.
4. Trainers have sometimes been less than diligent in visiting schools and assisting the trainees in remote areas.
5. Lack of literacy materials, along with limited understanding of strategies for developing oral language for academic purposes, particularly in the bridging classes (Grades 3 – 5) are currently being addressed.
6. To be effective, bridging between Elementary 2 and Grade 3 students was to build on dialogue between the Elementary 2 and Grade 3 teachers. For various reasons relating to time and distance, this has not largely happened. This has led to misunderstanding on the part of Grade 3 teachers about what the students should know and be able to do at the conclusion of Elementary schooling, and of their role as bridging teachers.
7. In the multilingual classrooms of the urban centres, most Elementary schooling is carried out in Tok Pisin, the lingua franca of PNG. In some instances, parents have opted for instruction in English. Continuing dialogue concerning the advantages of becoming bilingual in a Vernacular and later, English, needs to take place between educationists and community people.