

Literacy in an Emergent Society: Papua New Guinea

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Abstract

This paper was presented at the International Literacy Year Colloquium in October 1990 in Washington, D.C. The paper provides a brief historical and geographic look at what is now Papua New Guinea. It then moves on to provide a glimpse at literacy education, both before and after nationhood in 1975. Linguistic diversity—more than eight hundred languages—and language use for education have been on-going issues. Preparing for nationhood fueled a change from community language programs to English-only education programs. Concurrently, there was a change from mission-driven education programs to government-sponsored education programs. Now, there is a government-supported movement to reinstate starting education in the languages of the community. Innovative ways of producing literature in the local languages is also presented.

1. Background Information

Papua New Guinea (PNG) consists of the eastern half of the island of New Guinea and about six hundred smaller islands. The country is just south of the equator, sharing international boundaries with Australia, Indonesia, and the Solomon Islands. Total land area measures 463,840 square kilometers, divided into four regions: New Guinea Islands, New Guinea Mainland Coastal, Highlands, and Papua. Mountainous terrain and large swampy areas spread through the country. The population of 3.6 million is dense in some regions and sparse in others. Estimates say that, given the difficult terrain, the land can support up to 9 million people (King and Ranck 1982).*

According to the censuses of 1966, 1971, and 1980, Papua New Guinea's population was 2.1 million, 2.4 million, and 3.0 million, respectively. At a population growth rate of 2.3 percent, the population could be 3.6 million by 1990 and 4.6 million by the year 2000. The age and sex distribution shows the broad-base pyramid usually associated with a rapid growth rate and declining mortality. About 47 percent of the population is under 15-years old.

The urban and rural distribution is uneven. About 88 percent of the population lives in rural areas, working in subsistence and cash crop production. Only 12 percent live in urban centers, with the urban population increasing by a rapid 4 percent yearly. Port Moresby, the capital, grows 5 percent annually, accelerated by rural to urban migration. Highlands accounts for 33 percent of the population, New Guinea Islands 15 percent, New Guinea Mainland Coastal 28 percent, and Papua 24 percent.

Papua New Guinea has 860 languages belonging to two main language groups. One-third of the languages are related, belonging to the Austronesian language family group. The other languages, many of which are unrelated, belong to the Non-Austronesian language family group. Very small speech communities have languages spoken by about 15 percent of the country's population.

There are three major languages of wider communication: Tok Pisin, Hiri Motu, and English. Tok Pisin is spoken more in the northern half of the country and, increasingly, in the southern half around Port Moresby. The Papuan side of the country speaks Hiri Motu. These two languages are used in the social domain, while English is used in the official communication domain. Tok Pisin, however, is increasing in official business domains.

The political history of Papua New Guinea underwent several major changes within the last century. From 1884 to 1914, different colonial powers separately administered the two halves of

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present day Papua New Guinea. From 1884 to 1906, Britain ruled the southern half, known as British New Guinea. Britain gave it to newly independent Australia in 1906, at which time it was renamed Papua. To the north, Germany ruled German New Guinea starting in 1884. After World War I, the League of Nations gave it to Australia, which then governed Papua and New Guinea as separate colonies.

Papua New Guinea became independent on September 16, 1975. Two years later, Papua New Guinea passed Organic Law One to redistribute administrative and economic power from the national government to the provincial governments. The decentralization policy was a strategy to pacify demands for greater autonomy by several ethnic groups. Nineteen provincial governments have legislative, executive, administrative and financial powers, yet they receive 93 percent of their funds from the national government.

2. Literacy Education in Papua New Guinea

2.1. Literacy before nationhood

Before World War II, colonial governments' rationale for education and literacy was to civilize the people. They also wanted to extend their social, political, and economic control over those in their colonies. The Germans chose German as the language of education in New Guinea; the British and Australians chose English for Papua. New Guinea switched to English after World War I.

Colonial governments encouraged mission education programs with subsidies. Governments established some schools, but enrollment was low compared to the mission schools. Mission influence dominated the villages, which used local languages for basic education and literacy.

After World War II, the government sought to extend its control over education, setting up the Education Department. The first Director of Education was W. C. Groves, an anthropologist who planned a bilingual system built from the mission school system. Initial education and literacy used vernacular languages or mission lingua francas, with English added later. This plan, however, was not effectively carried out.

In the late 1950s, the education philosophy moved away from meeting the needs of village societies to developing a nation. External and internal political developments put pressure toward developing a nation in which Papua New Guineans would take administrative roles from expatriates. This required a greater knowledge of English, so the government moved to support an exclusively English curriculum. With limited funds, the government sought help from the missions. Since the missions were reluctant to yield their influence in the villages to the government, especially in education, a conflict developed. Through legal and financial means, the government brought the mission education systems under its control. An English-only education system was firmly established by 1975.

Missions had greater social, political, economic, and religious influence in the villages than did the government until well after World War II. Their interests concerned effectively communicating with village people, teaching religion, and improving the quality of life. They did this with basic education programs primarily for children, with pastors or catechists usually serving as teachers. Materials typically included the Bible, hymnbooks, catechisms, primers, and readers.

The different missions had different policies on the languages used for literacy. Some chose a locally widespread language, some chose multiple local languages, and others chose a lingua franca, such as Tok Pisin or Hiri Motu. Many included English in the curriculum to prepare for higher education as government policy shifted to education for nation building, with an emphasis on preparing an educated elite. Most missions yielded to legal and financial incentives, thereby changing to an English curriculum, while abandoning their vernacular school programs for

children. Many continued with literacy programs in vernacular languages or lingua francas for adults. The Lutheran Mission continued its Tok Pisin curriculum outside the government system. After independence, the government firmly established an English education policy that most missions accepted.

After World War II, some nongovernment organizations (NGOs) began working in Papua New Guinea in literacy. One was the Summer Institute of Linguistics (SIL), which entered Papua New Guinea in 1956. This applied linguistics organization specializes in three areas: linguistics, literacy, and translation. SIL works with bilingual education programs in other countries, but could not in Papua New Guinea because of the English policy in formal education. SIL focused its literacy efforts on adults with vernacular literacy and transfer literacy to lingua francas. By the time of Papua New Guinea's independence, SIL worked in almost one hundred languages, with literacy programs in most of them. Now, SIL has literacy programs in nineteen provinces for all age groups at different stages of literacy.

Another NGO is Christian Missions in Many Lands, which began working in Papua New Guinea in the 1950s. The organization does adult literacy, especially in Tok Pisin. Their staff designed a widely-used Tok Pisin literacy course called Kisim Save.

Before independence, formal education systems taught literacy to children, with the government giving low priority to adult literacy. That adult literacy programs exist at all is due to the commitment of NGOs.

2.2. After nationhood

The PNG constitution states that everyone has the right to literacy in a vernacular, a national lingua franca (Tok Pisin or Hiri Motu), and English. Everyone should be literate in any language he or she uses. The constitution does not specify how to do this, other than encourage government departments and NGOs to be active in literacy. Until 1989, the government made no serious effort to make the general populace literate in the languages of Papua New Guinea.

The national education system changed little with independence. Though unemployment was a growing problem, the education system continued its modernizing focus on manpower needs. It emphasized passing exams to qualify for higher levels of education, giving little attention to appropriate education for the majority that remained in the villages.

Table 1 shows the school enrollment increase over a ten-year period from 1980–1989. Technical colleges and teachers' colleges show a decrease in enrollment.

Table 1. Number of Schools and Enrollments (1980–1989)

Ed. level	1980		1985		1989	
	schools	enrollment	schools	enrollment	schools	enrollment
Primary	2,077	296,166	2,392	362,030	2,692	418,926
Secondary	103	38,630	119	49,985	140	57,676
Vocational	88	3,992	88	6,843	104	6,064
Technical	9	3,778	8	1,687	8	1,224
T/Colleges	9	2,142	9	1,922	9	1,830

Despite these increases, gross enrollment is only 66.1 percent (table 2). The remaining school-age children do not go to school at all and lack any other opportunity for literacy.

Table 2. Gross and Net Enrollments for Primary Schools¹

Year	School Age Population	Actual Enrollment	Pupils Out of School
1980	493,400	284,089 (57.6%)	209,311 (42.4%)
1981	502,000	299,588 (59.7%)	202,412 (40.3%)
1982	509,000	312,620 (61.4%)	196,380 (38.6%)
1983	515,000	322,254 (62.6%)	192,746 (37.4%)
1984	520,800	344,616 (66.8%)	174,429 (33.2%)
1985	525,600	351,171 (69.5%)	161,745 (30.5%)
1987	535,100	373,999 (69.9%)	161,101 (30.1%)
1988	542,200	387,882 (71.5%)	154,318 (28.5%)
1989	550,800	407,748 (74.0%)	143,052 (26.0%)

About 65 percent of those who enroll in first grade complete their primary education. Of these, 33 percent go on to secondary education. Of those who do that, 70 percent complete the four years of secondary school. Thus, for every one hundred school-age children, only nine complete secondary education.

Political decentralization affected the education system. The national government retained responsibility for the core curriculum, which included English, science, mathematics, and social studies. Provinces took responsibility for nonformal education and developed their own curriculum in noncore areas.

Independence came to PNG during a time of much discussion on the issue of language in education. A proposed five-year plan released in 1973 included the option of using vernacular languages and lingua francas in education. The University of Papua New Guinea put literacy courses into some teachers' colleges. Academic discussions focused on a top-down national language policy approach. Those who emphasized the student and community perspective spoke of the lack of communication when using English as the language of education. They spoke of the great waste of effort for those who could not use English effectively and found it of little benefit in their village life. Those who favored the retention of an English curriculum spoke of the problems associated with so many languages: few languages with alphabets, few materials, few trained teachers to teach in vernaculars, and the expense of education development. After

¹Schools outside the National Education System are not included in the data.

independence, the National Executive Council discussed the language issue and decided to keep English as the medium of instruction. English simplified the problems of materials and teacher training.

Several concerns arose over English-only education. This policy provided for the manpower needs of an independent nation, but it ignored the socioeconomic and cultural needs of the rural majority. Parents expected their children to find work after attending school. They were frustrated when few graduates found jobs. Many who finished school no longer fit into village life, which led to boredom, antisocial behavior, and urban migration. Surveys in North Solomons in the late 1970s confirmed parental concern about the social alienation of graduates. Parents wanted schools that supported local languages and cultures. In 1979, a provincial system of vernacular preschools, outside the formal education system, satisfied some of these concerns. Aided by NGOs like SIL, provinces and communities developed their own vernacular literacy programs. This grass roots movement expanded in the 1980s. By the end of the decade, the national government developed a literacy policy and program.

3. Current Initiatives

Three factors encourage the current dramatic increase of literacy activities in PNG:

- (1) dissatisfaction with existing priorities,
- (2) the success of several communities with provincial vernacular literacy programs, and
- (3) the increased number of graduates.

Many view the formal education system as a major contributor to social, cultural, economic, and spiritual alienation, especially among the nation's youth. A ministerial committee formed in 1985 studied these problems and wrote a philosophy of education. In 1986, the committee published *Philosophy of Education for Papua New Guinea*, also known as the *Matane Report*. Recommendation twelve of the report states, "That the vernacular language be used as the medium of instruction in the early years of schooling and English be used in later years."

That recommendation came from the success of community-based vernacular literacy programs started in the North Solomons and East New Britain in the early 1980s. The Vilis Tokples (Village Vernacular) Schools taught children to read and write their language. They also taught children to value their cultural heritage before they enter first grade. Later research and evaluation confirmed what the communities already knew regarding education: children did better in the formal system when they had a background in vernacular literacy.

As these kinds of local and regional literacy activities increased, programs clearly needed more teachers. The overabundance of graduates—a problem created by the education system—became the major human resource for vernacular literacy programs.

In 1989, the national government addressed the need and demand for vernacular literacy. It created the Language and Literacy Section within the Curriculum Development Division of the Department of Education. The National Literacy Committee (NLC) was formed and serves as an advisory board to the Language and Literacy Section. The NLC formed a language and literacy policy later endorsed by the national Department of Education. This policy states:

...we recommend the development of education programs to ensure that children, out-of-school youth, and adults become literate in Tokples, transfer their skills to Tok Pisin, Hiri Motu, or English, and maintain and expand their literacy skills in these languages.

This policy was the first effort by the National Education Department to reach the National Constitution's goal of universal literacy in PNG languages.

The Language and Literacy Policy is part of a larger project, the Literacy and Awareness Program (LAP), which tries to achieve National Objective thirteen of the National Constitution:

...to help people understand the changes occurring in contemporary PNG society and to improve their ability to maintain and enhance this awareness and their participation in development through the improvement of basic literacy and access to development information.

This objective envisions a linkage of literacy programs with development information needed and desired by the local communities. Such a linkage could promote participation in both development and government. LAP will gather data to document existing and proposed literacy and awareness activities of the government and NGOs.

The Department of Education established a Literacy and Awareness Secretariat to set up the LAP. In January 1990, the National Literacy Committee formed the National Literacy and Awareness Council (NLAC). The function of the Secretariat and NLAC is to gather data on existing and proposed literacy and awareness activities, as well as to enable an intersectoral approach to literacy and awareness programs. The Language and Literacy Section does program planning, personnel training, materials preparation, and literacy and awareness activities promotion—especially related to the International Literacy Year.

Responsibility varies for coordinating literacy activities in the provinces. In some provinces, the Provincial Non-formal Education Officer administers activities. NGOs take on the responsibility in other provinces.

Provincial and local initiatives have been the impetus behind much of the current momentum for literacy in PNG. The national government fills the role of supporter, not initiator. It supports literacy by planning literacy programs, training literacy workers, developing curricula, producing materials, and giving financial aid. The literacy task in PNG is a shared responsibility, starting in the local community or province, and later supported by the national government.

About two hundred literacy programs in nineteen provinces have a total enrollment of 17,500 students. These include ten thousand preschool pupils, one thousand youths, thirty-five hundred adult women, and four thousand adult men. Each literacy program has an average enrollment of 87.5 individuals. These figures are small compared to literacy enrollments in other countries, and reflect the small size of many language groups. Most languages still do not have literacy programs. In the North Solomons, only six of twenty-two languages have literacy programs, using 15 percent of the provincial education budget. In East New Britain, five of seventeen languages have literacy programs, using 10 percent of the provincial education budget.

Since September 1989, the National Department of Education, the University of Papua New Guinea, or the Summer Institute of Linguistics trained about one thousand literacy workers at workshops ranging from one to four weeks. As literacy spreads to more languages, the financial burden will clearly be on the sponsoring agencies.

4. Features of Current Initiatives

4.1. Integral human development

The National Education Department endorsed a new philosophy of education that conforms to the national goals and directive principles of the constitution. The premise of this philosophy is the development of the individual as a total human being. The philosophy strongly expresses that all education must meet the social, cultural, spiritual, economic, and political needs of the learner. Unlike past literacy programs in the country, this philosophy guides programs sponsored by NGOs and the government. Community literacy programs that once only concentrated on literacy by itself now include lessons on health, agriculture, banking, environment, and conservation.

4.2. Vernacular literacy

It is noteworthy that a country with more than 860 languages decided to promote initial literacy in vernacular languages. The perception of them as backward languages hindering the modernization of PNG is disappearing. They are essential resources in the education and mobilization of the rural masses in development. The potential loss to local cultures would be great, if we were to ignore vernacular literacy.

4.3. Community-based literacy

With vernacular languages being the language of literacy, the programs are community-based in all aspects. The community does the following: (1) planning and management, (2) provision and maintenance of buildings, (3) fund raising, (4) provision of literacy workers, teachers, and writers, (5) paying of teachers' salaries, and (6) writing and producing materials. The National Language and Literacy Policy requires that these functions be in place before the national government gives any help. The community does these in close consultation with literacy officers from the national government.

4.4. Intersectoral cooperation

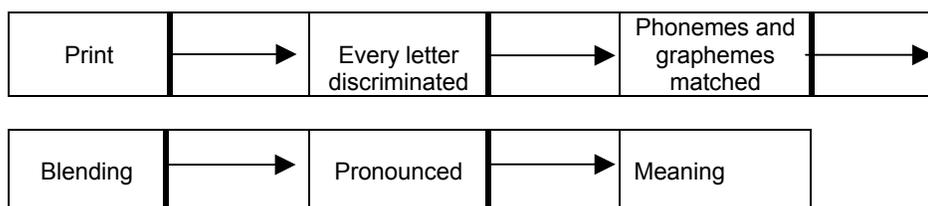
Intersectoral cooperation is important for the success of the Literacy and Awareness Program. One aim of the program is the rationing of resources for maximum utility. Instead of proliferating and reduplicating activities and resources among government departments and NGOs, all share and benefit from each other's activities and resources. All cooperate in planning, programs, funding, and training. The number of NGOs is increasing. They vary from the mission-oriented NGOs to those that address specific development issues and particular populations. They include the Melanesian Environment Foundation, Partners With Melanesians, Papua New Guinea Development Trust, Young Women's Christian Association, and others.

4.5. Innovative teaching: The Multi-Strategy Method

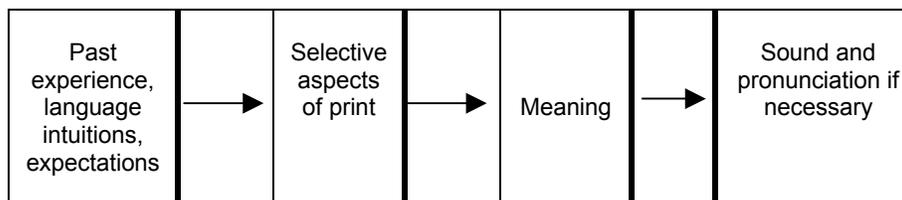
We know much of how people learn to read and write, but we need to know more. Many strategies for learning to read and write work in different socio-cultural situations. Researchers from the Summer Institute of Linguistics and the University of Papua New Guinea developed the Multi-Strategy Method four years ago. They harnessed many of the strategies without too much focus on any one strategy. To utilize many of the ways we learn to read and write, the method uses two main tracks, the story track and the workbook track. The story track emphasizes holistic learning, while the workbook track emphasizes the mechanics of hand movement and word attack. The key to the workbook track is analysis and synthesis: syllables relate to words, and words relate to sentences. The theoretical premise of the story track follows that of the inside-out model of reading (Cambourne 1979:79) in which the learner uses knowledge or experience from inside the head to apply to the print. The workbook track follows the outside-in model of reading, in which the pupil learns to discriminate the print and eventually discover meaning. The following chart compares the tasks of the two approaches.

Chart 1: Reading Models

The outside-in model of reading



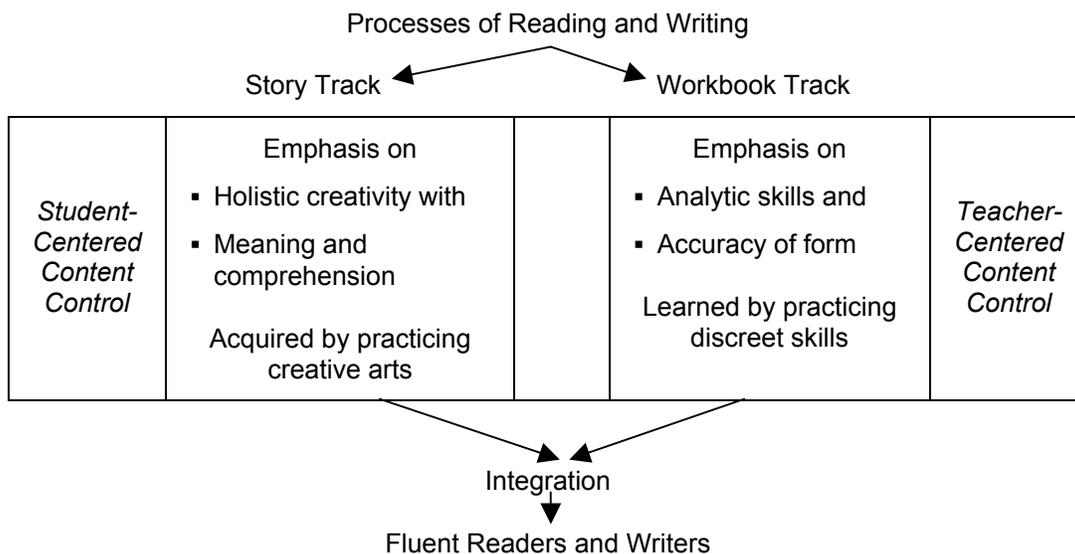
The inside-out model of reading



(Cambourne 1979:82)

The following chart shows the reading and writing instruction used in the Multi-Strategy Method.

Chart 2: A Simple Model of the Multi-Strategy Method



Experience shows this method to be suitable for adults and children.

4.6. Innovative methods of literacy training

Literacy worker training is done in two to four week workshops in host provinces and communities. The University of Papua New Guinea offers a semester-long certificate course for field workers. The short workshop format is not new, but the integration of the components is. Now, one course provides the training previously done by several courses.

Literacy training courses normally start with learning to write the orthography of the language. Next comes learning to write and produce materials and how to teach. Trainees receive integrated training at one workshop. The literacy worker gets a good overview of literacy instead of a narrow, specialized view.

4.7. Developmental information workers

The integrated training method also trains developmental information workers. These are teams of mobile NGO workers who go from province to province, leading discussions about development. Issues include forest management and logging, fishing, mining, environment and conservation, small-scale businesses, and women's issues. The discussion may be a formal seminar, a small village discussion of development issues, or viewing videos on development.

Papua New Guinea is going through rapid change that causes social disharmony. Literacy alone cannot guarantee an improved way of life. The Mobile Awareness Workers' Project aims to help

people understand the changes, so they can make informed decisions about resource management and their lives.

4.8. Innovative methods of producing materials

With the sudden increase of literacy programs, more literacy and resource materials are needed. This necessitates looking for newer and better ways of producing materials. The production of materials is now all community based. The people themselves write and print the materials under the supervision of an expert or experienced literacy worker.

A new method of producing materials is being developed and tried in several areas. This method combines computer technology with simple community-based methods of reproducing materials with a silkscreen press. Artists draw pictures of social, cultural, economic, political, spiritual, or other common themes. A technician scans them onto a computer. Specialists then use these to illustrate a book. The picture books, called Shell books, do not have text. Each language group, on receiving a Shell book, writes the appropriate text in the vernacular.

Writing the appropriate text follows these steps:

1. Local people translate the text of the Shell book into their language, changing it to meet the local setting.
2. Someone prints or types the translated text onto stencils, using the picture pages as guides.
3. The text on the stencils is duplicated onto the text, but not on the picture pages.
4. Workers collate, bind, and distribute the book.

The main advantages of Shell books are the following:

1. They enable the local communities to produce good quality materials. Locally produced materials are not always of good quality using current methods.
2. They enable national and provincial writers to produce materials for use in many languages. The same Shell book can serve for several languages.
3. The small size of most language groups makes production of good quality materials expensive. Though the initial outlay for setting up the computer facilities may be expensive, this method permits several inexpensive small runs of quality materials, which reduces the financial burden.

4.9 International cooperation

The World Declaration of Education For All calls for the

...strengthening of international solidarity in meeting basic learning needs through the sharing of knowledge and experiences, and equitable and fair economic relations.

International cooperation has a role to play in the spread of literacy in Papua New Guinea. This is happening already among the three Melanesian countries of Vanuatu, Solomon Islands, and Papua New Guinea through the Australian government-sponsored Melanesian Literacy project. Unlike general aid projects that depend on expertise and resources from the donor country, Australia makes funds available for Melanesians to train fellow Melanesians. Both Vanuatu and Solomon Islands personnel received training in Papua New Guinea. Papua New Guinea borrowed the idea of mobile developmental information workers, discussed earlier, from the Solomon Islands Development Trust. This is an NGO whose task is to raise awareness on critical developmental issues affecting peoples' lives.

5. Conclusion

Papua New Guinea officially recognizes the value of vernacular languages as a resource in socio-cultural, economic, and political development. Many strategies reflect the unique factors identified with literacy programs. The strong grass roots involvement in all aspects of literacy differs from the experience of countries with centralized literacy programs.

The problems of attaining universal literacy in a country with 860 languages are enormous. The task is possible if given adequate personnel, funding, and facilities. The sharing of experience, knowledge, and funds is needed. Aid should aim at enhancing local literacy programs and reflect the needs of the people themselves.

People with expertise in education are available. Between the government and NGOs, a pool of experienced literacy workers can act as advisors, trainers, and researchers. Many of the innovations discussed above undoubtedly need to be refined, but literacy in Papua New Guinea certainly has a bright future!

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