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## **Impact Study 6**

### **Final Report**

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# A b b r e v i a t i o n s

BOM	Board of Management
CCWs	Curriculum Cluster Workshops
CDD	Curriculum Development Division
CET	Certificate in Elementary Teaching
CRIP	Curriculum Reform Implementation Project
DOE	Department of Education
ECBP	Education Capacity Building Program
E1	Elementary One
E2	Elementary Two
EP	Elementary Prep
EHP	Eastern Highlands Province
ENBP	East New Britain Province
ETESP	Elementary Teacher Education Support Project
LLG	Local Level Government
NCD	National Capital District
NDOE	National Department of Education
NGO	Non-Government Organisation
NRI	National Research Institute
OBE	Outcomes-Based Education
PE	Physical Education
PEC	Provincial Elementary Coordinator
PEIC	Provincial Elementary Inspector Coordinator
PETTC	Provincial Elementary Teacher Training Coordinator
PNGEI	Papua New Guinea Education Institute
SAC	Subject Advisory Committee
SDA	Seventh Day Adventist
SIL	Summer Institute of Linguistics
SIU	Self-Instructional Unit
TDT	Trainer-Directed Training
TIC	Teacher In-Charge
TNA	Training Needs Analysis
TOT	Training of Trainers
TPPS	Tok Ples Priskul

# **1 Executive Summary and Recommendations**

## **1.1 Overview**

The Curriculum Reform Implementation Project (CRIP) Impact Study 6 commenced in September 2004 and concluded in October 2006. The project was funded by AusAID through SAGRIC International. The study was conducted by a research team comprising staff from the Faculty of Education, Deakin University (DU), Australia and the National Research Institute (NRI) of Papua New Guinea: Professor Terry Evans (Project Manager, DU), Dr Richard Guy (Lead Researcher NRI until March 2006), Dr Eileen Honan (DU, now The University of Queensland), Longamel Moi Kippel (NRI), Dr Sandy Muspratt (DU, now Griffith University), Patricia Paraide (NRI Lead Researcher from March 2006), Medi Reta (NRI) and Pani Tawaiyole (NRI, who passed away in June 2006).

The main aims of the research, as detailed in the Scope of Services, were to study:

- The effectiveness of the processes implemented by Curriculum Development Division (CDD) and Curriculum Reform Implementation Project (CRIP) to develop elementary syllabuses and locally developed support materials including consultation and trialling processes;
- The perceptions of teachers, head teachers, elementary trainers and elementary inspectors of the quality of the syllabuses and their effectiveness in supporting community-based learning;
- The perceptions of teachers and head teachers about the quality and effectiveness of the teachers' guide, the implementation support booklet and other teacher support materials supported by CDD;
- The processes used by teachers to implement the new syllabuses and their effectiveness;
- The impact of the syllabuses on teacher practice, student participation in schooling, students' attitudes to school and community support for elementary education; and
- The relevance, quality and effectiveness of the teacher in-service materials and the processes used to implement the in-service training.

The research design for this Impact Study consisted of three elements:

- A two-stage longitudinal quantitative survey of all elementary teachers in eight provinces and the National Capital District (NCD);
- A three-stage study of selected sites within those eight provinces and NCD; and
- Case-study work with CRIP-related key informants and stakeholders.

Eight provinces (Central, Eastern Highlands, East New Britain, Milne Bay, Morobe, New Ireland, Sandaun, and Simbu) and the NCD were the focus of the research. Each province is considered in the study in relation to the implementation of the new elementary curriculum. Over two thousand elementary teachers completed one or both of the surveys. About 135 teachers participated in the site studies over approximately eighteen months, many members of elementary school communities provided advice and information, and

several staff of CDD, Papua New Guinea Education Institute (PNGEI), the Elementary Inspectorate, CRIP, National Department of Education (NDOE) gave their time for interviews, discussions and the provision of documents.

## 1.2 Selected findings

### *Survey data*

The aims of the survey are:

- To understand the perceptions of elementary teachers and head teachers of the quality of the syllabuses; and
- To collect background information about teachers and their schools to determine the extent to which variation in teachers' perceptions can be accounted for in terms of the background characteristics (e.g., gender, experience, training, school location and size, and so forth).

The survey was distributed to all elementary schools in eight selected provinces (Central, Eastern Highlands, East New Britain, Milne Bay, Morobe, New Ireland, Sandaun, and Simbu) during March, 2005. The survey was repeated in a slightly revised form in March and April, 2006. A total of 1504 teachers representing 742 schools responded to the first survey, and 1270 teachers representing 549 schools responded to the second survey. The findings represented below relate to the analysis of surveys combined across the two data collections.

- Most schools have received the 2003 Elementary Syllabus documents. More than half the schools have a Curriculum Committee; even larger proportions for schools located in rural areas, or in villages and settlements. Most schools have their own Board of Management;
- The majority of teachers have completed Grade 10 or higher at school. More than half the teachers: graduated from the elementary training program; have taught in elementary schools for five or more years; and used the 2003 syllabus documents for four terms or more. The majority have had some in-service training on the documents. Most teachers have received in-service Unit 1, but about half the teachers have used it, and even fewer found it useful;
- A Tok Ples language is preferred overall in classrooms, but Tok Ples is even more preferred in schools located in villages in rural areas, in multi-grade classrooms, and in classrooms taught by teachers who have had Tok Ples Pre Skul (TPPS) experience. Tok Pisin is the preferred language in schools in urban areas;
- Fewer teachers teach in multi-grade classrooms than in single-grade classrooms, but multi-grade classrooms are more popular in small rural schools located in villages;
- In-service training is reaching some teachers who reported missing such training in the first survey. Similarly, the distribution of in-service units is improving although some teachers are still without such materials. Also, there is some evidence to suggest that there are increasing numbers of teachers who have found the in-service Unit 1 useful;
- Teachers generally claim that aspects of quality and effectiveness are emphasised in the syllabus documents; that the syllabus documents help them to achieve objectives and outcomes stated in the syllabus documents; and they experience little difficulty



with the layout and formatting of the syllabus documents, and with the ability to distinguish between key terms and phrases used in the documents;

- Teachers' attitudes and perceptions are associated with in-service training received by teachers, the establishment of Curriculum Committees, and the size of their schools. Teachers' attitudes towards, and perceptions of, the syllabus documents become more positive if teachers have received in-service training, if the school has an established Curriculum Committee, and if the school is of a size that affords formal and informal meetings and discussions with other teachers. It appears that teachers' attitudes and perceptions become more positive when formal and informal support is provided;
- Teachers' attitudes and perceptions are associated with the length of time that teachers have been using the syllabus documents. Teachers who have been using the syllabus documents longer tend to have more positive attitudes and perceptions. However, this effect may be confounded with in-servicing: Teachers who have been using the syllabus documents for longer periods of time are also more likely to have received some form of in-service on the syllabus documents. Teachers' attitudes and perceptions of the quality and effectiveness are associated with their English language abilities. Teachers with better English language abilities have more positive attitudes of the quality and effectiveness of the documents, and, more crucially, less difficulty with understanding the documents.

#### *Site fieldwork*

All of the elementary schools that participated for the duration of the study were visited on at least three occasions over the period of the research. During these visits, the researchers interviewed elementary teachers, head teachers, trainers, inspectors, and other members of the provincial education offices. They observed classroom lessons, talked to community members and attended community meetings. As well the research team members worked with schools to conduct action research projects. The site schools in all provinces were encouraged to solve a problem or issue related to the implementation of the 2003 elementary curriculum as part of their active involvement in this research. The teachers were encouraged to identify a problem, analyse appropriate data collected on the problem, formulate an action plan to solve the problem, collect data after a period of implementation of the action plan, and write a report on the problem and how it was solved or otherwise. The action research has been implemented with varying successes in the site schools.

The research team also interviewed key informants and stakeholders in Port Moresby in relation to the processes used by CRIP in the development, consultation and trialling stages of the elementary syllabuses.

While the summary below reports findings across provinces, it should be noted that there is great diversity in the different approaches to implementation within each province.

The findings below represent the outcomes of data collected over an eighteen month period and provide evidence that teachers who have been working with the curriculum materials for two years or more are much more positive and confident about their understanding of the curriculum and their ability to implement and manipulate the curriculum to suit local circumstances. The experience of using the curriculum, in-service

activities attended, and working with colleagues during the first two years, results in more confident and successful teachers by the third year of teaching.

This summary is reported against the main aims of the project.

**The effectiveness of the processes implemented by CDD and CRIP to develop elementary syllabuses and locally developed support materials including consultation and trialling process**

- There was a positive view of the development and consultation, whether informally or formally through such bodies as (especially) the Subject Advisory Committees (SACs);
- The cultural and linguistic diversity of PNG is such that it is difficult—if not impossible—to have an effective and efficient consultative process that is representative of such diversity;
- The consultation between CDD/CRIP staff with staff at PNGEI responsible for the pre-service course was not seen by the latter to be as fulsome as it could have been.

**The perceptions of teachers and head teachers of the quality of the syllabuses.**

Elementary teachers reported as follows:

- Set out in a logical way and is user friendly;
- English text is understood by most teachers;
- More structured and the knowledge, skills and attitudes to be taught are specified through the outcomes, indicators and the activities;
- Provides much needed guidance and helpful hints;
- Makes planning for teaching and learning quite easy;
- Adopts a child-centred approach to teaching and learning which is in direct contrast to teacher talk;
- Initial difficulties with new terms and concepts have been overcome through training;
- Signposts for planning of teaching and learning in order to achieve outcomes;
- Better than Scope and Sequence and flexible; and
- Related to all subjects, assists in integration.

**The perceptions of elementary trainers and elementary inspectors of the quality of the syllabuses**

- Elementary inspectors and trainers interviewed were generally positive about the quality of the syllabuses in terms of the structure, educational principles and the production quality;
- Their concerns were more focused on distribution, support for teachers (especially workshops), support for trainers (especially to visit schools and run workshops) and the capacity or willingness of some teachers to implement the new syllabus;
- Some trainers' own inexperience in elementary education leaves them devoid of a practical professional basis upon which to draw when confronted with real classroom situations.

**The perceptions of teachers, head teachers, elementary trainers and inspectors of the effectiveness of the syllabuses in supporting community-based learning**

- Elementary Teacher Education Support Project (ETESP) and TPPS teacher training has had some impact on the teachers' current practices as these programs emphasised integration of formal learning with the students' everyday community activities;
- Tok Ples as the language of instruction has had a significant influence on the link between classroom lessons and the students' lives in their communities;
- Community integration is particularly notable in the semi rural and rural schools in the eight provinces;
- Teachers found integration easy although it depends very much on the theme.

**The perceptions of teachers and head teachers about the quality and effectiveness of the teachers' guide, the implementation support booklet and other teacher support materials supported by CDD**

**The perceptions of teachers and head teachers about the quality and effectiveness of the Teachers' Guide**

In discussing the Teachers' Guide, the teachers stated that it:

- Contains a clearer explanation of what is in the syllabus;
- Has specific explanation regarding skills, knowledge, and attitudes;
- Assists in the preparation of lesson plans;
- Assists with team planning, multigrade teaching planning;
- Assists with integration across the curriculum and the community, catering for different ability groups, and subject content links between all grades;
- A common view is that the ideas and procedures in the Teachers' Guide are all that they are allowed to put into practice, reinforced by the advice teachers receive from trainers that there is one way to program, plan and teach;
- The teachers are not encouraged to be imaginative or flexible;
- Teachers were generally still closely following the Teachers' Guide, rather than experimenting with new ideas about possible activities.

**The perceptions of teachers and head teachers about the quality and effectiveness of the implementation support booklet and other teacher support materials supported by CDD**

- Relationship between the use of the materials and key individuals, e.g., head-teachers, inspectors, trainers. If head-teachers or trainers provide advice or guidance on the use of the materials then teachers are much more likely to use them;
- Teachers' understanding of the nature of support materials is impacted upon by the contents of any box or kit. It seems that to many teachers, the kits only contained policy documents and were therefore not perceived to be useful. The shell books, crayons, and activity books therefore remain unused in many schools;
- Implementation of the new elementary syllabuses has meant that teachers have had to balance the time needed to understand the new curriculum with the time needed to

plan and teach. For many teachers, it seems they perceived the time needed to read and understand the support materials as not a priority.

### **The processes used by teachers to implement the new syllabuses and their effectiveness**

- The time that teachers spend using the syllabuses is ‘time well spent’, according to some of them;
- After two years of implementation, teachers are now able to find short-cuts when planning lessons;
- Some provinces have developed standard program guides, to minimise the amount of time and paper used by teachers to prepare daily and weekly plans;
- After the initial reluctance, the teachers were willing to implement the new curriculum, after they attended workshops;
- There were innovations in their interpretations of it, and a general determination to make it work even when feelings of uncertainty prevailed as reflected in, ‘mipela i burukim bus’, which means, ‘we made our own pathways’.

### **The impact of the syllabuses on teacher practice, student participation in schooling, students’ attitudes to school and community support for elementary education**

Teacher practice:

- Children are very much involved in learning inside as well as outside the classroom;
- Lessons that tend to be lengthy for 6–8 year olds have become, in some classrooms, more interesting, with a variety of activities to keep children’s interests;
- Marked change in classroom management, integration across curriculum and the community, and a slight improvement in catering for different ability groups;
- Integration of cultural mathematics with the other two subjects was stronger;
- Teachers in their second year of implementing the new curriculum are able to meaningfully transfer statements from the syllabus, to the classroom, with assistance from the Teachers’ Guide, Elementary Activity Books and Shell books;
- They are beginning to work as a group, although at different levels of implementation;
- Teachers are better able to relate outcomes to themes.

Student participation:

- Community interest in the school and students’ learning has some impact on the teachers’ and students’ attendance and punctuality in school;
- Participation in schooling and attitude to school vary in the site schools. Marked improvement in school attendance and general interest in schooling are evident in schools with strong community support.

Community support:

- Although curriculum committees exist in most sites, they are not fully utilised by the schools because both teachers and members of the committees are not certain of their role in curriculum development;
- A strong and fair Board of Management ensures that the community plays its part in the education of the children, whether directly or indirectly. Schools with weak Boards are not able to function properly;
- Schools that reported increased interaction with their communities secured more community support than those who had fewer interactions;
- The researcher's involvement initiating interactions between the schools and their communities had an impact;
- Most schools reported increased community support for their schools after the initial school visits;
- Awareness provided by members of the research team during the study on the links between the elementary curriculum and the lower primary curriculum had an impact on community support.

**The relevance, quality and effectiveness of the teacher in-service materials and the processes used to implement the in-service training**

Teacher in-service materials

- For some teachers and trainers, if training has been delivered, then there is no need to engage with the materials. For others, the materials are seen to be complementary to the training. For many teachers they perceive a need to be trained on how to use the materials;
- The timing of delivery of the in-service materials has affected teachers' usage. Once teachers become engaged with the actual syllabus documents and the teachers' guide they do not see a purpose for engaging with the in-service materials;
- The content of Unit 1 may have impacted on teachers' engagement with Units 2 and 3. The data suggests that elementary teachers are continually on the search for ideas and strategies to improve their classroom teaching and put into practice the philosophy of the new curriculum. The content of Unit 1 of the in-service materials did not provide them with any assistance in this area.

Processes used to implement the in-service training

- The teachers do not receive the kind of follow-up attention from trainers and inspectors that they are looking for to confirm that they are teaching in appropriate ways;
- There is some evidence to suggest that the official trainer to teacher ratio is not being met;
- Teachers lack the confidence to reflect on their own performance, to establish local structures within cluster groups of schools or within their own school environment, to be critical of existing practices and to seek improvements. There are examples from the site studies of teachers and schools who have taken initiatives in these areas, and once again the success of these seems to depend heavily on the role of the head teachers;

- The study has found that the cluster-based approach to professional development matters should be reconsidered with a view to strengthening it;
- Some clusters are effective and indicate that they get more assistance from the cluster members than the trainer. Other clusters have collapsed for a range of reasons but there are large benefits in terms of funding, efficiencies, rationalisation and immediacy that are not achieved from the cascading model of professional development that is also in use at the present time;
- It would seem that the cluster-based approach to in-service is perceived to be much more valuable by the teachers themselves. Those provinces that have strong cluster organisations seem also to be much more successful in delivering widespread in-service to teachers.

#### **Research design collaboration and approach**

- The involvement of PNG researchers was essential to the integrity and authenticity of the project and the collaboration with overseas researchers proved an invaluable strength;
- The implementation of the action research part of this study seemed to have an impact on the attitudes of teachers involved in relation to solving problems themselves;
- The role of the researcher during the site visits has had an impact on school improvement.

### **1.3 Recommendations**

The recommendations are not listed in order of importance or priority but in relation to the main aims of the project as provided in the Scope of Services.

On the basis of the evidence collected and the analyses undertaken, it is recommended that:

- 1 Inspections and Guidance Division take the findings of this study into consideration during the implementation of SLIP;
- 2 Elementary Unit/CDD ensure that the consultative process involves groups of users that authentically represent the diversity of elementary teachers experiences, contexts and competencies;
- 3 Elementary Unit/CDD use trialling processes that involve a range of users reflecting the diversity of elementary school, community and teachers' contexts;
- 4 Elementary Unit/CDD maintain closer consultations with PNGEI in the development of curriculum to ensure in-service and pre-service courses are harmonised to ensure effectiveness and sustainability;
- 5 PNGEI and TE&SD continue negotiations with TSC to develop a career path for experienced elementary teachers to move into training and inspectorate positions;
- 6 PNGEI and TSC develop a professional framework and in-service materials that have an assessment component to enable accreditation towards further study;

- 7 Elementary Unit/CDD and PNGEI ensure that teachers, inspectors and trainers have an understanding of ‘community activities’ which takes account of the diverse urban community contexts, activities and experiences;
- 8 PNGEI assist trainers and inspectors to encourage teachers to be imaginative and flexible in their interpretations of the Teachers’ Guide;
- 9 CDD improve the distribution, packaging and delivery of support materials to Elementary Schools. It is recommended, for example, that: an overview and explanation of the package of materials be provided; delivery is timed for the beginning of the school year; stronger links are developed with provinces to obtain current information about schools and their locations, and to provide a provincial electronic repository of all materials to enable local printing and access if delivery fails; and reliable methods of delivering materials directly to elementary schools are identified and/or developed;
- 10 PNGEI, and the Inspections and Guidance Division, commend and encourage elementary teachers’ adaptability and efforts expressed as ‘mipela i burukim bus’;
- 11 PNGEI, in collaboration with Provincial Divisions of Education, conduct regular training needs analyses of elementary teachers to ensure that training and support materials are directed to their contemporary needs, such as, the assessment of students;
- 12 PNGEI, and the Inspections and Guidance Division take immediate action to ensure communities are aware of their responsibilities for supporting elementary schools and working with teachers, the connections between elementary and lower primary schooling, and the role of Curriculum Committees and BOMs;
- 13 PNGEI and the Inspections and Guidance Division, through trainers and inspectors regularly consulting BOMs, develop and sustain a role for BOMs to monitor and assess the performance of elementary teachers;
- 14 PNGEI, in collaboration with Provincial Divisions of Education, strengthen cluster based in-service delivery with the understanding that there is a diversity in the organisation and practices of clusters across provinces;
- 15 PNGEI develop in-service materials to include a face-to-face component delivered through school Clusters;
- 16 TSC and PNGEI review the numbers and locations of trainers to ensure an effective distribution of trainers in districts and sub-districts;
- 17 PNGEI review the role of elementary trainers to include providing professional development for all elementary teachers through Cluster organisations;
- 18 PNGEI and the Inspections and Guidance Division encourage and strengthen the role of primary school teachers as mentors/assessors in their Clusters;

- 19 PNGEI and Provincial Divisions of Education recognise and promote effective leadership of Clusters provided by a variety of people; for example, experienced elementary teachers, head teachers, trainers, and primary school teachers;
- 20 The Top Management Team (TMT), and Policy, Research and Communication Division (PRC) of the Department of Education advise researchers, when working in schools, that they should consider employing collaborative methods such as those deployed successfully in this project, for example, simple participatory and/or action research strategies;
- 21 Department of Education (DOE) recognises the value of longitudinal studies (quantitative and/or qualitative) and identifies appropriate funding to continue to track students through elementary, primary and secondary school to ascertain the sustainability of the benefits of the new curriculum.



## **2. Project Overview**

### **2.1 Introduction**

The Curriculum Reform Implementation Project (CRIP) Impact Study 6 commenced in September 2004 and concluded in October 2006. The project was funded by AusAID through SAGRIC International. The study was conducted by a research team comprising staff from the Faculty of Education, Deakin University (DU), Australia and the National Research Institute (NRI) of Papua New Guinea: Professor Terry Evans (Project Manager, DU), Dr Richard Guy (Lead Researcher NRI until March 2006), Dr Eileen Honan (DU, now University of Queensland), Longamel Moi Kippel (NRI), Dr Sandy Muspratt (DU, now Griffith University), Patricia Paraide (NRI Lead Researcher from March 2006), Medi Reta (NRI) and Pani Tawaiyole (NRI, who passed away in June 2006).

The main aims of the research, as detailed in the Scope of Services, were to study:

- The effectiveness of the processes implemented by CDD and CRIP to develop elementary syllabuses and locally developed support materials including consultation and trialling processes;
- The perceptions of teachers, head teachers, elementary trainers and elementary inspectors of the quality of the syllabuses and their effectiveness in supporting community-based learning;
- The perceptions of teachers and head teachers about the quality and effectiveness of the teachers' guide, the implementation support booklet and other teacher support materials supported by CDD;
- The processes used by teachers to implement the new syllabuses and their effectiveness;
- The impact of the syllabuses on teacher practice, student participation in schooling, students' attitudes to school and community support for elementary education; and
- The relevance, quality and effectiveness of the teacher in-service materials and the processes used to implement the in-service training.

The research design for this Impact Study consisted of three elements:

- A two-stage longitudinal quantitative survey of all elementary teachers in eight provinces and the National Capital District (NCD);
- A three-stage action research study of selected sites within those eight provinces and NCD; and,
- Case-study work with CRIP-related key informants and stakeholders.

Initially, eight provinces and NCD were the focus of the research. Western Province was eliminated due to profound difficulties in establishing contact to arrange site visits and for the distribution of surveys. After consultation with Impact Study 6 Steering Committee, Central Province was selected as a replacement. Although the Central Province elementary schools participated in the survey, the delay in commencing site visits, coupled with heavy floods and several teacher strikes in 2006, meant that Central had to

be eliminated from the site study and action research. Each province is considered in the study in relation to the implementation of the new elementary curriculum.

The research team expresses its gratitude for the co-operation of all the participants in this project. Over two thousand elementary teachers completed one or both of the surveys. About 135 teachers participated in the action research over approximately eighteen months, many members of elementary school communities provided advice and information, and several staff of CDD, PNGEI, the Elementary Inspectorate, CRIP, National Department of Education (NDOE) gave their time for interviews, discussions and the provision of documents. This co-operation has been exemplary of the cooperative approaches in school communities, and of the professional attitudes of PNG educational staff. The research team also acknowledges the invaluable support and advice of the Australian Team Leaders who oversaw the project (Graham Dawson until December 2004, and Mostyn Coleman from 2005) and the Steering Committee.

The Report includes an executive summary and recommendations, and appendices. Additional material related to the research data and analysis is available electronically. Presentations and publications on aspects of the project will follow this report.

## 3. Findings

### 3.1 Survey

#### 3.1.1 Introduction

The aims of the survey were:

- To understand the perceptions of elementary teachers and head teachers of the quality of the syllabuses; and
- To collect background information about teachers and their schools to determine the extent to which variation in teachers' perceptions can be accounted for in terms of the background characteristics (e.g., gender, experience, training, school location and size, and so forth).

A trial version of the survey was developed and distributed to teachers in elementary schools in NCD in 2004. The purpose of the trial was to ensure that the questions were intelligible to teachers, and subsequently to modify the survey in light of discussions with elementary teachers while they completed the survey, the results of preliminary analyses of the survey data, and advice from the Steering Committee. A report on the trial was provided in the First Six-Monthly Report to the Steering Committee (see Evans and others 2005). The trial led to the development of a final version of the survey which was distributed to all elementary schools in eight selected provinces (Central, Eastern Highlands, East New Britain, Milne Bay, Morobe, New Ireland, Sandaun, and Simbu) during March, 2005. The survey was repeated in a slightly revised form in March and April, 2006 (Appendix 6.2). Elementary teachers in NCD were not asked to complete the survey during the 2005 data collection because they had only just completed the trial survey at the end of the previous year, but they were asked to complete the survey for the 2006 data collection.

A summary of the findings from the 2005 data collection was presented in the Second Six-Monthly Report to the Steering Committee. Subsequently, a substantial number of returns from the 2005 data collection were received. These additional surveys were incorporated into the analyses presented in the Third Six-Monthly Report along with the 2006 data received at that time. This report presents and discusses the complete 2005 and 2006 data-sets.

Table 1 shows the number of teachers from each province responding to the surveys in each data collection period (2005 and 2006), and the number of schools represented by these teachers. A total of 1499 teachers representing 741 schools responded to the first survey, and 1610 teachers representing 712 schools responded to the second survey. There were problems associated with the distribution and collection of surveys in Central, and as a consequence, Central teachers and the schools they represent make only a small contribution to the total number of returned surveys. As mentioned earlier, teachers from NCD completed the 2006 survey only.

**Table 1: Number of returned surveys and the number of schools represented**

Province	2005		2006	
	Schools Number (%)	Teachers Number (%)	Schools Number (%)	Teachers Number (%)
Central	22 (3.0)	52 (3.5)	32 (4.5)	73 (4.5)
Eastern Highlands	85 (11.5)	146 (9.7)	20 (2.8)	58 (3.6)
East New Britain	85 (11.5)	237 (15.8)	112 (15.7)	309 (19.2)
Milne Bay	78 (10.5)	128 (8.5)	83 (11.7)	217 (13.5)
Morobe	134 (18.1)	281 (18.7)	102 (14.3)	220 (13.7)
New Ireland	136 (18.4)	201 (13.4)	117 (16.4)	165 (10.2)
Sandaun	112 (15.1)	215 (14.3)	94 (13.2)	156 (9.7)
Simbu	89 (12.0)	239 (15.9)	141 (19.8)	327 (20.3)
NCD*	-	-	11 (1.5)	85 (5.3)
<b>Total</b>	<b>741</b>	<b>1499</b>	<b>712</b>	<b>1610</b>

\* For reasons outlined earlier, the survey was not distributed to NCD teachers for the 2005 data collection.

Using data reported elsewhere in this report on the total number of teachers and schools in each province, it is possible to calculate approximate response rates for each province. Treating the two data collections as a single data collection (and taking account of the number of teachers who responded to both data collections), Table 2 shows the approximate response rates for each province. The response rates can only be approximate because the number of teachers and schools change from year to year, whereas the figures reported in Table 2 assume a stable number of teachers and schools across the two years of data collection. Also, the surveys include responses from teachers in ‘permitted’ schools, and these are not included in counts of the total number of teachers and schools in each province. With these constraints in mind, Table 2 shows that the response rates are, on the whole, large. More than half the teachers in the provinces, representing more than half the schools, responded to one or the other or both surveys, and indeed, in some provinces, the response rates were 70% or more. The exceptions are Central and NCD, for reasons already outlined, and possibly Eastern Highlands and Milne Bay.

**Table 2: Approximate response rates and percent of schools represented**

Province	Response Rate (%)	Schools (%)
Central	21	17
Eastern Highlands	31	36
East New Britain	72	68
Milne Bay	47	42
Morobe	72	86
New Ireland	62	64
Sandaun	80	77
Simbu	69	72
NCD	16	26
<b>Total</b>	<b>51</b>	<b>54</b>

A total of 650 teachers responded to both surveys. These teachers represent 26% of the sample combined across the two data collections. However, as shown in Table 3, there is considerable variation in the number of teachers completing both surveys from each province. At one extreme, 47% of teachers from Sandaun and, at the other extreme, 2% of teachers from Central completed both surveys; and only a small percentage (less than 20%) of teachers from Eastern Highlands and Milne Bay completed both surveys. Nevertheless, if the two data collections can be considered as a single two-year data collection, there are moderate to large response rates across the provinces.

**Table 3: Number of teachers responding to both surveys**

Province	Number (%)	Percent of combined sample
Central	2 (0.3)	1.6
Eastern Highlands	19 (2.9)	10.3
East New Britain	121 (18.6)	28.5
Milne Bay	49 (7.5)	16.6
Morobe	120 (18.5)	31.5
New Ireland	87 (13.4)	31.2
Sandaun	119 (18.3)	47.2
Simbu	133 (20.5)	30.7
NCD*	-	
<b>Total</b>	<b>650 (100)</b>	<b>26.4</b>

\* For reasons outlined above, NCD teachers did not complete the 2005 survey.

### 3.1.2 Characteristics of the schools

The survey asked teachers to provide information about their schools. The aim was to obtain this information without being dependent on any one teacher or a head teacher to supply it. The approach was to ask all teachers in any given school to complete this section of the survey. A disadvantage of the approach is that teachers within a school might disagree or might not know about particular characteristics of their school. However, the trial survey showed that teachers within schools, on the whole, agreed about their school's characteristics, and the results from the two data collections substantiate that conclusion. Where there was disagreement within a school, it was usually the case that only a minority of teachers disagreed with the majority, and disagreement was usually limited to one point on the scale either side of the point that the majority of teachers assigned for their school. For the questions where teachers responded on an ordered scale (e.g., *How many students are enrolled in your elementary school?*; *How many elementary teachers are teaching at your elementary school?*), an average was calculated for each school, then the school was assigned the average after rounding to the nearest whole number. For questions where teachers responded on a nominal scale (For example: *What kind of Board of Management (BOM) does your elementary school have?*; *Does your elementary school have a Curriculum Committee?*), if there was a clear majority, the school was assigned the value according to the majority; otherwise, no value was recorded for the school (typically, the latter situation applied to less than 10 schools).

There was, however, one question where the variation in responses by teachers within schools could not be considered to be minimal: *In your elementary school, how many classes are there in: Multigrade, Elementary Prep (EP), Elementary One (E1), Elementary Two (E2)?* The responses indicated that there was uncertainty among teachers about the exact number of classes in their schools, but in addition, it appears as though a large number of teachers misread the question, and responded in terms of the number of teachers or the number of students in each grade level. For this reason, the results for this question are not presented.

Leaving this question aside, the rates at which no results were recorded for schools (i.e., the rates for missing data) were small; of the order of 5% or less. For the two questions concerning school size (enrolment and number of teachers) the rate was less than 1%, but the rate rises to approximately 5% for one of the questions concerning the location of the school (located in a village or a primary school).

The schools represented in the samples are mostly small. The majority of schools (2005 and 2006: 79%) have enrolments of fewer than 100 students, and there are a few (approximately 1%) very small schools (with enrolments of 10 students or less). When school size is assessed using the number of teachers at a school, similar conclusions regarding school size are obtained: the majority of schools (2005 and 2006: 91%) are staffed by one, two or three teachers. Figure 1 shows the distribution of schools according to student enrolment, and Figure 2 shows the distribution of schools according to the number of teachers. Both figures show the distributions broken down according to the year of data collection, and they show that the distributions remain reasonably stable across the two data collections.

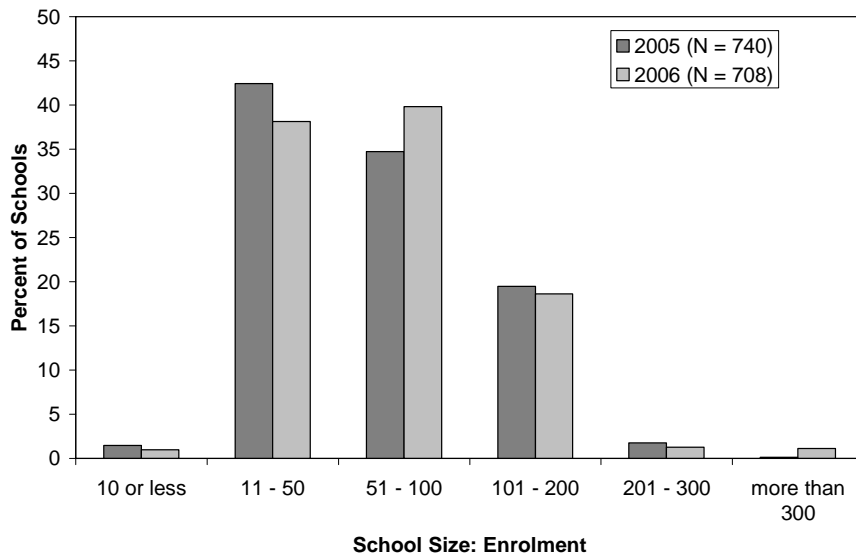


Figure 1: Distribution of school sizes according to school enrolments

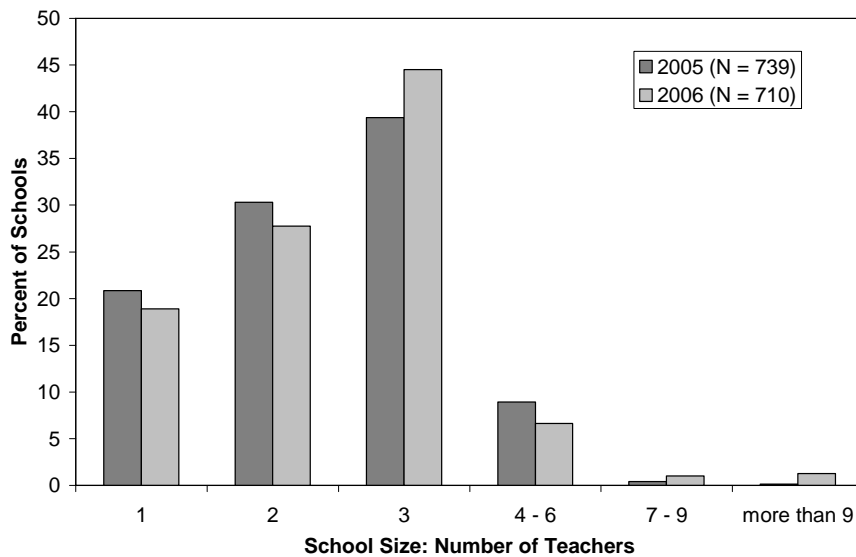
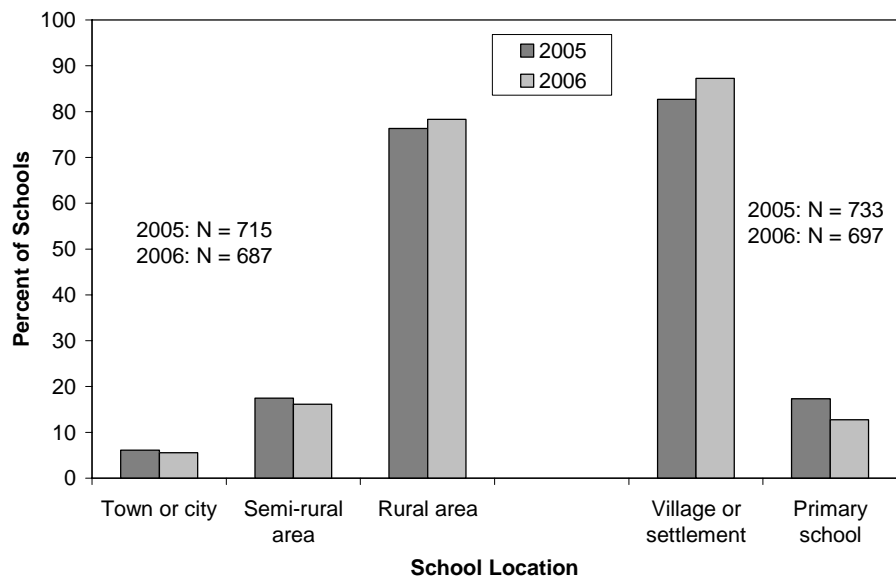


Figure 2: Distribution of school sizes according to number of teachers

Figure 3 shows the distribution of schools according to their location in urban and rural areas, and according to their location in primary schools or in villages and settlements. Most schools are located in rural areas (2005: 76%; 2006: 78%), and are located in villages or settlements (2005: 81%; 2006: 83%). Furthermore, the distributions do not change substantially across the two data collections.

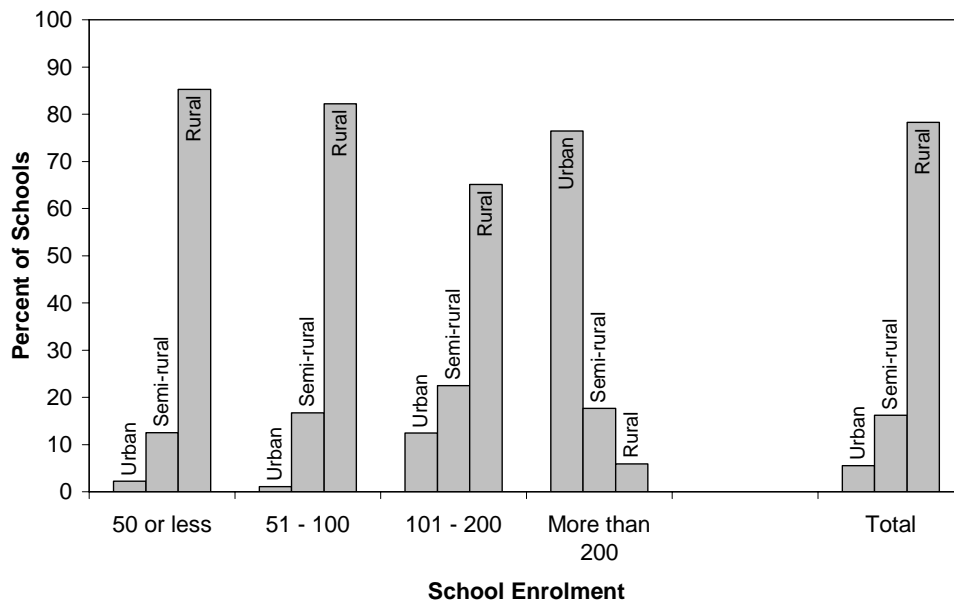


*Figure 3: Distribution of schools according to school location*

The majority of the schools (2005: 83%; 2006: 87%) have received the 2003 elementary syllabus documents, although this left an important proportion (13%) that had not received the documents. Of the schools claiming not to have received the syllabus documents, most are located in rural areas, but this is largely because there are more schools located in rural areas. For the 2006 data collection, there is no association between school location and whether or not the school has received the syllabus documents, and for the 2005 data collection, there is a weak association. The majority of schools (2005 and 2006: 93%) have their own BOM, and only 4% or 5% of schools share a BOM with a primary school. A little more than half the schools (2005 and 2006: 61%) have a Curriculum Committee that involves members of the community. The figures concerning Curriculum Committees might appear to contradict information collected for the qualitative analyses, but it should be noted that the survey question did not ask how effective the committee was or how often the committee meets; only that the school has a Curriculum Committee.

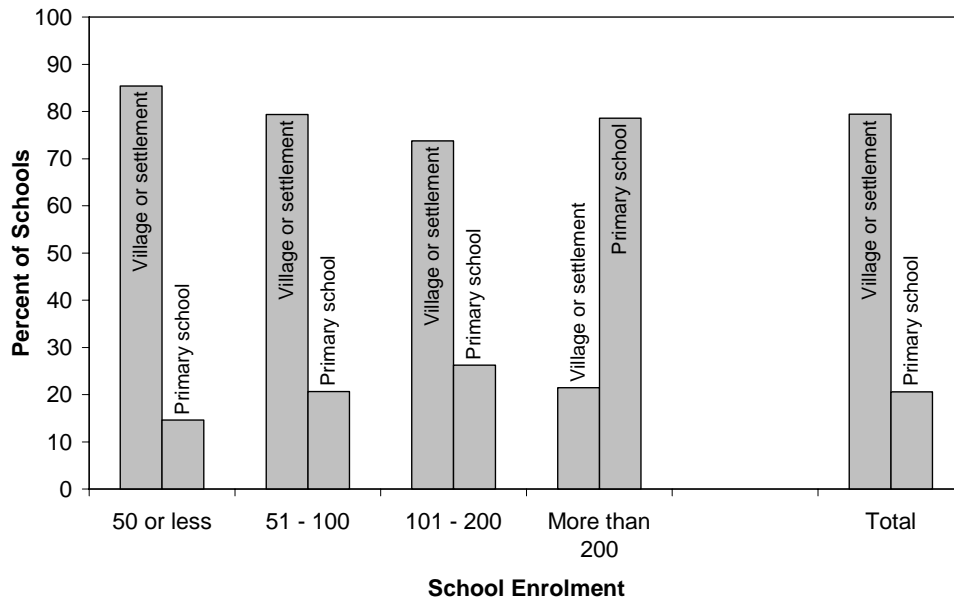
Furthermore, there are associations among school size, school location, and whether or not a school has a Curriculum Committee. Figure 4 shows the trends for the association between school enrolment and school location for the 2006 data collection. The columns to the right in the Figure give the percentage of schools in each location category for the 2006 sample as a whole. The four sets of columns to the left give the percentage of schools in each location category within each school enrolment category. As has already been noted, across the whole sample, the majority of schools are located in rural areas. However, for the largest schools (schools with enrolments more than 200), this trend is reversed: most of the largest schools are located in urban areas. Moving through the other categories of school enrolment, the percentage that are urban schools decreases while the percentage that are rural schools increases. There is a similar trend for the 2005 data collections, and for school size determined by the number of teachers. That is, there are fewer large schools than expected located in rural areas, and more small schools than expected located in rural areas.





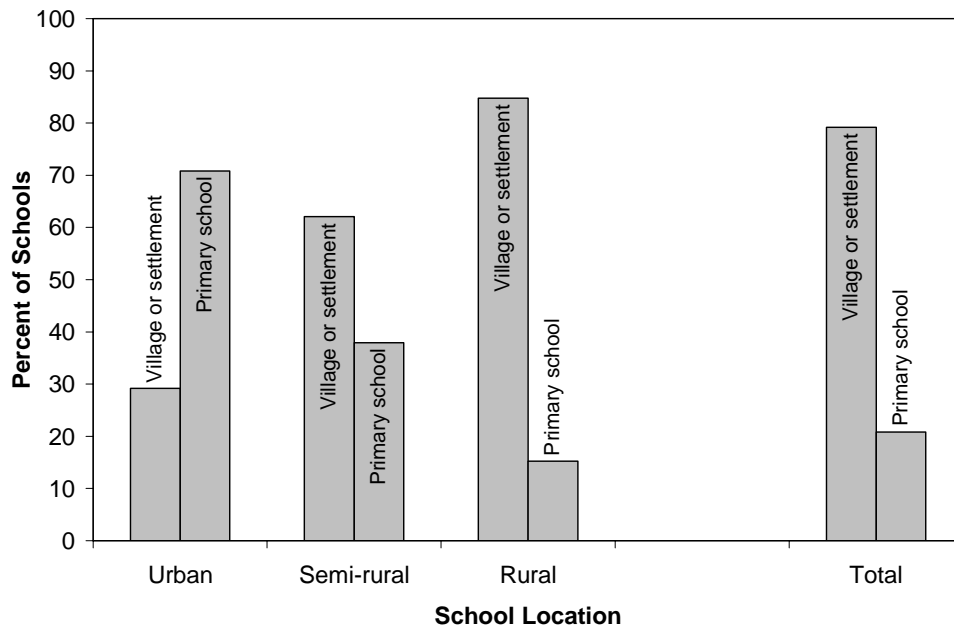
**Figure 4: Association between school size and school location (rural / urban) for the 2006 data collection (N = 685)**

Figure 5 shows the association between school enrolment and the other school location variable (whether the school is located in a primary school or in a village or settlement) for the 2006 data collection. The columns to the right show that most schools are located in villages or settlements, as has already been noted. However, for the largest schools, this trend is reversed: large schools are more likely to be located in primary schools. As school enrolments decrease, larger percentages of schools are located in villages or settlements. Similar trends were noted for the 2005 data collections, and for school size determined by the number of teachers. Again, there are fewer large schools than expected located in villages and settlements, and more small schools than expected located in villages and settlements.



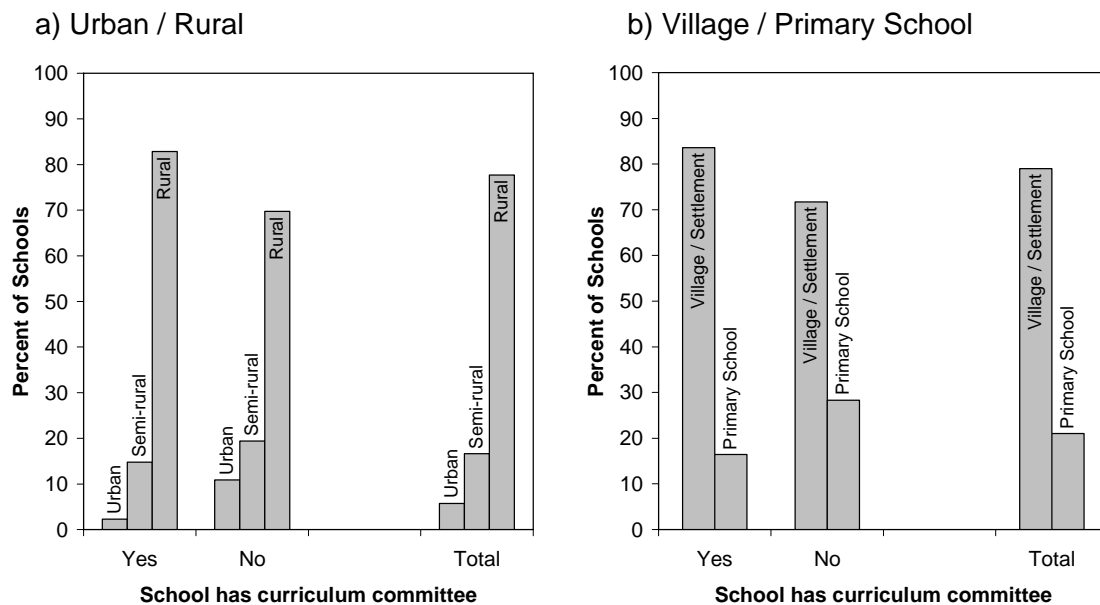
*Figure 5: Association between school size and school location (primary school / village or settlement) for the 2006 data collection (N = 646)*

The results from Figures 4 and 5 suggest that there is an association between the two school location variables. Figure 6 shows the association of the 2006 data collection. The columns to the right show that, once again, the majority of schools are located in villages or settlements. However, for urban schools, this trend is reversed: urban schools are more likely to be located in primary schools than in villages or settlements. Similar trends are noted for the 2005 data collection. That is, moving from urban to rural settings, schools are increasingly likely to be located in villages or settlements; whereas moving from rural to urban settings, schools are increasingly likely to be located in primary schools.



*Figure 6: Association between location according to primary school or village and settlement and location according to urban, semi-rural or rural areas for the 2006 data collection (N = 624)*

School size and school location are in turn associated with the establishment of a Curriculum Committee. Figure 7 shows the associations for the two school location variables for the 2006 data collection. The effect is smaller than those noted above. Focusing on Figure 7a, the majority of schools are located in rural areas. When the sample is split according to whether or not the school has a Curriculum Committee, the majority of schools in each category ('yes' and 'no') are still located in rural areas. The association is that the percentage of schools located in rural areas that have a Curriculum Committee is larger than the percent that do not have a Curriculum Committee. A minority of schools are located in urban areas, but they are even more in the minority if they also have a Curriculum Committee. That is, schools located in rural areas have a slightly greater tendency to have a Curriculum Committee and schools located in urban areas have a slightly reduced tendency to have a Curriculum Committee. There is a similar effect for the second school location variable. The majority of schools are located in villages and settlements; more so if the school has a Curriculum Committee, and slightly less so if the school does not have a Curriculum Committee. Further, these effects are evident in the 2005 data collection.



*Figure 7: Association between school location and whether or not the school has a Curriculum Committee for the 2006 data collection (Figure a: N = 650; Figure b: N = 610)*

Thus, these analyses suggest that the establishment of a Curriculum Committee is only weakly associated with school location and enrolment, and that smaller schools are more likely to be found in rural areas and to be found in villages and settlements. Added to this is the conclusion that, for the 2006 data collection, neither school size nor location is associated with whether or not a school has received the 2003 syllabus documents.

Some of these variables are associated with province and there are differences for particular provinces across the two data collections. However, any conclusions drawn from these associations would need to be treated with considerable caution. Given that the nature of data collection differs among the provinces and across the two data collections for some provinces, some proportion of an association could be attributed to the unevenness of data collection among the provinces and / or across the two data collections rather than to genuine differences among the provinces. Therefore, these associations are not reported here.

### **3.1.3 Characteristics of the Teachers**

A little more than half the teachers are male (2005: 57%; 2006: 61%), and approximately half the teachers are 30 years of age or less (2005: 56%; 2006: 48%). The majority of teachers have completed Grade 10 or higher at school (2005 and 2006: 87%), and more than half the teachers have graduated from the elementary training program (2005: 61%; 2006: 62%) with a substantial percentage in the third year of the program (2005: 25%; 2006: 21%). More than half the teachers have been teaching in elementary schools for five or more years (2005: 60%; 2006: 71%), and in addition, a little more than a third of the teachers (2005: 37%; 2006: 38%) have had teaching experience other than in elementary schools, and more than a third (2005: 36%; 2006: 39%) have worked in Tok Ples Priskuls (TPPS).

More than half the teachers (2005: 63%; 2006: 78%) have been using the 2003 syllabus documents for four terms or more, and the majority (2005: 83%; 2006: 85%) have had some in-service training on the documents. For the 2005 data collection, teachers in rural schools were slightly less likely to have received in-service, but for the 2006 data collection, this association has disappeared.

Nearly half of the teachers are Head Teachers (2005: 47%; 2006: 43%). However, there is an association between the teacher's position in the school (Head Teacher, Deputy Head Teacher, classroom teacher) and the size of the school. The interpretation is that, with a large number of small schools in the sample, the likelihood of a teacher being a Head teacher is increased. The teachers are more or less evenly spread across EP, E1 and E2, but fewer teachers are teachers in multigrade classrooms (Figure 8). Nearly two thirds of the teachers (2005 and 2006: 64%) teach in classrooms with 30 or fewer students, but a substantial proportion of teachers (2005: 15%; 2006: 13%) teach in classrooms with more than 40 students (Figure 9).

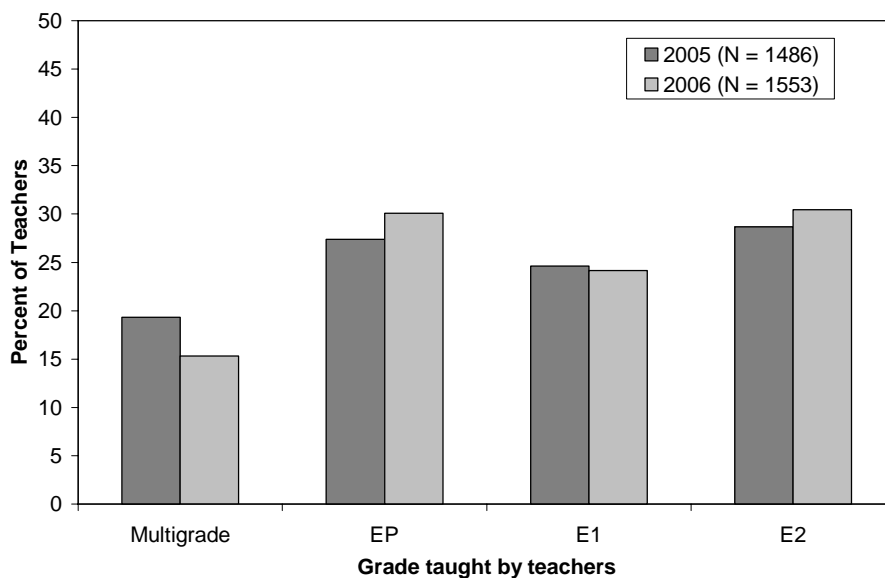


Figure 8: Distribution of grade level taught by teachers

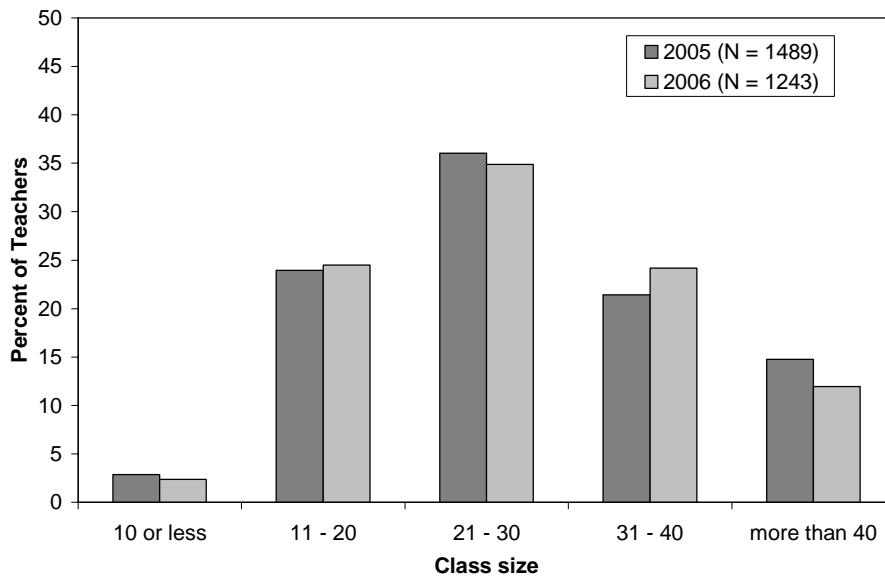


Figure 9: Distribution of teachers' class sizes

Most of the teachers (2005: 70%; 2006: 69%) come from small schools with enrolments of fewer than 100 students, but there is also a substantial proportion from larger schools (enrolments between 100 and 200). Figure 10 shows the distribution of teachers across school sizes, and it can be seen that the distribution remains reasonably stable across the two data collections. The proportion of teachers from the largest schools (with enrolments over 200) is somewhat less in 2005 data collection, but this is probably because NCD, where most schools are large, was not included in the 2005 data collection.

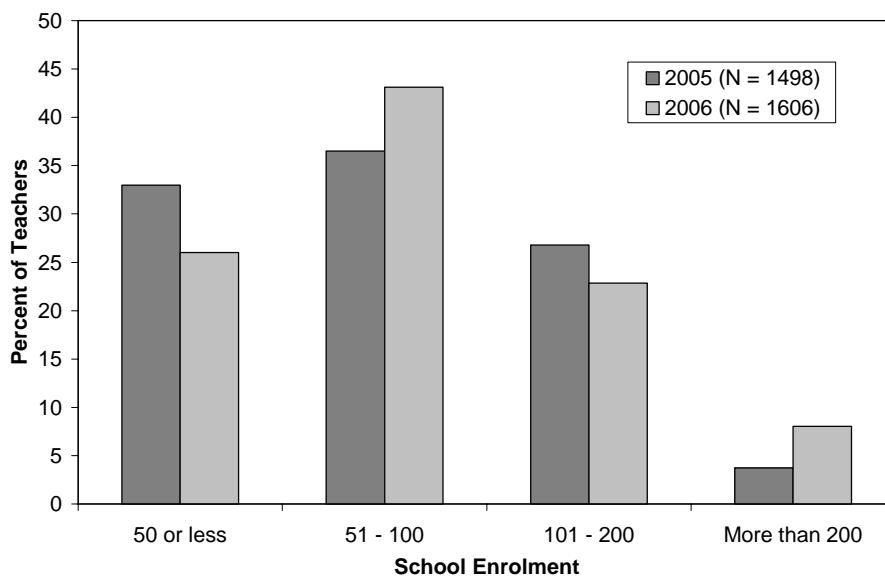
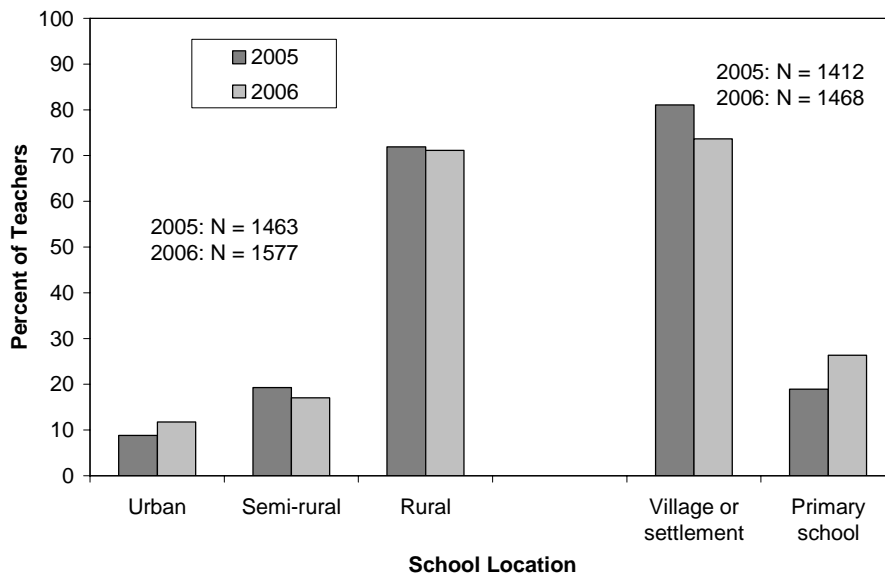


Figure 10: Distribution of teachers according to the size of the schools

Figure 11 shows the distribution according to teachers' schools' locations. The majority of teachers come from schools located in rural areas (2005: 72%; 2006: 71%), and from schools located in villages or settlements (2005: 81%; 2006: 74%). The distributions are reasonably stable across the two data collections, although, for schools located in primary schools, the proportions across the two data collections are different. Again, this can be accounted for by the fact that NCD, where most schools are located in primary schools, was not included in the 2005 data collection.



*Figure 11: Distribution of teachers according to their schools' locations*

The type of classroom that a teacher teaches in (Multigrade or Not Multigrade) is associated with the school's location. Figure 12 shows the associations for the 2006 data collection. Overall, few teachers (15%) teach in multigrade classrooms, but even fewer teachers teach in multigrade classrooms if the school is located in an urban area (3%); or if the school is located in a primary school (8%). Also, the type of classroom is associated with class size and with school size (Figure 13). Again, few teachers teach in multigrade classrooms, but they are more likely to teach in a multigrade classroom if they teach a large class. However, there is the opposite trend with school size: there are few teachers teaching in multigrade classrooms, but they are more likely to teach in a multigrade classroom if they teach in small schools. Thus it appears that multigrade classrooms are more popular in small rural schools located in the village, in which it is more likely to find larger class sizes.

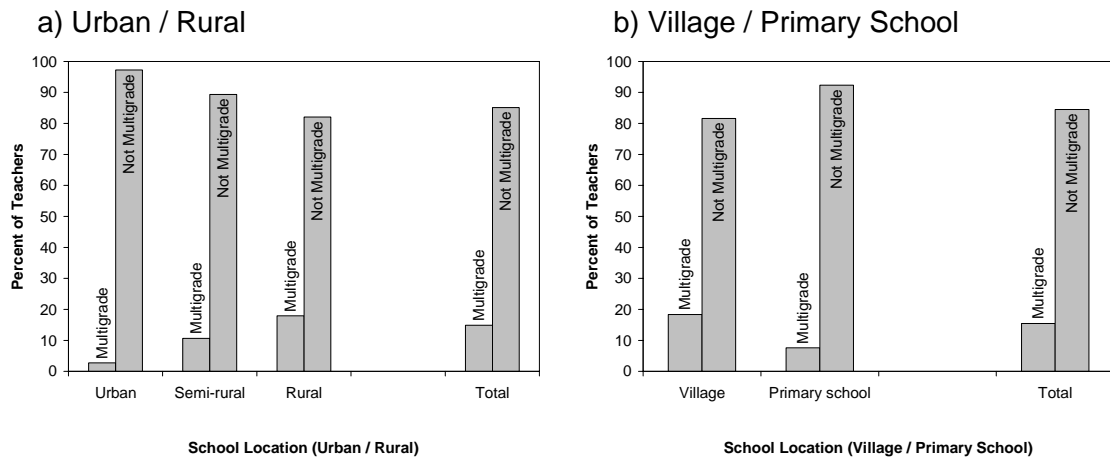


Figure 12: Associations between school location and type of classroom for the 2006 data collection (Figure a: N = 1521; Figure b: N = 1416)

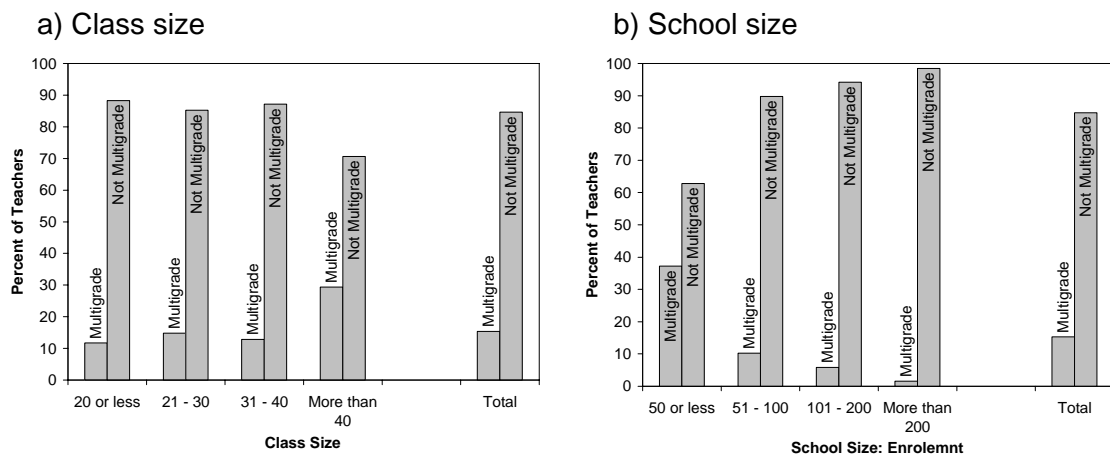


Figure 13: Associations between class size, school size and type of classroom for the 2006 data collection (Figure a: N = 1526; Figure b: N = 1550)

The majority of teachers rate their abilities in English as good to very good (2005: 80%; 2006: 82%), and an overwhelming majority of teachers claim to be able to read and write in a Tok Ples (2005 and 2006: 96%). More than two thirds of the teachers (2005: 68%; 2006: 71%) claim that the language used most often in their classrooms is a Tok Ples, and less than a third (2005: 30%; 2006: 24%) claim that Tok Pisin is the language used most often. Only a small number (2005: 2%; 2006: 5%) claim that English is the main language. Further, the majority of the teachers (2005: 94%; 2006: 93%) claim that the language used most often in the classroom is also the language that the children use outside the classroom.

There are strong associations between school location and the language used most often in the classroom. Figure 14 shows the effects for the 2006 data collection. Overall, Tok Ples is the preferred language across the whole sample, but it is noticeably more so in rural areas and in schools located in villages and settlements; and noticeably less so in



urban areas (where Tok Pisin is the preferred language) and in schools located in primary schools.

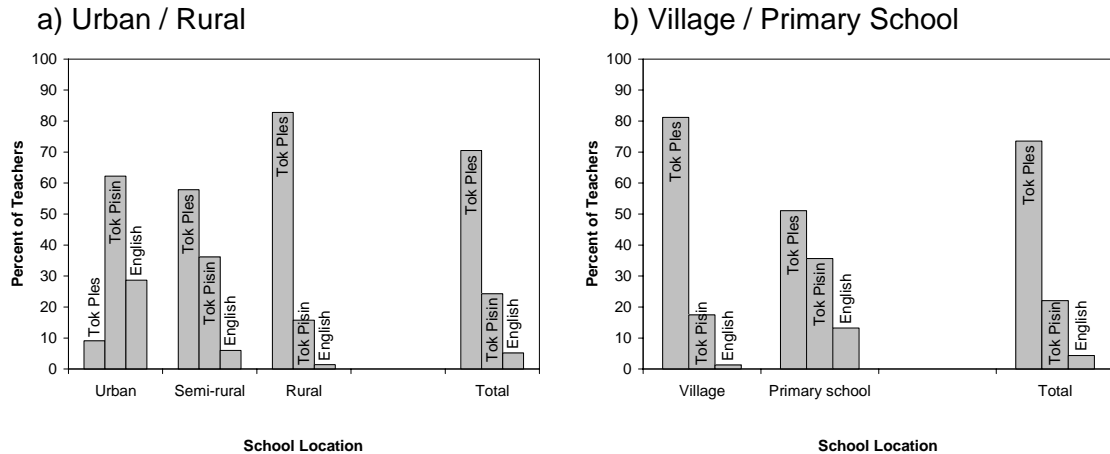


Figure 14: Associations between language used most often in the classroom and school location for the 2006 data collection (Figure a: N = 1488; Figure b: N = 1391)

There is also an association between the main language used in the classroom and whether or not the teacher has had TPPS experience. Figure 15 shows the effect for the 2006 data collection. Tok Ples is the language used by the majority of teachers, but noticeably more so if the teachers have had TPPS experience.

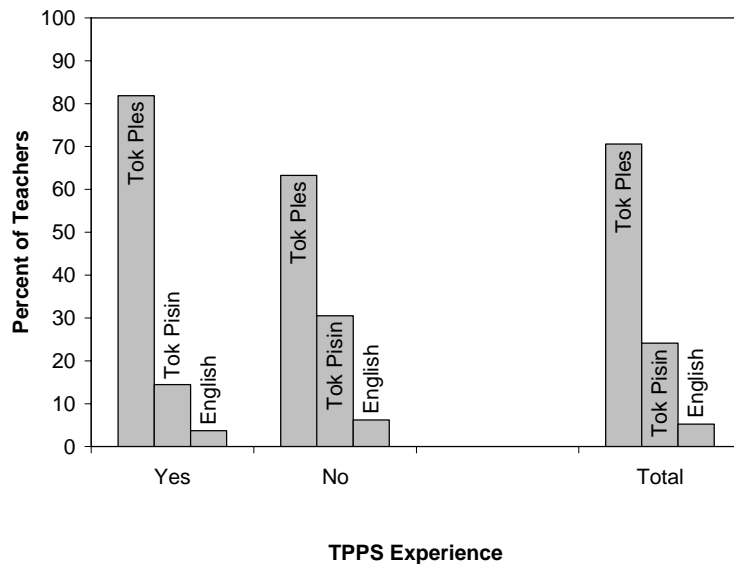
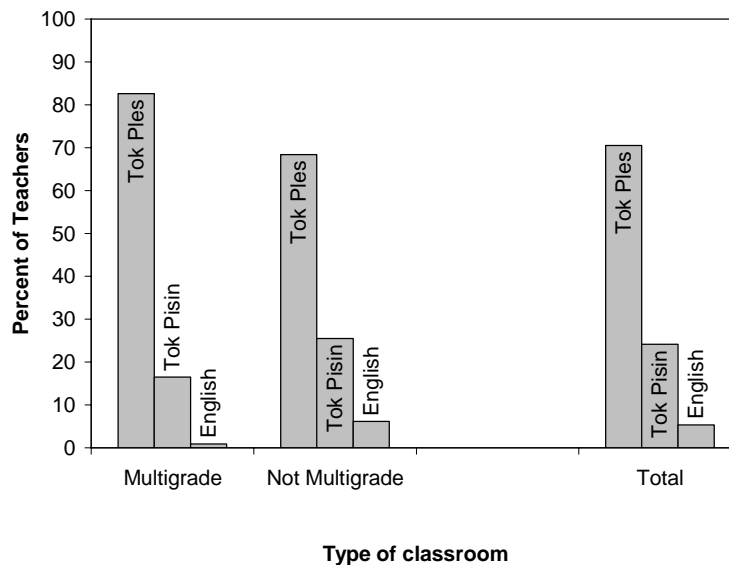


Figure 15: Association between language used in the classroom and whether or not teachers have had TPPS experience for the 2006 data collection (N = 1493)

Finally, there is an association between the language used most often in the classroom and whether or not the teacher teaches in a multigrade classroom. Figure 16 shows the effect for the 2006 data collection. In both types of classroom, Tok Ples is more likely to

be the language used most often, but slightly more so in multigrade classrooms and slightly less so in non-multigrade classrooms. Tok Pisin is used in 24% of classrooms across the whole sample, but it is used in only 17% of multigrade classrooms. Thus, a Tok Ples language is preferred overall, but it appears that Tok Ples is even more preferred in schools located in villages in rural areas, in multigrade classrooms, and in classrooms taught by teachers who have had TPPS experience.



**Figure 16: Association between language used in the classroom and whether or not the classroom is a multigrade classroom for the 2006 data collection (N = 1467)**

The majority of teachers (2005: 73%; 2006: 74%) have received the *In-service Unit 1: Education Reform in PNG*, and of these teachers, the majority (2005: 73%; 2006: 78%) have used it. Of those teachers who have used *In-service Unit 1*, more than two thirds (2005: 69%; 2006: 76%) found it useful. However, these figures are not as encouraging as they first appear. They mean that a little more than half the teachers across the sample (2005: 52%; 2006: 56%) have used the unit; and even fewer (2005: 35%; 2006: 42%) have found it useful.

There are a number of variables discussed above that relate to the provision of materials or services at the provincial or national level. The next set of analyses ask if there are detectable differences across the two data collections in the effectiveness with which the materials and services are provided. There are two ways in which these analyses can be conducted, but both are problematic. The first method is to treat the two samples as two data collections separated by 12 months. It might seem reasonable to attribute any detectable differences across the two samples to the time factor. However, the problem with this method is that any detectable differences across the two samples could just as easily be attributed to the fact that the two samples contain different individuals. The second method is to base the analysis on those individuals who responded in both data collections. It is a more defensible method but the problem with the data at hand is that only a small number of teachers responded in both data collections (see Table 3).

Detectable differences are genuine differences but because the analysis is based on a small number of teachers, there are questions concerning the generalisability of the conclusions drawn from the analyses. That is, detectable differences apply to the sample of 650 teachers who responded to both surveys, but any claims concerning the generalisability of conclusions to the larger population of elementary teachers would need to be accompanied by a note of caution.

Applying the second method, the questions of interest concern:

- Whether or not teachers have received in-service training on the syllabus documents; and
- Whether or not teachers have received *In-service Unit 1*, if they have used it, and how useful it has been.

Of the 623 teachers who responded to the question concerning in-service training in the two data collections, 80% in the 2005 collection claimed to have received in-service training, 85% in the 2006 collection claimed to have received in-service training, and the difference in these two percentages is statistically reliable. That is, a substantial and statistically reliable proportion of those who had missed out on in-service training up until 2005 received in-service training by the 2006 data collection. There are two positive aspects: first, a large percentage of the teachers (approximately 80%) have received in-service training (although it must be noted that 20% have not); and second, significant inroads have been made into meeting the in-service training needs of those who had missed out on in-service training up until 2005.

There is a similar conclusion regarding the question of whether or not teachers have a copy of *In-service Unit 1*. Of the 609 teachers who responded to the question in the two data collections, 76% in the 2005 data collection claimed to possess a copy of *In-service Unit 1*, which increased to 81% in the 2006 data collection: the difference between these two percentages is statistically reliable. Of those who have a copy, there is a similar movement in the numbers relating to the question of whether or not teachers have used *In-service Unit 1* (of the teachers who have received *In-service Unit 1*, 73% in the 2005 collection and 78% in the 2006 collection claimed to have used *In-service Unit 1*). Of the teachers who have used *In-service Unit 1*, there is a small but statistically reliable increase in ratings of its usefulness. Thus, with a note of caution concerning the generalisability of these findings beyond the sample, teachers are reporting positively on the provision of in-service training, and the supply and use of *In-service Unit 1*.

### **3.1.4 Teachers' perceptions of quality and effectiveness**

The survey contained three sets of statements designed to assess teachers' perceptions, attitudes and beliefs concerning the quality and effectiveness of the 2003 Elementary Syllabus documents.

- The first set contained 18 statements, drawn from the wider literature, concerning the quality and effectiveness of syllabuses in general. Teachers were asked to indicate, on a 5-point Likert scale, the extent to which each statement is emphasised in the 2003 Elementary Syllabus documents;

- The second set contained 18 statements, drawn from the 2003 Elementary Syllabus documents themselves, concerning what teachers and students should do or should be able to do. Teachers were asked to indicate, on a 5-point Likert scale, the extent to which they believe that the syllabus documents helped them to achieve these outcomes and objectives;
- The third set contained seven statements concerning the layout and formatting of the syllabus documents and the extent to which teachers felt they can distinguish between key terms used in the documents.

The same concerns raised at the end of the previous section about attempting to detect differences between the two data collections apply to analyses of teachers' responses to these sets of statements. However, a preliminary analysis of the responses from teachers who responded to both data collections showed that there were no statistically reliably differences in their responses across the two data collections. It could be argued that the teachers in the schools in which the qualitative data were collected, because the design encouraged these teachers to focus on teaching and learning issues, might show changes across the two data collections. However, an analysis of these 40 teachers' responses showed no differences across the two data collections. Given these issues, we treat the two data collections as a single data collection collected over approximately 18 months. The teachers who responded in both data collections were randomly assigned to one or the other. This resulted in a data file with 2459 teachers.

***First Set of Statements: Extent to which the 2003 Elementary Syllabus documents emphasised aspects of effectiveness and quality***

The Likert scale for each statement ran from: 1 = not at all, through to 5 = a lot. Thus, a high score (close to 5) indicates that, according to the teacher, the statement is emphasised a lot in the syllabus documents, whereas a low score (close to 1) indicates that the statement is not emphasised in the syllabus documents. The means for all statements (shown in Table 4) are well above the midpoints (the midpoint of a five-point scale is 3), indicating that, on the whole, teachers believe that these statements are emphasised in the syllabus documents.

A factor analysis indicates that there are three underlying dimensions to these statements. That is, some statements tend to 'go together' and a factor analysis reveals the grouping of the statements. It is assumed that the statements that belong to a particular group are assessing something in common, and part of the task of interpreting a factor analysis solution is determining and labelling that common aspect; that is, determining and labelling the underlying dimension. Careful consideration of the statements within a group usually reveals the nature of the underlying dimension and an appropriate label. The statements in Table 4 are grouped according to the factor analysis solution, and the labels for the underlying dimensions are shown in bold. Thus, the original 18 statements appear to be assessing the extent to which teachers believe that the syllabus documents emphasise:

- A focus on students;
- A focus on content; and
- A focus on the social and cultural context.

- (Four statements, shown at the bottom of Table 4, do not fit into the structure.)

During the development of the set of statements, the wider literature on ‘quality curriculum’ suggested that the components of a quality curriculum can be grouped according to their relevance to:

- Students - What students are encouraged to do or what students should be able to do;
- Content - What students need to learn and how to assess that learning while being flexible and child-centred; and
- Context - How to make learning relevant to all learners by, for instance, incorporating realistic activities that draw on real life and everyday experiences of the community.

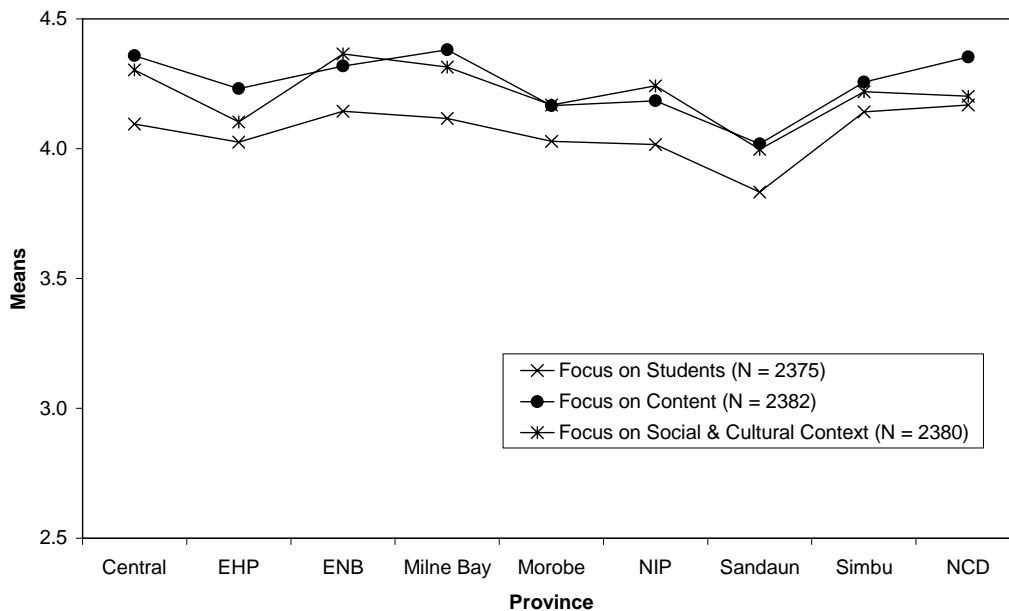
**Table 4: Means and standard deviations for the set of statements asking teachers to indicate the extent to which the 2003 Elementary Syllabus documents emphasise aspects of quality and effectiveness**

Statements and Scales	Mean	Standard deviation
<b>Scale 1: Focus on students</b>	<b>4.07</b>	<b>0.78</b>
A syllabus encourages children to have personal values.	4.01	0.96
The content of a syllabus allows equal access for all students.	3.99	0.97
A syllabus is relevant to all learners.	4.20	0.95
<b>Scale 2: Focus on content</b>	<b>4.24</b>	<b>0.67</b>
The content of a syllabus is flexible.	4.10	1.02
The content of a syllabus clearly states what students need to learn.	4.33	0.91
A syllabus encourages cooperation, not competition.	4.21	0.98
The content of a syllabus is motivating for learners.	4.20	0.93
The content of a syllabus focuses on the learners.	4.21	0.95
The content of a syllabus provides assessment for learning.	4.42	0.87
<b>Scale 3: Focus on social and cultural context</b>	<b>4.22</b>	<b>0.72</b>
A syllabus encourages children to be concerned for the cultural richness of the community.	4.37	0.94
A syllabus encourages teachers to interact with the community.	4.33	0.95
The content of a syllabus encourages high standards.	3.81	1.12
A syllabus encourages children to contribute to society.	4.25	0.96
A syllabus includes everyday experiences of the community.	4.36	0.95
<b>Single items</b>		
A syllabus encourages children to work well with other people.	4.19	0.95
The content of a syllabus helps students to find new ways of doing things and to be creative.	4.37	0.89
A syllabus encourages children to be independent.	3.68	1.22
A syllabus includes realistic activities that are close to real life activities.	4.41	0.87

The statements that were presented to the teachers were written so that they addressed these major components of quality curriculum. Thus, the factor analysis solution and its interpretation align closely with the theoretical understanding of what is meant by ‘quality’ with respect to curriculum and /or syllabuses.

A score is calculated for each teacher for each of the three new scales. These scores also range from 1 (little emphasis) through to 5 (a lot of emphasis). The means for the three scales (shown in Table 4 in bold) are well above the midpoints of the scales, indicating that, on the whole, teachers believe that the syllabus documents emphasise a focus on students, a focus on content, and a focus on the social and cultural context. This is not surprising given that the means for the individual statements contributing to each scale are also large.

Figure 17 shows the mean scores for each scale (Students, Content, and Social and Cultural Context) according to the province in which teachers' schools are located. Even though there is not much separating the means across the provinces, there is nevertheless a statistically reliable effect. From Figure 17, it appears that most of the effect can be attributed to teachers from Sandaun. The means for Sandaun are high (well above the midpoint of 3), but elementary teachers from Sandaun are less convinced than teachers from other provinces of the extent to which the syllabus documents emphasise the three aspects of quality and effectiveness.

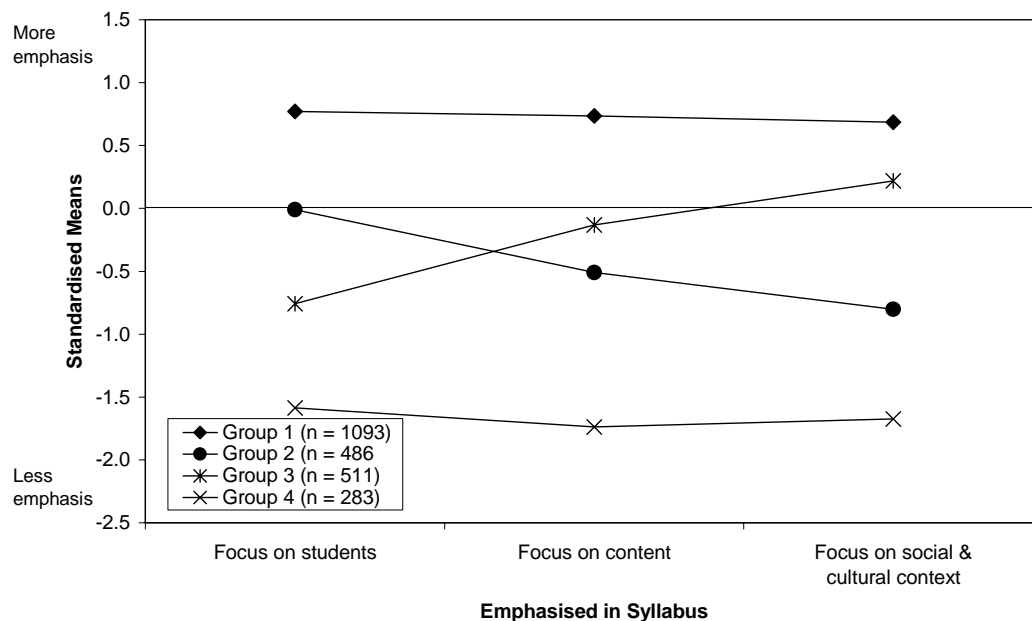


**Figure 17: Means for each province for teachers' perceptions of the extent to which the syllabus documents emphasise aspects of quality and effectiveness**

As shown in Table 4, the means for the three new scales are large, but the standard deviations indicate that there is substantial variation in the teachers' ratings. Indeed, there are teachers who believe that these aspects of quality and effectiveness receive little emphasis in the syllabus documents. The next analysis, a cluster analysis, attempts to

group the teachers so that teachers within a group have reasonably similar profiles across the three scales. Figure 18 shows the results of the cluster analysis. The analysis indicates that the sample is characterised by four groups of teachers: a large group that claims that the three aspects of quality and effectiveness are emphasised a lot in the syllabus documents; a small group that claims that there is not much emphasis in the syllabus documents on any of these aspects of quality and effectiveness. There are also two intermediate groups whose profiles cross over. One intermediate group perceives average emphasis on students but less than average emphasis on content and the social and cultural context, and the other intermediate group perceives less than average emphasis on students but average emphasis on content and the social and cultural context. Thus, the four groups of teachers are characterised as:

- Group 1: Perceives a lot of emphasis on all three aspects of quality and effectiveness;
- Group 2: Perceives less emphasis on content and the social and cultural context;
- Group 3: Perceives less emphasis on students;
- Group 4: Perceives little emphasis on any of the aspects of quality and effectiveness.



*Figure 18: Profiles for four groups of teachers formed according to the extent to which they perceive an emphasis on aspects of quality and effectiveness in the 2003 Elementary Syllabus documents*

The next set of analyses attempt to characterise teachers' membership in these groups in terms of schools' and teachers' background characteristics. First, group membership is not associated with:

- Gender;
- The school's location (in a town, semi-rural or rural area; and in a village or a primary school);

- Previous teaching experience (whether or not the teacher has had TPPS experience; and whether or not the teacher has had teaching experience other than in elementary).

Second, group membership is associated with whether or not the teacher has received in-service training on the syllabus documents (Figure 19), whether or not the school has a Curriculum Committee (Figure 20), and with school size (Figure 21). Figure 19 shows the association between group membership and whether or not the teachers have received in-service training. Across the whole sample (the columns to the right in the figure), only a small percentage of teachers have not received any form of in-service training on the syllabus documents. However, when moving from Group 1 (the group that perceives a lot of emphasis on all aspects of quality and effectiveness) to Group 4 (the group that perceives little emphasis on any of the aspects of quality and effectiveness), that percentage increases. Put another way, most of Group 4 members have received in-service training, but those who said 'yes' to in-service are under-represented in Group 4, and those who said 'no' are over-represented in Group 4. The converse holds: most Group 1 members have received in-service training, but those who said 'yes' are over-represented in Group 1, and those who said 'no' are under-represented in Group 1. Thus, in-service training appears to have had a positive impact on teachers' perceptions.

Figure 20 shows the association between group membership and whether or not the school has a Curriculum Committee. Across the whole sample, approximately half the teachers come from schools that have a Curriculum Committee, but for members of Group 4 (the group that perceives little emphasis on any of the aspects of quality and effectiveness), the percentage drops to close to 46%, and for Group 1, the percentage rises to approximately 58%. That is, teachers who said 'Yes' to the question concerning a Curriculum Committee are under-represented in Group 4, and over-represented in Group 1. Thus, the establishment of a Curriculum Committee in a school appears to have had a positive impact on teachers' perceptions.

Figure 21 shows the association between group membership and school size (as determined by the number of teachers). Across the whole sample, approximately 50% of teachers come from schools with three teachers. However, for Group 4, this percentage drops to close to 40%. Teachers from three-teacher schools are under-represented in Group 4, whereas teachers from smaller schools and teachers from larger schools are over-represented in Group 4. That is, teachers who come from schools that are too small (one or two teacher schools) or from schools that are too large (four or more teachers) are over-represented in Group 4; alternatively, teachers who come from three-teacher schools are under-represented in Group 4. Thus, school size and in particular the number of colleagues that teachers can draw upon for advice appears to affect teachers' perceptions.



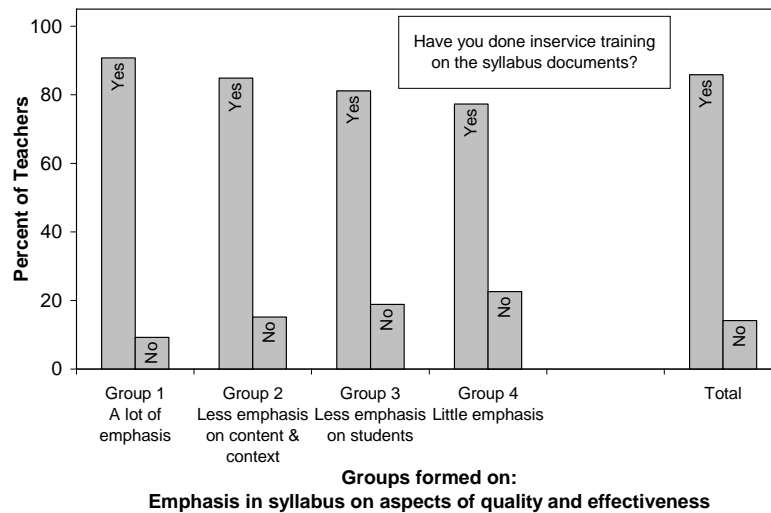


Figure 19: Emphasis-in-syllabus groups BY in-service (N = 2334)

Group membership is also associated with teachers' self-ratings of their English language abilities (Figure 22), and with the length of time teachers have been using the syllabus documents (Figure 23). Figure 22 shows the association between group membership and English language abilities. Across the whole sample, 27% of the teachers rate their English language abilities as 'very good'. However, when contrasting Group 1 (the group that perceives a lot of emphasis on all aspects of quality and effectiveness) with Group 4 (the group that perceives little emphasis on any of the aspects of quality and effectiveness), this percentage drops from 31% to 24%. Thus English language ability appears to influence teachers' perceptions of the degree to which the syllabus documents emphasise aspects of quality and effectiveness.

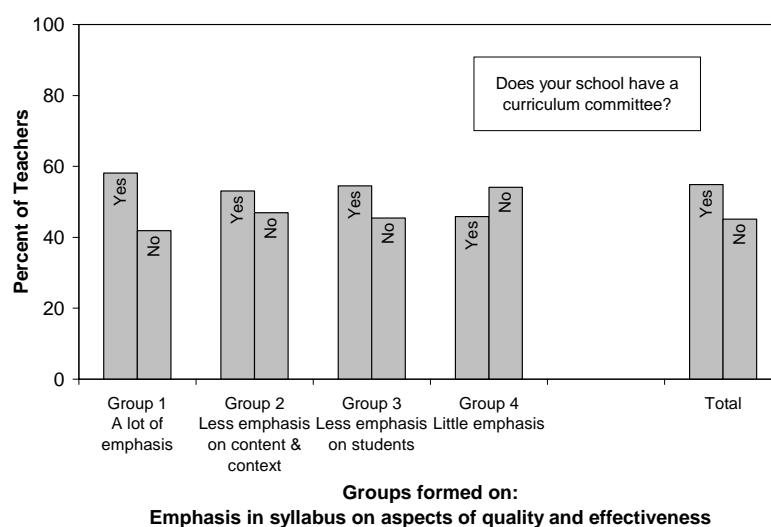


Figure 20: Emphasis-in-syllabus groups BY Curriculum Committee (N = 2270)

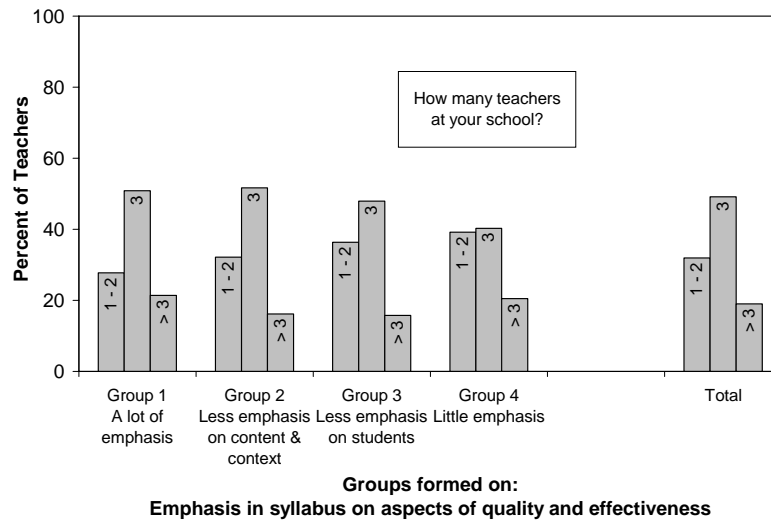


Figure 21: Emphasis-in-syllabus groups BY School size (N = 2359)

Figure 23 shows the association between group membership and the length of time teachers have been using the syllabus documents. The percentage of teachers who have been using the syllabus documents for four or more terms steadily decreases when moving from Group 1 (perceive a lot of emphasis on aspects of quality and effectiveness) through to Group 4 (perceive little emphasis on any of the aspects of quality and effectiveness). The opposite trend applies to teachers who have been using the syllabus for three terms or less: the percentage steadily increases when moving from Group 1 through to Group 4. Thus, it appears that teachers who were working through the syllabus documents for the first time (that is, using the documents for three terms or less) are less likely to perceive an emphasis on aspects of quality.

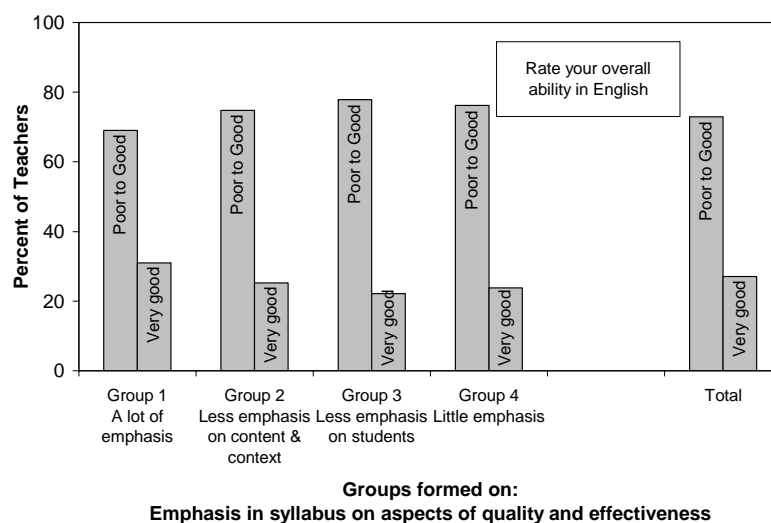
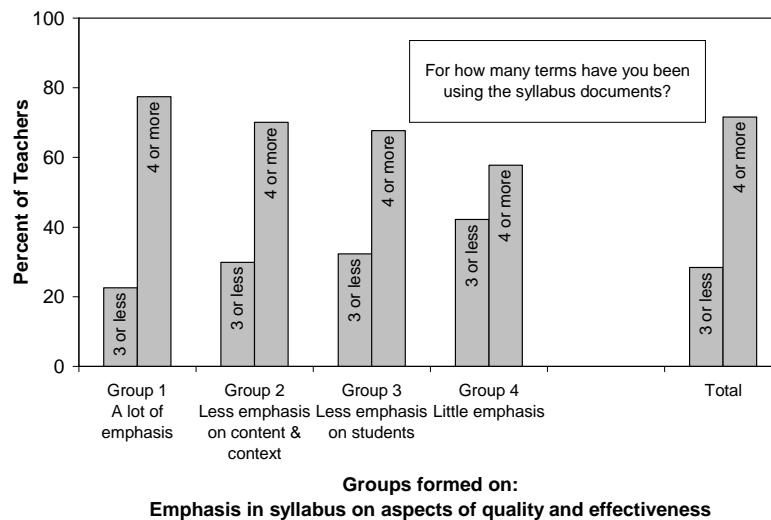


Figure 22: Emphasis-in-syllabus groups BY English language ability (N = 2331)



**Figure 23: Emphasis-is-syllabus groups BY length of time using the syllabus documents (N = 2202)**

**Second Set of Statements: Extent to which the 2003 Elementary Syllabus documents helps teachers to achieve the syllabus's stated outcomes and objectives.**

The Likert scale for each statement ran from: 1 = not at all, through to 5 = a lot. Thus, a high score (close to 5) indicates that, according to the teacher, the syllabus documents help the teacher to achieve the stated objective or outcomes, whereas a low score (close to 1) indicates that syllabus documents do not help the teacher to achieve the stated objective or outcomes. The means for all statements (shown in Table 5) are well above the midpoints of the scales, indicating that, on the whole, teachers believe that the syllabus documents provide help in achieving the stated objectives and outcomes.

A factor analysis indicates that there are two underlying dimensions to these statements. Table 5 shows the statements grouped according to the indications of the factor analysis and an appropriate label for each dimension (shown in bold). Thus, the original 18 statements appear to be assessing the extent to which teachers believe that the syllabus documents help with:

- A focus on planning; and
- A focus on integrating the syllabus with past and future learning, across curriculum areas, and with aspects of the social and cultural environment in which the syllabus is to be implemented.
- (Three statements, shown at the bottom of Table 5, do not fit into the structure.)

During the development of the set of statements, the syllabus documents were consulted, and a large number of statements that appeared to be advising teachers of an approach to teaching or of ways to organise their teaching were taken directly from the documents. On the whole, these statements addressed one of three main aspects of curriculum organisation:

- Planning;

- Teaching and learning; and
- Assessment and evaluation.

The factor analysis solution and its interpretation align somewhat with this understanding of what is meant by curriculum organisation, but there are also significant differences. The data from the teachers suggest two underlying dimensions whereas we hypothesised three dimensions. The dimension that is lost in teachers' perceptions is the assessment-and-evaluation dimension. This is not to say that the teachers perceive assessment and evaluation issues to be unimportant. Quite the contrary: statements pertaining to assessment and evaluation are embedded in the factorial structure, and teachers' ratings of these statements are high. It is just that the statements that we hypothesised were assessment-and-evaluation statements do not, according to the teachers' perceptions, go together as an assessment and evaluation dimension.

**Table 5: Means and standard deviations for the set of statements asking teachers to indicate the extent to which the 2003 Elementary Syllabus documents help them to achieve stated outcomes and objectives**

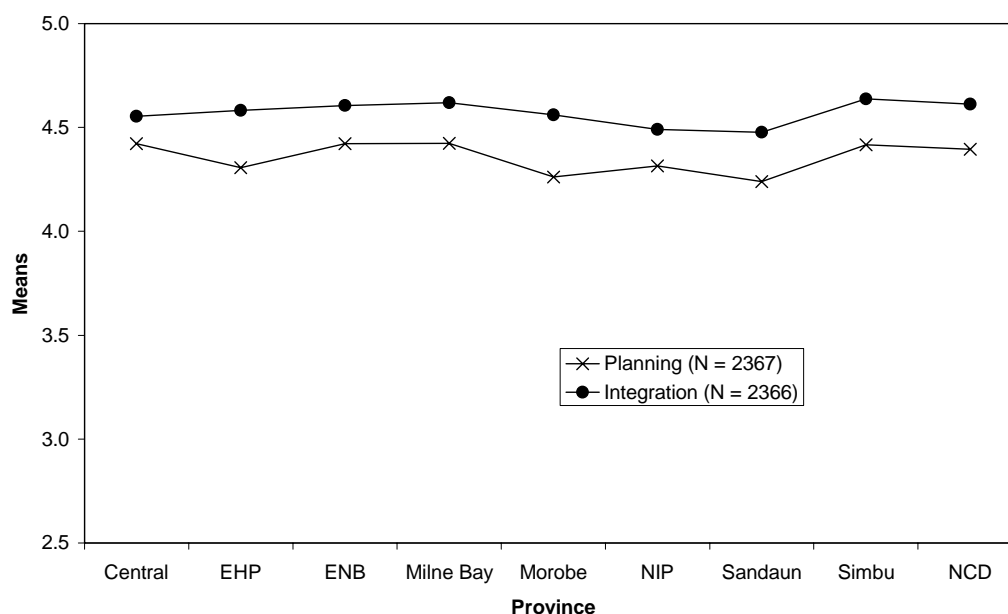
Statements and Scales	Mean	Standard deviation
<b>Scale 1: Planning</b>	<b>4.36</b>	<b>0.59</b>
Outcomes and indicators allow students' achievements to be described in consistent ways.	4.21	0.93
Teachers provide opportunities for students to assess their own work.	4.00	1.10
Teachers develop lesson plans that describe the order of how teaching and learning will take place.	4.57	0.74
Outcomes and indicators help teachers to assess and report students' achievements.	4.60	0.73
Outcomes and indicators help teachers to plan their teaching programs.	4.66	0.73
Teachers use assessment information to evaluate the effectiveness of their teaching.	4.49	0.82
Teachers develop weekly plans to sequence the lesson activities from the unit of work.	4.49	0.83
Opportunities are provided for students with special needs so that they can participate in a variety of learning experiences.	3.90	1.11
Teachers use records of students' achievement to plan and program future learning.	4.31	0.92
<b>Scale 2: Integration</b>	<b>4.58</b>	<b>0.53</b>
Students have the right to participate in any curriculum activity regardless of their gender, ability, or language group.	4.48	0.82
Teaching should help students to develop pride in their culture and language.	4.60	0.72
The learning that students experience in Elementary sets the foundations for learning in Lower and Upper Primary.	4.56	0.76
Elementary teaching is based on learning that is relevant to students' lives and values in the community in which they live.	4.69	0.65
Activities in one subject are integrated with activities in other subjects.	4.41	0.87
Students learn best when learning is built on what is already known.	4.73	0.63
<b>Single items</b>		
A successful classroom provides opportunities for students to work in small groups, pairs, individually, and as a whole class.	4.61	0.75
Outcomes and indicators help teachers to monitor students' learning.	4.58	0.75
To ensure a student-centred approach to teaching and learning, students are the focus of learning activities.	4.46	0.80

The first dimension (labelled 'Planning' in Table 5) contains statements that are directly related to planning, but also contains statements related to assessment and evaluation, and statements that at first glance do not appear to related to either planning or assessment and evaluation. However, it can be argued that these statements relate to an aspect of teaching or of assessment that needs to be planned or that feeds into the planning of a

subsequent activity. The second dimension (labelled 'Integration' in Table 5) contains statements that could be interpreted as relating to issues to do teaching and learning, but an alternative interpretation is that these statements appear to be encouraging teachers to make connections with teaching and learning that take place at other times, in other places, and in other curriculum areas. Hence 'Integration' seems to be a more appropriate label for the second dimension than 'Teaching and Learning'.

A score is calculated for each teacher for each of the two new scales (Planning and Integration). These scores range from 1 (no help) through to 5 (a lot of help). The means for the two scales (shown in Table 5 in bold) are well above the midpoints of the scales, indicating that, on the whole, teachers believe that the syllabus documents provide help in achieving a focus on planning, and a focus on integrating the syllabus across curriculum areas, with past and future learning, and with the social and cultural context in which learning is to take place.

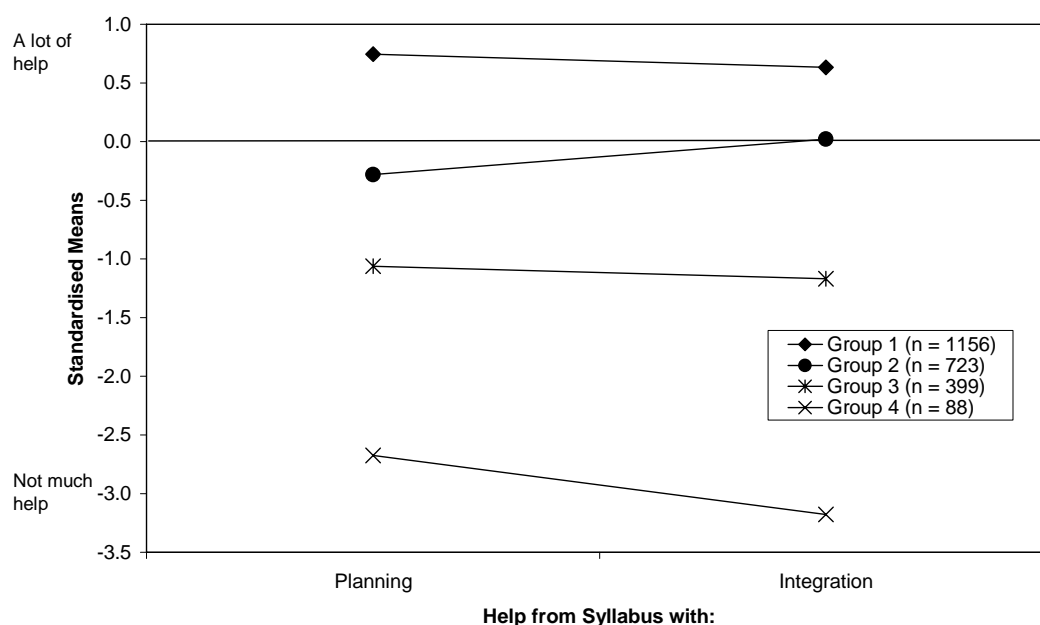
Figure 24 shows the mean scores for the two scales (Planning and Integration) according to the province in which teachers' schools are located. As was the situation with the previous set of statements, there is not much separating the means across the provinces, but there is nevertheless a statistically reliable effect and, again, it appears that most of the effect can be attributed to teachers from Sandaun, and possibly, with respect to the Planning scale, to teachers from Morobe. The means for Sandaun and Morobe are high, but elementary teachers from Sandaun and Morobe are less convinced than teachers from other provinces of the extent to which the syllabus documents help with organising planning; and teachers from Sandaun are, in addition, less convinced than teachers from other provinces of the extent to which the syllabus documents help with organising integration.



*Figure 24: Means for each province for teachers' perceptions of the extent to which the syllabus documents help with curriculum organisation*

As with the first set of statements, the means for the new scales are large but the standard deviations indicate that there is considerable variation in the teachers' ratings. A cluster analysis suggests that the sample can be characterised by four groups of teachers. Figure 25 shows the results of the cluster analysis. There is a large group that claims that the syllabus documents help a lot with the two aspects of organization, and a small group that claims that the syllabus documents offer little help. In addition, there are two intermediate groups: a group that claims the syllabus documents offer average levels of help; and a group that claims the syllabus documents offer moderately low levels of help. The four groups of teachers are characterised as:

- Group 1: Syllabus provides lots of help with organising Planning and Integration;
- Group 2: Syllabus provides average levels of help with organising Planning and Integration;
- Group 3: Syllabus provides moderately low levels of help with organising Planning and Integration;
- Group 4: Syllabus provides little help with organising Planning and Integration.



**Figure 25: Profiles for four groups of teachers formed according to the extent to which they believe that the syllabus documents help them to organise Planning and Integration**

The next set of analyses characterise teachers' membership in these groups in terms of schools' and teachers' background characteristics. First, group membership is not associated with:

- Gender;
- The school's location (in a town, semi-rural or rural area; and in a village or a primary school);
- Previous teaching experience (whether or not the teacher has had TPPS experience; and whether or not the teachers have had teaching experience other than in elementary).

Group membership is, however, associated with whether or not teachers have received in-service on the syllabus documents (Figure 26), whether or not their schools have a Curriculum Committee (Figure 27) and school size (Figure 28). Figure 26 shows the association between group membership and whether or not the teacher has received in-service training. The trend is similar to the trend for group membership established on the first set of statements (see Figure 19). Overall, few teachers have not received in-service training, but when moving from Group 1 (the group that claims that the syllabus provides a lot of help with Planning and Integration) to Group 4 (the group that claims that the syllabus provides little help with Planning and Integration), there is a noticeable increase in the proportion of teachers who claim not to have received in-service training.



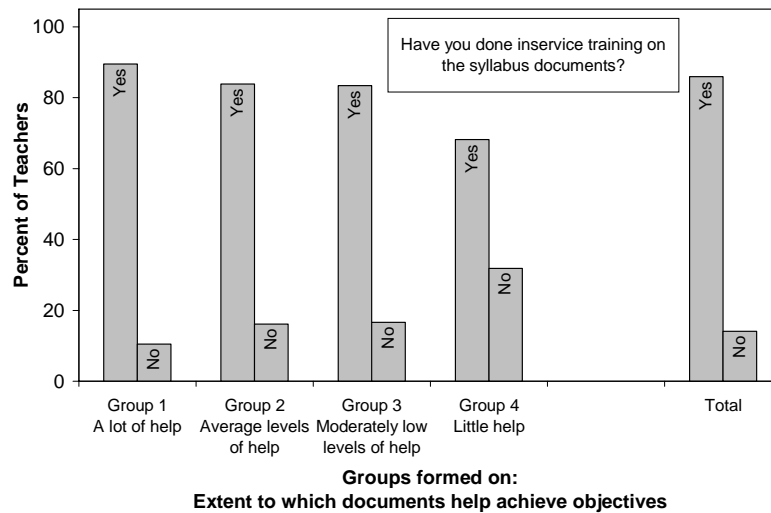


Figure 26: Help from syllabus groups BY in-service training (N = 2327)

Figure 27 shows the association between group membership and whether or not the school has a Curriculum Committee. Overall, 55% of teachers come from schools with a Curriculum Committee, but for Groups 1 (the groups that perceives a lot of help with Planning and Integration), this proportion rises to 59%. However, for the other three groups, the percentage of teachers who come from school with Curriculum Committees is less.

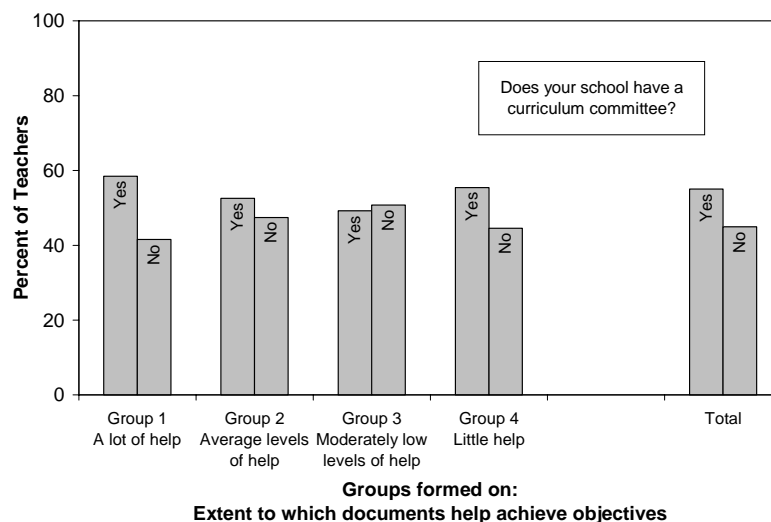
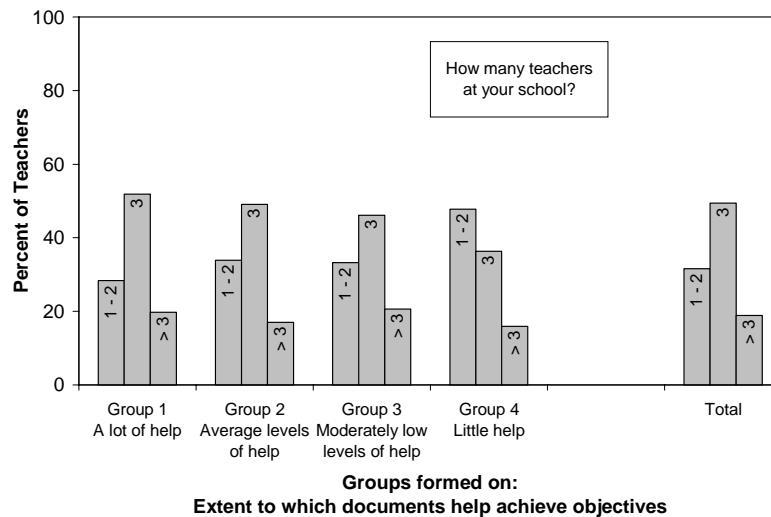


Figure 27: Help from syllabus groups BY Curriculum Committee (N = 2261)

Figure 28 shows the association between group membership and school size (determined by the number of teachers). Approximately 50% of the teachers come from schools with three teachers, but in Group 4 (the group that claims that the syllabus provides little help with Planning and Integration), that percentage drops to approximately 36%. For teachers who come from smaller schools (schools with one or two teachers), the opposite holds. Approximately 32% of the teachers come from smaller schools, but in Group 4, that

percentage increases to approximately 48%. That is, teachers from medium sized schools are under-represented in Group 4, and teachers from small schools are over-represented in Group 4.



**Figure 28: Help from syllabus groups BY School size (N = 2350)**

Group membership is also associated with teachers' self-ratings of their English abilities (Figure 29), and with the length of time teachers have been using the syllabus documents (Figure 30). Figure 29 shows the association between group membership and teachers' self-ratings of their English abilities. Across the whole sample, approximately a quarter of the teachers rate their English language abilities as 'very good'. However, when moving from Group 1 to Group 4, there is a noticeable decrease in the percentage of teachers who rate their English abilities as 'very good'. Thus, English language ability appears to influence teachers' perceptions of the degree to which the syllabus documents help with Planning and Integration.

Figure 30 shows the association between group membership and the length of time teachers have been using the syllabus documents. The percentage of teachers who have been using the syllabus documents for four or more terms steadily decreases when moving from Group 1 (perceive a lot of help with organising Planning and Integration) through to Group 4 (perceive little help). The opposite trend applies to teachers who have been using the syllabus for three terms or less: the percentage steadily increases when moving from Group 1 through to Group 4. Thus, it appears that teachers who were working through the syllabus documents for the first time are more likely to perceive lower levels of help from the syllabus documents with Planning and Integration.

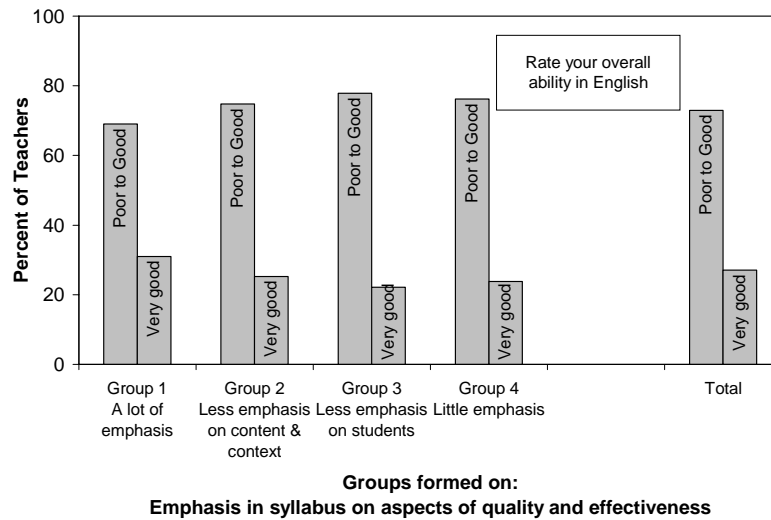


Figure 29: Help from syllabus groups BY English language ability (N = 2324)

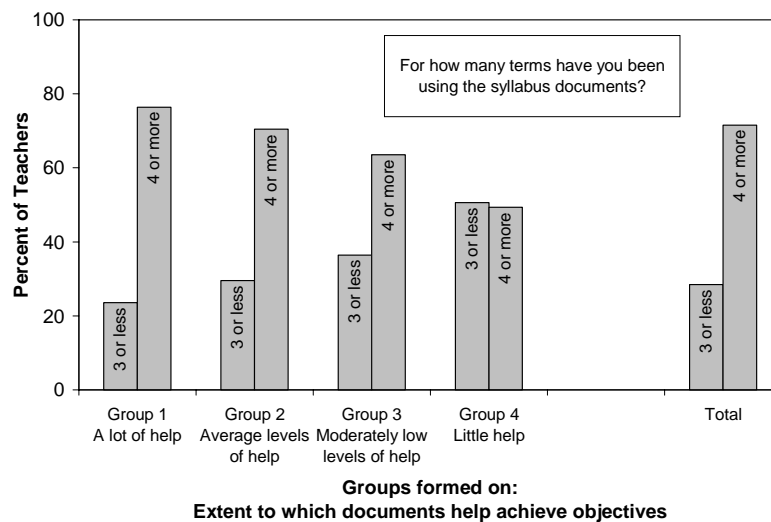


Figure 30: Help from syllabus groups BY length of time using the syllabus documents (N = 2198)

**Third Set of Statements: The extent to which teachers agree with statements concerning the layout and formatting of 2003 Elementary Syllabus documents and their ability to distinguish key terms and phrases used in the syllabus documents.**

The Likert scale for each statement ran from: 1 = strongly disagree, through to 5 = strongly agree. The statements were worded positively. Thus, a high score (close to 5), indicating strong agreement with a statement, can be interpreted as meaning that the teacher has little difficulty with the layout and formatting issue being expressed in the statement, whereas a low score (close to 1) can be interpreted as meaning that the teacher does have difficulty with the layout and formatting issue. The means for all statements (shown in Table 6) are well above the midpoints of the scales, indicating that, on the

whole, teachers have little difficulty with the layout and formatting of the syllabus documents, and distinguishing key terms and phrases used in the documents.

A factor analysis was conducted on the responses to these statements, but its purpose was less to do with obtaining underlying dimensions; rather its purpose was to reduce the number of variables from seven to a more manageable set. The factor analysis indicates two clearly defined sets of statements. Table 6 shows the statements grouped according to the indications of the factor analysis and an appropriate label for each group (shown in bold). Thus, the original seven statements can be reduced to two variables that appear to be assessing the extent to which teachers have difficulty with:

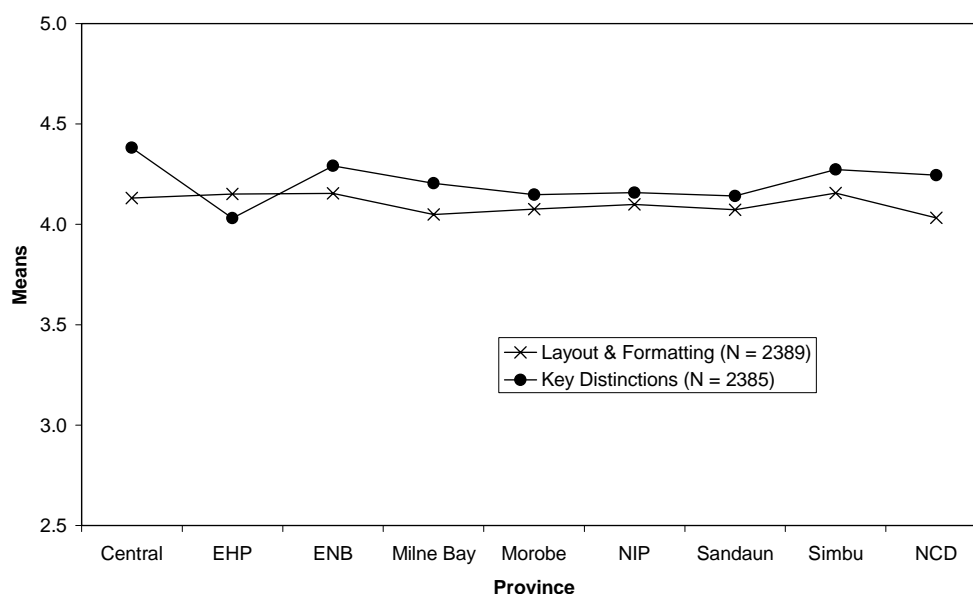
- Layout and formatting; and
- Being able to distinguish key terms and phrases.

A score was calculated for each teacher for each of the two new scales. These scores range from 1 (strongly disagree) through to 5 (strongly agree). The means for the two scales (shown in Table 6 in bold) are well above the midpoints of the scales, indicating that, on the whole, teachers have little difficulty with layout and formatting of the syllabus documents, and little difficulty distinguishing key terms and phrases used in the syllabus documents.

Figure 31 shows the mean scores for the two scales (Layout and Formatting, and Making Key Distinctions) according to the province in which teachers' schools are located. There is, again, not much separating the means across the provinces, and indeed, the differences for the Layout-and-Formatting scale are not statistically reliable. There is, however, a statistically reliable effect for the Key-Distinctions scale, and it appears that most of the effect can be attributed to teachers from Eastern Highlands. The mean for Eastern Highlands is high but nevertheless teachers from Eastern Highlands experience slightly more difficulty with making distinctions between key terms and phrases than teachers from other provinces.

**Table 6: Means and standard deviations for the set of statements asking about layout and formatting of the 2003 Elementary Syllabus**

Statements and Scales	Mean	Standard deviation
<b>Scale 1: Layout and formatting</b>	<b>4.11</b>	<b>0.70</b>
I can easily find what I need in the syllabus documents.	4.07	0.89
The format of the syllabus documents is easy to follow.	4.01	0.95
I can easily understand the English used in the syllabus documents.	4.23	0.78
The relationship between the Teachers Guide and each of the syllabus documents is clear.	4.14	0.86
<b>Scale 2: Key Distinctions</b>	<b>4.21</b>	<b>0.71</b>
I understand the differences between ' <i>Strands</i> ' and ' <i>Sub-strands</i> '.	4.40	0.78
I understand the difference between ' <i>Recommended knowledge</i> ' and ' <i>Recommended skills and suggested activities</i> '.	3.86	0.94
I understand the difference between ' <i>Outcomes</i> ' and ' <i>Indicators</i> '.	4.36	0.78

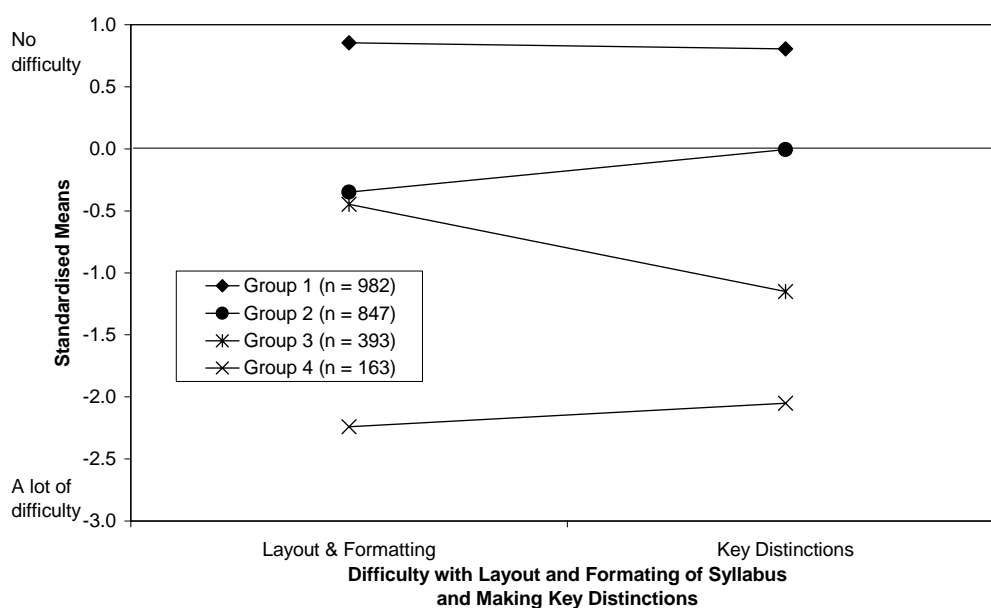


**Figure 31: Means for each province for teachers' perceptions of the difficulties they experience with the layout and formatting of the syllabus documents and with making distinctions between key terms and phrases**

The means for the new scales are large, but again the standard deviations indicate that there is considerable variation in the teachers' ratings. A cluster analysis suggests that the sample can be characterised by four groups of teachers. Figure 32 shows the results of the cluster analysis. There is a large group that claims to have no difficulty with the layout and formatting nor with making the key distinctions, and there is a small group that claims a great deal of difficulty with the layout and formatting and with making the key

distinctions. There are two intermediate groups with contrasting profiles: one that claims average levels of difficulty with layout and formatting and with making the key distinctions; and one that claims more difficulty with making the key distinctions. The four groups of teachers are characterised as:

- Group 1: No difficulty with layout, formatting and making key distinctions;
- Group 2: Average difficulty with layout, formatting and making key distinctions;
- Group 2: Difficulty with making key distinctions only;
- Group 4: Difficulty with layout, formatting and making key distinctions.



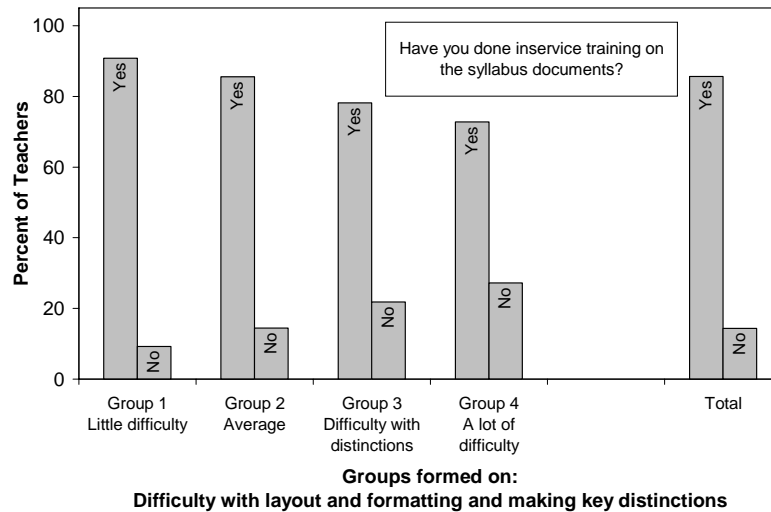
*Figure 32: Profiles for four groups of teachers formed according to the extent to which they perceive difficulty with the layout and formatting of the syllabus documents and an ability to make key distinctions*

The next set of analyses attempt to characterise group membership in terms of schools' and teachers' background characteristics. First, group membership is not associated with:

- Gender;
- The school's location in a town, semi-rural or rural area;
- Previous teaching experience in TPPS.

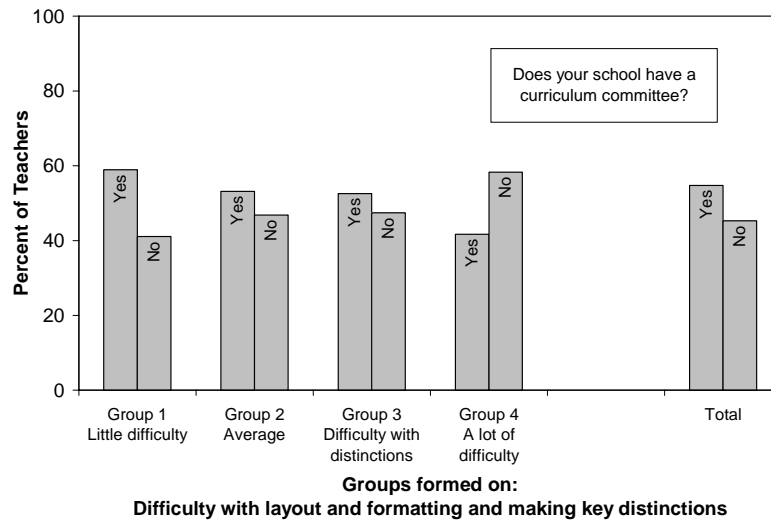
Group membership is associated with whether or not teachers have received in-service training on the syllabus documents (Figure 33), whether or not their schools have Curriculum Committees (Figure 34), and with school size (Figure 35). Figure 33 shows the association between group membership and whether or not the teacher has received in-service training. Overall, approximately 14% of teachers have not received in-service training. However, for Group 1 (the group that claims little difficulty with layout and formatting and the ability to make crucial distinctions), this percentage falls to 9%. Moving across the groups, this percentage increases substantially, so that in Group 4 (the group that claims high levels of difficulty with layout and formatting and the ability to

make crucial distinctions), this percentage rises to 27%. Thus, teachers who have not received in-service training are under-represented in Group 1 and over-represented in Group 4.



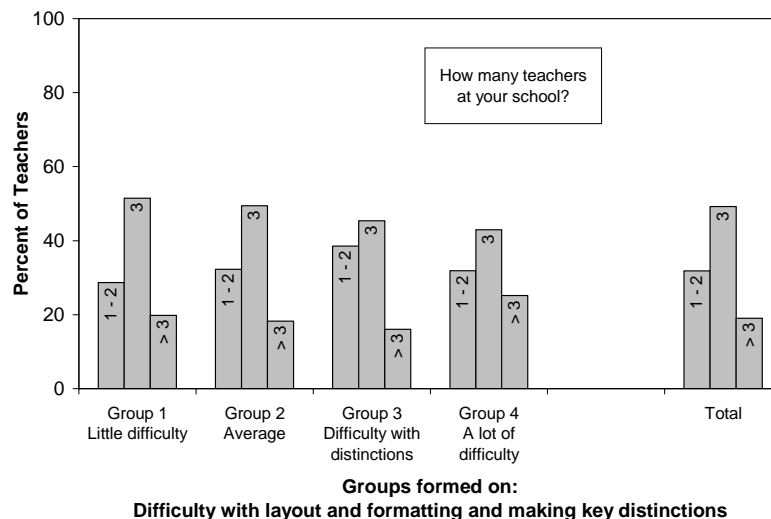
**Figure 33: Difficulty with layout, formatting and distinctions groups BY in-service training (N = 2343)**

Figure 34 shows the association between group membership and whether or not the school has a Curriculum Committee. Overall, 55% of teachers come from schools that have a Curriculum Committee. For the group that claim little difficulty with formatting, layout, and the ability to make crucial distinctions (Group 1), this percentage rises to 59%, whereas for the group that claims a lot of difficulty with layout and formatting (Group 4), this percentage drops to 42%. That is, those who said ‘yes’ to the question concerning the presence of a Curriculum Committee are over-represented in Group 1 and under-represented in Group 4.



**Figure 34: Difficulty with layout, formatting and distinctions groups BY Curriculum Committee (N = 2281)**

Figure 35 shows the association between group membership and school size (determined by the number of teachers). This is a weak association, and as can be seen in Figure 35, the differences among the four groups are not large. Most of the association lies with Group 4 membership. Teachers who come from three-teacher schools are under-represented in Group 4, whereas teachers who come from schools with more than three teachers are over-represented in Group 4.

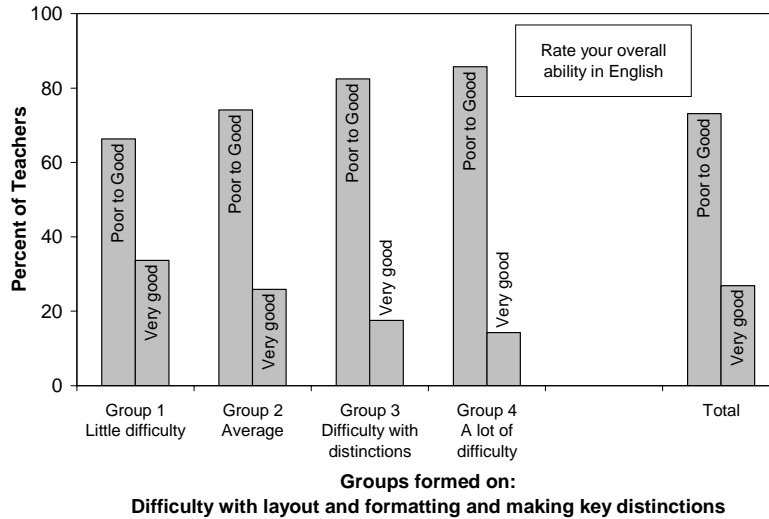


**Figure 35: Difficulty with layout, formatting and distinctions groups BY School size (N = 2371)**

Group membership is also associated with teachers' self-rating of their English language abilities (Figure 36), and with the length of time teachers have been using the syllabus documents (Figure 37). Figure 36 shows the association between group membership and teachers' self-ratings of their English abilities. Overall, 27% of the teachers rate their English ability as 'very good', but they are over-represented in Group 1 (34% of Group 1

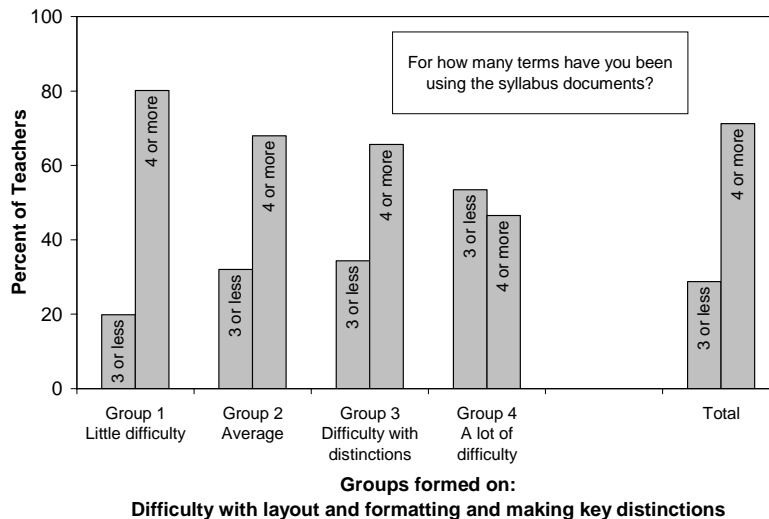


members rate their English ability as 'very good') and under-represented in Group 4 (14% of Group 4 members rate their English ability as 'very good').



**Figure 36: Difficulty with layout, formatting and distinctions groups BY English language ability (N = 2342)**

Figure 37 shows the association between group membership and the length of time teachers have been using the syllabus documents. Overall, 71% of teachers have been using the syllabus for four terms or more.

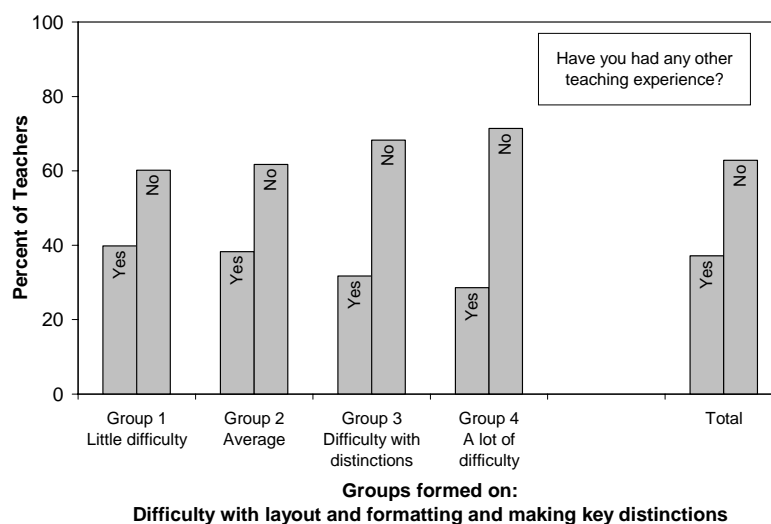


**Figure 37: Difficulty with layout, formatting and distinctions groups BY length of time using the syllabus documents (N = 2210)**

For the group that claims little difficulty with layout, formatting and the ability to make crucial distinctions (Group 1), this percentage rises to 80%, then steadily drops in groups that experience increasing levels of difficulty until Group 4 (the groups that experiences

the most difficulty) where only 47% of teachers have been using the syllabus for four or more terms. Teachers who are using the documents for a second or third time are more likely to experience less difficulty with the layout, formatting and the ability to make crucial distinctions.

Finally, there is an association between group membership and whether or not teachers have had previous teaching experience other than in elementary schools. The association is shown in Figure 38. Across the whole sample, most of the teachers (63%) have not had other teaching experience, but in the two groups (Groups 3 and 4) that experience the most difficulty with an ability to make distinctions between key terms and phrases used in the documents, the percentage rises to approximately 70%. That is, teachers who have not had previous teaching experience find it more difficult to make distinctions between key terms and phrases used in the syllabus documents.



**Figure 38: Difficulty with layout, formatting and distinctions groups BY Other Teaching Experience (N = 2326)**

It is noted that previous teaching experience was not associated with the groups formed on the other two sets of statements (aspects of quality and effectiveness of syllabuses in general and the extent to which the syllabus documents help teachers to achieve stated outcomes and objectives). That previous teaching experience is associated with an ability to make distinctions between key terms and phrases could result from these teachers, during their previous teaching, having to work with other syllabus documents that contain similar sorts of terms and phrases.

### 3.1.5 Discussion

The preceding discussions presented the results analysis by analysis, but an analysis-by-analysis presentation sometimes makes it difficult to keep track of major trends emerging across different analyses. The following discussion draws together major points of connection across these analyses.

First, teachers generally claim that aspects of quality and effectiveness are emphasised in the syllabus documents, that the syllabus documents help them to achieve objectives and outcomes stated in the documents, and that they experience little difficulty with the layout and formatting of the documents and with an ability to distinguish between key terms and phrases used in the documents. Nevertheless there is variation in teachers' opinions, and this variation allows an analysis that puts the statements into groups. Statements that go together within a group tend to assess a common aspect. Thus, if the statements are representative of opinions that are prevalent in a wider community, and if the sample is representative of the population of elementary teachers, the analysis synthesises the statements into a smaller number of underlying dimensions that are interpreted as major dimensions of thought among elementary teachers.

The second major conclusion is that, for elementary teachers, there are distinct dimensions of thought underlying the sets of statements. For the set of statements concerning the extent to which elementary teachers perceive an emphasis in the syllabus documents on aspects of quality and effectiveness, the underlying dimensions are: a focus on students; a focus on the content of the syllabus; and a focus on the social and cultural context in which learning takes place. For the set of statements concerning the amount of help given by the syllabus documents to achieve stated objectives and outcomes, the underlying dimensions are: a focus on help with planning; and a focus on help with integrating teaching programs with past and future learning, across curriculum areas, and with aspects of the social and cultural environment in which the syllabus is to be implemented. Of interest here is that statements dealing with assessment and evaluation do not form a distinct underlying dimension. Some of them contribute to the interpretation of the dimensions that result from the analysis, and some are single statements unconnected to either dimension. This is not to say that assessment and evaluation are of no concern to elementary teachers; rather, assessment and evaluation do not form a distinct underlying dimension, and instead, assessment and evaluation are implicated in the other dimensions of thought. The third set of statements, concerning the layout and formatting of the syllabus and the ability to make key distinctions, formed two distinct groups of statements: a group dealing with layout and formatting; and a group dealing with the ability to make distinctions between key terms and phrases used in the syllabus documents.

Teachers' opinions vary along these dimensions, and so the next set of analyses grouped the teachers so that members of any given group held similar opinions across the dimensions of thought. The third major conclusion is that for each set of underlying dimensions, the analyses suggested four distinct groups of teachers: a large group that perceived a lot of emphasis on aspects of quality and effectiveness, a lot of help in meeting objectives and outcomes, and experienced little difficulty with layout and formatting; a small group that perceived little emphasis on aspects of quality and effectiveness, little help in meeting objectives and outcomes, and experienced a lot of difficulty with layout and formatting. For each analysis, there were also two intermediate groups whose perceptions, opinions and beliefs were part way between these extremes.

The last set of analyses account for teachers' membership in these groups in terms of teachers' and schools' characteristics. That is, they determine the extent to which

differences in teachers' opinions are associated with in-service provision, English language abilities, school size, and so forth. The fourth major conclusion is that teachers' opinions are associated with background characteristics. There is a set of characteristics that could be interpreted as the extent to which mechanisms are in place for formal and informal meetings with colleagues who have a common interest in the education of elementary children. Two of these characteristics are the provision of in-service training, and the establishment of a Curriculum Committee. The third characteristic, school size, could be interpreted as the extent to which formal and/or informal meetings with other teachers are afforded, although there appears to be a critical size. If schools are too large or too small, the effects are generally negative, but if schools have about three teachers, the effects are generally positive. Allowing for some variation, the general trend is that if teachers can avail themselves of formal and informal meetings with colleagues (other teachers, in-service providers, inspectors, and so forth), then there is a tendency for them to perceive a lot of emphasis in the syllabus documents on aspects of quality and effectiveness, a lot of help from the syllabus documents in meeting objectives and outcomes, and to experience less difficulty with layout and formatting.

There is a similar association with the length of time teachers have been using the syllabus documents. Teachers who were into their second or subsequent year of using the syllabus documents perceive higher levels of emphasis in the syllabus documents on aspects of quality and effectiveness, more help from the syllabus documents in meeting objectives and outcomes, and experience less difficulty with layout and formatting than teachers who were using the syllabus documents for the first time. Thus there is an association with a time factor, and so some of that association could be attributed to other related characteristics – for instance, the provision of in-service training.

Finally, teachers' English language abilities affect their perceptions. In general, if teachers' English language abilities are higher, they perceive higher levels of emphasis in the syllabus documents on aspects of quality and effectiveness, help in meeting objectives and outcomes, and lower levels of difficulty with layout and formatting. For now, we note that English language abilities are associated with teachers' perceptions, but later in the report, there are discussions concerning overly optimistic assumptions of the teachers' English language abilities.

## **3.2 Site studies**

### **3.2.1 Provincial overview**

A brief overview of each province involved in the project is provided in this section.

#### ***East New Britain Province (ENBP)***

##### ***Provincial Elementary Support Staff***

East New Britain has a Provincial Elementary Coordinator (PEC), an elementary inspector, and five elementary trainers.

**Table 7: ENB Elementary Teachers, Trainers, and Districts**

District	No. of Schools	No. of Teachers		Total	No of Trainers
		Male	Female		
Pomio	31	46	29	75	2
Gazelle	105	94	193	287	1
Kokopo	58	68	93	161	1
Rabaul	23	21	47	68	1
<b>Total</b>	<b>217</b>	<b>229</b>	<b>362</b>	<b>591</b>	<b>5</b>

These data show an acute shortage of trainers to support the elementary teachers in all four districts. The official teacher/trainer ratio is 1:30. Table 7 shows both graduates and teacher trainees. Trainers in East New Britain are said to be responsible for supervising both groups of teachers. Earlier data showed that elementary trainers rarely visit the elementary schools because of lack of funding for logistical support.

### ***Language Policy***

The province has a language policy whereby mixed community schools use Tok Pisin as the language of instruction, and schools in the village communities use Tok Ples.

### ***History of Tok Ples Priskuls (TPPS)***

TPPS was introduced in the late 1970s in East New Britain with assistance from the Canadian Government. Most of the print materials (big books, small books (readers), teachers' resource books and charts) used in the TPPS program were produced during the formative period. Most of the TPPS schools have now been converted into elementary schools. Most of the initial materials are still being used by the current elementary schools, and are in varying stages of disrepair.

### ***New Ireland Province***

New Ireland Province implemented the education reform through the elementary education program in 1995. The province has had 16 years of elementary education experience, including TPPS.

### ***Provincial Elementary Support Staff***

Based at the provincial level are the Provincial Elementary Inspector Coordinator (PEIC), the PEC, and the Kavieng district trainer. Four other trainers are based at various locations in the Namatanai district.

The widespread nature of the schools within the Namatanai District, covering the islands as well as the mainland, has meant that the district has more elementary trainers. Two trainers are based on the mainland, and one each on Lihir and Tanga/Anir Islands. Although there are only two trainers in the Kavieng District, an inspector is there to assist, when needed. The provincial inspector is assisted in his duties by three trainers who are trainers/inspectors. It is anticipated that, in the next provincial education plan, all trainers will eventually become trainers/inspectors, taking account of increased school establishment.

***Table 8: New Ireland Elementary Schools and Support Staff, by District***

Location (District)	No. of Elementary Schools	No. of Elementary Teachers		No. of Trainers	
		Male	Female	Male	Female
Kavieng	117	104	98	1	1
Namatanai	175	141	110	3	1
<b>Total</b>	<b>292</b>	<b>245</b>	<b>208</b>	<b>4</b>	<b>2</b>

The province has some 292 elementary schools on record. However, the number may be higher when the province takes account of the number of elementary schools in the Konoagil and Murat Local Level Governments (LLGs) within Namatanai and Kavieng Districts, respectively. The need for proper records of elementary schools is crucial, as this is one of the criteria used for funding by the national government and the provincial government.

The data shown in Table 8 indicate a high trainer-to-teacher ratio in the province and each district, in relation to the national recommended trainer/teacher ratio of 1:30. The provincial ratio is 1:75, but the district ratio shows that Kavieng has a ratio of 1:101, and Namatanai a slightly lower ratio of 1: 63.

The absence of logistical support in the province prevents trainers from visiting schools and teachers, and this has become a point of contention among teachers. Teachers feel that regular visits and supervision during the implementation of the new curriculum were necessary in order to reinforce teachers' confidence in the use of the materials. It is fortunate for teachers that the lack of on-the-ground support is being addressed through the National Education Plan, 2005–2014, in two ways. Supervisory roles by inspectors will eventually change and become more advisory, with the community being more responsible for teacher supervision and appraisal:

*Communities, through the Boards of Management, will be provided with the opportunity to have a greater say in the appraisal of the teachers working in their schools. Teacher*

*attendance, acceptability to and relationships with the community will be monitored by representatives of the community (National Education Plan, 2005–2014, p.47).*

The change will be good for the schools, the children, and the communities. The community currently grumbles about teachers' slack attitude to schooling, but can do nothing to correct it. That responsibility is now being provided. As teachers were initially chosen by the community, it follows that the community should be responsible for them.

### ***Provincial Language Policy***

The province does not have a language policy, as such. The national language policy guides language use in elementary education in the province. For example, in villages close to the urban centre, where children of different ethnic groups attend an elementary school, Tok Pisin is used as the language of instruction. In semi-rural and rural settings, the language of instruction is the vernacular.

### ***History of Tok Ples Pri Skuls***

TPPS were first established on New Hanover Island, Kavieng District, and in the Susurunga area of Namatanai district. By 1995, there were approximately 80 TPPS in the province, using 17 languages. These schools were established as a result of an initiative taken by the Summer Institute of Linguistics (SIL). Orthographies were developed, literacy teachers were trained, and TPPS schools were established. The TPPS continued until the implementation of the education reform. Most of these have now converted to elementary schools. The three sample schools in this study are examples of this. Materials that were developed for the TPPS are currently available and in use in some of the elementary schools. Teachers who have previously taught in TPPS find it easier to integrate community activities into their school programs. They are also flexible and more innovative in their preparation of programs.

There is still evidence of TPPS and literacy programs being conducted in the Murat LLG, in the Mussau-Emira Islands to the north of the province. These are being run by non-government organisations (NGOs) to assist the islanders to acquire literacy skills.

### ***Morobe Province***

#### ***Provincial Elementary Support Staff***

Morobe Province has a PEC, an elementary inspector, a teacher training coordinator, and twelve elementary trainers.

These data show an imbalance in the teacher: trainer ratio in all districts. Other data in the study show that elementary trainers do not adequately support and visit teachers in their districts.

**Table 9: Morobe Elementary Teachers, Trainers, by District**

District	No. of Schools	No. of Teachers		Total	No. of Trainers
		Male	Female		
Bulolo	22	30	20	50	1
Finchhafen	27	41	27	68	2
Huon	20	36	24	60	1
Kabwum	24	43	15	58	2
Lae Urban	32	38	83	121	1
Markam	20	28	17	45	1
Menyamya	18	33	8	41	1
Nawaeb	18	22	16	38	1
Tawae/Siassi	21	32	16	48	2
<b>Total</b>	<b>202</b>	<b>303</b>	<b>226</b>	<b>529</b>	<b>12</b>

### **Sandaun Province**

#### **Provincial Elementary Support Staff**

Sandaun Province has a PEC, an elementary inspector, and seven elementary trainers.

**Table 10: Sandaun Elementary Teachers and Trainers, by Districts**

District	No. of Schools	No. of Teachers		Total	No. of Trainers
		Male	Female		
Aitape/Lumi	53	61	30	91	2
Nuku	40	45	17	62	0
Telefomin	31	40	23	63	1
Vanimo/Green River	52	59	41	100	4
<b>Total</b>	<b>176</b>	<b>205</b>	<b>111</b>	<b>316</b>	<b>7</b>

These data show that only Vanimo/Green River District has a trainer/teacher ratio of 1:25. The other three districts have acute shortages of trainers. Nuku district does not have a trainer at all.

#### **Language Policy**

The province has a language policy which states that, ‘the language of instruction in elementary schools will be that which the children speak, and will be determined by the community’.

#### **History of Tok Ples Pri Skuls**

TPPS was introduced in 1996, and was started by the SIL. All of the site schools were originally TPPS schools. The researcher was unable to obtain any other information on the history of TPPS.

#### **Eastern Highlands Province**

Eastern Highlands Province (EHP) established its first elementary schools in 1997. There are some 265 schools in the province.



### ***Provincial Elementary Support Staff***

The PEIC, PEC, and the Provincial Elementary Teacher Training Coordinator (PETTC), are located at provincial headquarters. These officers assist trainers, when there is a need.

Currently, there are 265 elementary schools within the province, with a total of 600 teachers. Table 11 shows the elementary schools, by district, trainers, and teachers.

***Table 11: Eastern Highlands Staffing of Elementary Schools, by District, Trainers, and Teachers***

No.	District	No. of Schools	No. of Teachers			No. of Trainers
			M	F	Total	
1	Goroka	47	72	61	133	1
2	Daulo	35	47	40	87	1
3	Unggai Bena	33	45	14	59	1
4	Henganofi	29	39	29	68	1
5	Kainantu	36	41	27	68	1
6	Obura/Wonenara	29	39	16	55	1
7	Okapa	29	43	17	60	1
8	Lufa	28	56	14	70	1
<b>Total</b>		<b>265</b>	<b>382</b>	<b>213</b>	<b>600</b>	<b>8</b>

### ***Provincial Language Policy***

The province does not have its own language policy. It uses the national language policy. The province has vigorously opposed the use of Tok Ples, as a language of instruction in the elementary schools. As a result, there is evidence in some elementary schools of the use of up to three different instructional languages. The sample schools that were visited use Tok Pisin in Elementary prep, and English in E1 and E2. Where there seems to be little understanding by children, the vernacular is used. This strategy has been seen elsewhere in the province, and has been reported upon since the establishment of the first elementary schools.

The use of three different languages is confusing for young children, and can distort learning that is taking place. A provincial language policy would guide teachers and the community in the selection of an instructional language at this level of the school system, and at the lower primary level. At present, languages of instruction seem to change at the ‘whim’ of the community and the teachers of the feeder primary schools.

### ***History of Tok Ples Pri Skuls***

Kainantu District set up TPPS with the assistance of the SIL. SIL trained the literacy teachers and provided materials, such as phonics books, to assist with the children’s education.

There is still some evidence of TPPS operating in the remote areas of Daulo, Lufa, Okapa, and Obura/Wonenara Districts. The Lutheran Church is involved in TPPS in Daulo and Lufa Districts. Eventually, these TPPS will disappear, as more and more elementary schools are established in the more remote areas of the province.

The future provincial plans for elementary education are not yet known. EHP has yet to complete a draft 10-Year Education Plan for 2006–2015, which would indicate the future of elementary education in the province.

### *Simbu Province*

Simbu Province established its first elementary schools in 1996.

#### ***Provincial Elementary Support Staff***

Officers at the provincial level ensure that elementary education in the province progresses smoothly. Training and in-service workshops are initiated at the provincial level, when funding is made available from the Department of Education, or through AusAID.

The provincial elementary office is staffed by the PEIC, the PETTC, and the PEC. The PEIC is assisted by the four trainer/inspectors, who are based at the district levels.

Simbu Province has more than 240 elementary schools. Each of the seven districts has elementary schools (see Table 12).

***Table 12: Simbu Enrolment and Staffing, by District***

No.	District	No. of Schools	Trainers	Teachers		
				M	F	Total
1	Kerowagi	51	2	99	25	124
2	Gumine	31	1	68	16	84
3	Chuave	27	2	50	20	70
4	Kundiawa	39	2	66	44	110
5	Gembogl	33	1	64	21	85
6	Sina Sina/Yonggomugl	29	2	66	13	79
7	Karamui/Nomane	31	2	64	9	73
<b>Total</b>		<b>241</b>	<b>12</b>	<b>477</b>	<b>148</b>	<b>625</b>

All seven districts in the province have trainers in place. Most districts have two trainers, with the exception of Gembogl and Gumine, which have one each. The number of trainers per district depends on the number of elementary schools, and the widespread locations of the elementary schools. While the Simbu ratio of 1:52 is high, there are variations in trainer-to-teacher ratios between districts, with Gembogl having the highest, at 1:85, and Chuave the lowest, at 1:35.

#### ***Provincial Language Policy***

The province does not have its own language policy. The selection of a language for teaching is based on the national language policy. Many stakeholders are not happy with the current mode of instruction in elementary classrooms, where the child's first language is used. They have demanded that the language of instruction be changed to English,

commencing in EP. The draft Simbu Education Plan, 2006–2015, p.18, states that: ‘the mode of instruction in the Preparatory Grade will be English, as of 2006.’

### ***History of Tok Ples Pri Skuls***

Literacy programs were established in the province during the 1990s under the former Village Services Scheme. The languages used were Tok Ples and Tok Pisin for adults, TPPS, and kindergartens. Literacy groups were organised by mothers. The SIL assisted in the development of phonics and the alphabet in the Kuman language, which has the largest number of speakers in the province. Training materials were printed at the Literacy and Awareness Materials Production Centre in Kundiawa.

The government funded the teachers’ monthly allowance, and paid for materials. The introduction of elementary education in the province paved the way for the conversion of TPPS to elementary schools.

A report by the provincial non-formal education coordinator (2006) states that some 217 TPPS are currently operating in the province. Although the report does not specify locations of the TPPS, it is understood that most are located in the remote areas of the province. The gradual expansion of elementary education into remote Karamui/Nomane District and other such areas will eventually replace TPPS.

### ***Milne Bay Province***

The province established its first elementary schools in 1992. It was one of two pioneer provinces to introduce the elementary program.

### ***Provincial Elementary Support Staff***

The province has in place a Provincial Elementary Inspector and has appointed a Provincial Elementary Co-ordinator (PEC), a Provincial Elementary Teacher Training Co-ordinator, and has thirteen trainer positions of which just three are filled in 2006. The unfilled positions have occurred as a result of resignations, retrenchment and unfit for duties and the province is unable to recruit staff due to lack of funds to meet the additional salaries.

Currently, there are 318 elementary schools within the province, with a total of 633 teachers. Table 13 indicates the elementary schools, by district, trainers, and teachers.

**Table 13: Milne Bay Enrolment and Staffing, by District**

No	District	No. of Schools	Trainers	Teachers		
				M	F	Total
1	Alotau	104	1	75	132	207
2	Esa'ala	74		63	77	140
3	Samarai/Murua	85	1	90	74	164
4	Kiriwina/Goodenough	55	1	87	35	122
<b>Total</b>		<b>318</b>	<b>3</b>	<b>315</b>	<b>318</b>	<b>633</b>

### ***Provincial Language Policy***

The province does not have an explicit language policy but uses the national language policy, which places the responsibility for choosing the language of instruction in elementary schools with the local community. Vernacular languages are highly valued in Milne Bay and rural communities choose local languages for instruction. Elementary schools in Alotau, the provincial capital, also teach in a vernacular that is common to the urban area although English is used widely because children are often bilingual before they enter urban schools.

### ***History of Tok Ples Pri Skuls***

Prior to 1992, TPPS had been well established in the province and operated mostly by church based organizations. Previous research by Guy and Tawaiyole (1995) suggests that there were as many as 431 Tok Ples Pri Skuls before DOE intervention in early childhood education. A further report by Guy and Awei (2001) indicated that 101 TPPS classes continued to operate in Milne Bay as late as 1999 employing 101 teachers and enrolling some 1226 students. At the same time the formal elementary education system in Milne Bay consisted of 205 classes, 180 teachers and 3995 students.

There has not been any recent study done on the continuation or extent of TPPS in Milne Bay province.

### ***Site schools***

All of the elementary schools that participated for the duration of the study were visited on at least three occasions over the period of the research.

Table 14 lists the schools that participated in the study together with data on location of the school and the number of teachers who took part in the study.

There are 135 elementary teachers engaged in the study (Table 14) of whom 58% are women, which is an over-representation of women in comparison with the survey data which showed 59% of respondents were male. Furthermore, the survey data showed that gender was not a significant variable and the site study fieldwork confirmed that gender was not an important factor in teachers' implementation of the new curriculum or in their related professional experience and practice.

Table 15 shows that 91% of teachers gained the Grade 10 qualification, and teachers have been teaching for an average of 3.6 years in the elementary system. Table 16 presents data in relation to teacher training in which 70% of teachers have either completed all of the requirements, or have formally graduated with the Certificate in Elementary Teaching (CET).

### 3.2.2 Schools and teachers participating in the site studies

**Table 14: Site schools in the study**

Province	Elementary School	Location	# Teachers	
Morobe	Butibum	Urban	3	
	Emmanuel	Semi rural	3	
	Nasawapum	Rural	6	
Sandaun	St Martin	Urban	4	
	Wusipi	Semi rural	4	
	St Lukes (Woromo)	Rural	3	
EHP	Pinewood	Urban	6	
	Ketarobo	Semi rural	3	
	Komunive	Rural	3	
Simbu	SDA Kundiawa	Urban	3	
	Rosary, Kondiu	Semi rural	3	
	Kogemake	Rural	3	
ENBP	Vunamami	Urban	5	
	Vunagogo	Semi rural	3	
	Waragoi Township	Rural	4	
	Sacred Heart-Sunam	Rural	2	
New Ireland	Sacred Heart	Urban	5	
	Fissoa	Semi rural	3	
	Litoron	Rural	5	
Milne Bay	Labe	Urban	4	
	Huhuna Cluster			
	Porotona	Semi rural	2	
	Huhuna	Semi rural	3	
	Wagifa Cluster			
	Matalafalafa	Rural	3	
	Utu	Rural	3	
	Banada	Rural	3	
	Abolu	Rural	2	
	Awale	Rural	1	
	Nuagabubu	Rural	2	
	Central*/NCD	June Valley	Urban	9
		Hohola	Urban	7
Hula		Semi rural	10	
Veifa'a Cluster				
Veifa'a		Rural	6	
Aipeana		Rural	6	
AmoAmo		Rural	3	
<b>Total</b>	<b>31</b>		<b>135</b>	

\*Central Province's participation in the site studies ceased in 2005.

Table 15 indicates selected biographical data that have been collected from teachers.

**Table 15: Selected teacher bio-data**

Province	Gender		Highest Level of Schooling			Number of Years Teaching		
	Male	Female	< Gd 10	Gd 10	> Gd 10	< 2 years	2-5 years	> 5 years
Morobe	7	5	-	11	1	n/a	n/a	n/a
Sandaun	4	7	-	11	-	-	4	7
EHP	5	7	-	12	-	n/a	n/a	n/a
Simbu	3	6	-	9	-	-	4	5
ENBP	2	12	1	13	-	6	6	2
New Ireland	8	5	-	12	1	1	7	5
Milne Bay	15	8	4	18	1	3	12	8
Central/NCD	13	28	2	37	2	3	22	16
<b>Total</b>	<b>57</b>	<b>78</b>	<b>7</b>	<b>123</b>	<b>5</b>			

**Table 16: Selected teacher bio-data**

Province	Teacher Training					Language of instruction in schools
	Nil	Year 1	Year 2	Year 3	CET	
Morobe	-	-	-	-	12	Tok Ples and Tok Pisin
Sandaun	-	-	-	-	11	Tok Ples and Tok Pisin
EHP	-	-	-	-	12	Tok Ples and Tok Pisin and English
Simbu	-	-	-	-	9	Tok Pisin and English
ENBP	1	2	3	-	8	Tok Ples
New Ireland	3	1	-	-	9	Tok Ples and Tok Pisin
Milne Bay	-	1	3	7	12	Tok Ples
Central/NCD	-	5	7	8	21	Tok Ples in Central English in NCD schools
<b>Total</b>	<b>4</b>	<b>9</b>	<b>13</b>	<b>15</b>	<b>94</b>	

Teachers report that of the 31 schools in the sample, 20 schools use Tok Ples as the language of instruction followed by nine schools that use Tok Pisin.

### **3.2.3 Curriculum materials distribution and processes**

Packs of curriculum materials were forwarded to elementary schools commencing in 2003. The pack included one Teachers' Guide per school and a set of the syllabus documents for each teacher in the school. In addition, curriculum kits were sent to schools for each elementary grade in 2004. The following summarised data indicates the receipt of curriculum materials in the schools in the study.

- Most schools had received the 2003 elementary reform curriculum materials in varying numbers, and the curriculum kits by the end of 2004;

- Some schools received the syllabuses, but not the Teachers’ Guide;
- Most schools received less sets than the number of teachers in the school;
- Schools with two teachers indicated that they were able to share the materials adequately;
- Schools with more than three teachers encountered difficulties sharing the materials. Some teachers were reluctant to share while some simply refused to share materials once they got hold of them;
- The Wagifa Cluster of six schools (in Milne Bay Province) in the study is part of a larger Cluster of nine schools. The nine schools shared one set of syllabus documents and one Teachers’ Guide throughout 2004. The materials were shared systematically between the nine schools and the curriculum approach was in evidence in modest ways in the Wagifa Cluster schools during the first site visit. The researcher, with the assistance of CRIP staff, collected sets of curriculum materials from DOE stores in Port Moresby so that each school had its own set by mid 2005. The materials were delivered by the researcher to the schools during the second visit in 2005.

Table 17 provides aggregated data in relation to the nature of the access that teachers have to the syllabus documents. All teachers have access to the 2003 elementary syllabuses, although almost 50 percent of those responding share syllabus materials with other teachers.

**Table 17: Access to 2003 Elementary Syllabuses**

Sharing set with one other teacher	Sharing set with more than two teachers	Have own set
12	36	53

Table 18 indicates that seven (trainee) teachers reported not having access to a Teachers’ Guide and coped with portions of the Guide that they received during trainer-directed sessions.

**Table 18: Access to 2003 Elementary Teachers’ Guide**

Do not have access to a Guide	Sharing with one other teacher	Sharing with more than two other teachers	Have own Guide
7	3	38	53

Some 41% of teachers share a Teachers’ Guide and 52% have their own copy. This is a relatively high number given that officially each school was sent just one copy of the Teachers’ Guide. Schools that have access to photocopy facilities have copied the Teachers’ Guide so that each teacher has a personal copy.

### **3.2.4 2006 Update on materials distribution and processes**

Each province visited in the 2006 round was specifically asked to comment on the distribution of materials. In each province there was concern that the door-to-door delivery policy meant that the provincial education office was not directly involved in the delivery and was not aware of the type of materials, or the number of kits, delivered to each school. A further concern was the failure of some contractors engaged to deliver materials door-to-door to pass on a copy of the signed form from head teachers to provincial education authorities of the kind and quantity of curriculum materials that had been delivered to the school. Only two provinces, Simbu and New Ireland reported a successful door-to-door process, with schools generally happy with the mode of delivery. There are reports from other provinces, East New Britain and Morobe that not all of the elementary schools had received all of their materials. For example, in Morobe a district trainer reported that many schools in her district had not received the new elementary curriculum materials, and in East New Britain the researcher visited an elementary school during the study that had not received the curriculum materials. The District Education Adviser in the Goodenough District of Milne Bay explained that the elementary curriculum materials for schools in the district were delivered to the district office rather than the schools. The office had no funds to transfer the materials to schools by boat and distribution depended on word of mouth communication that the materials were available and teachers walking considerable distances to collect the materials from the office.

Officers in the EHP expressed the greatest dissatisfaction with the mode and process of materials distribution. Schools did not know how many kits they were supposed to receive. For example, a trainer from Daulo District had to travel to Obura/Wonenara District because materials that were meant for some of his schools ended up there.

There were many instances such as this. The kits for some elementary schools within Goroka ended up at a primary school in Unggai/Bena District. This dumping of materials at certain primary schools gave some elementary schools the opportunity to help themselves to materials from more than one kit. One urban school ended up with seven Teachers' Guides and seven copies of in-service Units 2 and 3.

Further specific information about the in-service materials especially Units 2 and 3 is provided in Section 2.7 of this report.

### **3.2.5 Action research**

The site schools in all provinces were encouraged to solve a problem or issue related to the implementation of the 2003 elementary curriculum as part of their active involvement in this research. The teachers were assisted by the researchers to do action research. They were encouraged to identify a problem, analyse appropriate data collected on the problem, formulate an action plan to solve the problem, collect data after a period of implementation of the action plan, and write a report on the problem and how it was solved or otherwise. The action research has been implemented with varying successes in the site schools.



Several projects have been completed. Some of the problems being researched in the site schools include:

- How can we make our mathematics lessons more interesting?
- How can we teach language more effectively in a multigrade class?
- How can we standardise Dumo spelling in our teaching texts?
- How can we increase and improve the number of students' reading materials (small books)?
- How can we improve/replace and increase the production of big and small books?
- How can we involve the community to assist with the production of big books?
- How can we improve children's class attendance in our school?
- How can we improve teacher and children absenteeism?
- How can we improve community support for the school?
- How can we improve classroom organisation to make teaching and learning more effective?

In East New Britain, three schools solved issues relating to the development of big books and small books, and their general maintenance. All schools decided to work as a team to solve their identified issues. They are now using effective strategies, which they had identified after the analysis of the data to solve their particular issues. A fourth school investigated reasons for poor class attendance. Although the issue of students' absenteeism is not directly related to the implementation of the curriculum, the data indicate that the change in teachers' teaching practice as a result of the use of the new elementary curriculum has affected students' interest in learning. The researcher noted a marked increase in class attendance during the final visits. Classroom organisation and teaching strategies that were used seemed to capture the students' interest. What used to be classes of four or five students had increased to 15 or more.

One teacher in New Ireland worked on a project to help her understand the relationship between assessment and teaching. It clearly demonstrated the commitment by the teacher to implement the new curriculum, even though her understanding may have been limited.

In Sandaun one school began an ambitious project to standardise the use of the Dumo spelling in their school texts. Their comments on the struggles to achieve their aims are indicative of the impact of external factors on elementary teachers' work.

*2005 wasn't a good year for us (teachers). We have been left alone, without support from the BOM and parents. Although there were BOM members available, there was no cooperation, no meetings, and no Curriculum Committees to help us work with our study. The three of us have worked right through the year, by ourselves.*

*We have worked on our own, except for some old people who have volunteered to help. We managed to plan data collection, collect data, and correct some of the spelling. However, a lot more words still have to be collected. We have analysed some of our data, but we can't carry on any further because of the lack of cooperation.*

*We now have a new BOM and Curriculum Committee which are very active, and I am certain they will help us with our survey. There are regular meetings, and a lot of issues concerning the school have been addressed — even the use of Dumo as the language of instruction at the school.*

Three schools in EHP implemented action research projects over the term of the study and all reported some success in minimizing existing problems they had chosen to investigate. For example, one school investigated the issue of teacher absenteeism and lateness, as they saw this as contributing to the lack of implementation of the new curriculum. All three teachers appreciated their own efforts as they were now able to see some positive results of their own decision making. The BOM's involvement in the monitoring of teachers was a positive move, as it improved attendance and punctuality of teachers. During one visit, in November 2005, the researcher noted a timesheet in the school's office notice board. The attendance and punctuality problem was almost nil for the month of October.

In Simbu, the difficulties teachers experienced in implementing the action research projects were exemplified in one teacher's attempts.

*In my action plan, I decided to spend more time with the slow learners during the lesson, and model on how to read, write, and solve simple Maths problems, while other children could read and do activities by themselves from the chalkboard. My plan was very easy to implement. It took two weeks to implement, and I felt this was more than enough time.*

*My second data collection indicated that I had successfully dealt with the problem, after I analysed it. I enjoy the action research cycle. It was the best way of solving problems or answering questions. The best part of the research cycle was implementation, because I was able to assist individual children and give them confidence. They are able to relate to me better, because I showed concern for them. In future, I will use the research cycle to solve problems or answer questions that arise in teaching, or in my personal life.*

This teacher was using the action research cycle as a method to improve her own teaching rather than as a method to investigate and research a particular issue.

The staff of the urban elementary school in Milne Bay completed a piece of action research in which the 84 Big Books in stock were analysed in terms of the portrayal of gender. The teachers developed a definition of gender inclusiveness that included males and females and analysed the roles that each gender played in each Big Book. The action researchers analysed each Big Book and concluded that 32 Big Books involved a male character only, and 17 of the Books included men and women, but portrayed women in an inferior role to men. A total of 16 Big Books included men and women characters and portrayed women in positive ways. The remaining books were stories about the bush, the moon and stars, or animals. The teachers and the BOM, as a result of the action research, removed a number of the Big Books because of inappropriateness and targeted community people to work with the teachers and nine Big Books were developed in the first half of 2006.

The rural elementary schools in Milne Bay had a different set of problems with Big Books. These schools had produced few, if any, Big Books. One school, which had no Big Books at all, approached the local community for assistance using an action research approach. The researcher did awareness of the importance of Big Books after a Sunday morning church service and asked the community to nominate a person who would take responsibility for approaching senior members of the community to collect traditional and contemporary stories that would be suitable for Big Book development. A tape recorder was provided and stories were collected between the scheduled visits by the researcher. The researcher returned in 2006 and six hours of recorded stories had been collected. The elementary teachers confirmed that the stories were suitable although they were too long to be developed as Big Books and required editing to a suitable length. The process of editing and developing the Big Books commenced in mid-2006 and ten books were produced by the end of third term. In addition, the teachers had produced a further twelve shell Big Books by third term in contrast to the resistance that was shown by these teachers to the concept of shell books and their inability to match the drawings in the shell books to a story suitable to the local area.

Despite the varying success of the action research projects, there is evidence that this part of the study did have a positive impact on the schools involved in the site studies. Certainly there is evidence that schools and teachers realised that this particular research method provided them with opportunities to solve problems themselves, rather than waiting for external assistance. The action research projects also provided teachers with opportunities to critically reflect on their own teaching practices as well as the practices and processes in the school and their communities. Critical reflection is one of the cornerstones of the development of a successful teacher and these teachers certainly made every attempt to engage in this professional activity. The importance of critical reflection was one of the reasons that the study included a reflective journal component, where teachers were asked to record their thoughts about the action research projects. The long-term use of journals was not overly successful, although a number of teachers wrote consistently for the first twelve months of the research. There are a number of reasons why journals were not kept by teachers for the two year life of the study: teachers' lack of confidence in writing English; the difficulties of sharing the journals with their research partners in Port Moresby; the workload associated with implementing the new curriculum; and/or teachers perceiving little value in undertaking this activity. There did seem to be the sense that some teachers in the sample schools did not, or could not, see how their sharing of initial apprehension of issues encountered in the new curriculum could assist them to understand it better. Further discussion of the use of action research as a method to be used in Papua New Guinea is included in the conclusion section of this report.

*Additional case-study fieldwork*

In addition to the material and data collected in the provinces and in the site studies, interviews, observations and document collection were undertaken in Port Moresby. Key informants were interviewed (individually and/or in groups) from selected departments, sections or areas of the NDOE, CDD, CRIP, PNGEI, etc, including members of the inspectorate, trainers, in-service educators, and syllabus and other support materials developers.

### **3.3 The effectiveness of the processes implemented by CDD and CRIP to develop elementary syllabuses and locally developed support materials including consultation and trialling process.**

The views of the effectiveness of the processes implemented by CDD and CRIP to develop the elementary syllabuses and the support materials differ between the various stakeholders. These perceptions, however, as noted elsewhere in this report, are strongly influenced by the distribution process and the in-service activities of the trainers, and the frequency and effectiveness of the Curriculum Cluster Workshops (CCWs); that is, matters that are not directly concerned with the curriculum development processes. The curriculum and support materials development processes have been in progress for about five years and are continuing, with more materials being produced and distributed in the future. The new elementary curriculum consists of three syllabus documents (cultural mathematics, language, and culture and community). There are also teachers' guides, and a handbook for head teachers. There are also in-service materials that are discussed elsewhere in this report. The first of these materials were distributed nationally and received in 2003 and into 2004. Other materials were distributed during 2005 and 2006. Typically, the materials distribution can be a long and protracted logistical exercise that also influences the perceptions of effectiveness of some people.

The view from those closest to the development of the materials is that, in the words of a senior bureaucrat, 'there is a lot of input by the stakeholders'. In general, there was a positive view of the consultation processes in the development of the materials. This was accomplished both informally, and formally through such bodies as (especially) the SACs. The SACs oversee each aspect of the syllabus development and review the plans and drafts of the material. The SAC includes representatives from various interested parties (stakeholders): teachers, community members, educational officials, religious interests, teacher educators, etc. The SAC represents a key formal process of consultation on the particular syllabus materials and, less directly, the implementation of changes to elementary education in general. The Board of Studies formally approves the documents and, although this is another level of consultation, the SAC is where the most detailed consultation occurs. This is held to be a generally effective process of consultation by most informants. There is a tension, however, as noted elsewhere, between developing a national syllabus and addressing local languages and communities. The cultural and linguistic diversity of PNG is such that it is difficult—if not impossible—to have an effective and efficient consultative process that is representative of such diversity. The influence of Port Moresby and the NCD tends to dominate, although the people involved

in the consultation processes in these locations reflect wider understandings and experiences due to their diverse origins, connections and experiences. It is recognised that the syllabus, and the elementary school reforms more generally, assumes significant community participation in the everyday provision of elementary schooling in those communities.

The site studies uncovered some differences in the perceptions of the appropriateness of the syllabus and in-service materials that suggest that the outcomes of the consultation process were not as effective as they might have been. As noted previously in this report, the assumptions about the teachers' English abilities underpinning the development of the materials seemed to be over-estimations. It was noted that a significant proportion of teachers found it more difficult to read and understand the materials than inspectors, curriculum developers and others assumed. There is also evidence cited in this report that some of the teachers who said that they did understand the documents appeared to do so on the basis of either a relatively superficial understanding or one that was a 'hybrid' understanding based on their practical knowledge, their understanding of the previous curriculum (Scope and Sequence), and their interpretation of the new Outcomes-Based Education (OBE). This suggests that there may well be a gap in the effectiveness of the consultation processes between producing good quality documents in/for Moresby and NCD, and their application in the more remote parts of the nation.

Several respondents reported that the CDD curriculum development processes have been greatly enhanced with the support of CRIP. By mid-2006, the CDD Elementary Unit had developed three teachers' resource books. These are on the topics: cultural mathematics; culture and community; and games activities (physical games that integrate language, maths, Physical Education (PE), health etc). A further book on language is to be completed for early 2007. The books are designed by Elementary Unit staff to assist teachers to produce activities for children that address the learning outcomes in the syllabus documents. Early work is underway on a resource book on programming, it is in the consultation phase and will go out in 2007. The programming book is meant to help teachers reduce the amount of preparation that teachers have to do outside of school. The Elementary Unit has a plan for materials development between 2006–2008. A further handbook on assessment and reporting has just commenced its development phase and is also due out in 2007. A further book is planned to commence consultation and development in 2007 on vernacular literacy, with hints for teachers on how to produce materials locally for use with the children. A concern is not so much the development process itself, but rather the funding available to produce sufficient copies of materials for distribution to all schools. A strategy used is to have one or two copies sent to schools and then others will be distributed later when funds permit. However, this is seen as a less efficient use of print-capacity and it means that teachers have to share materials which is not always fair and effective.

The consultation between CDD/CRIP staff in the development of syllabus and support materials with staff at PNGEI responsible for the pre-service course was not seen by the latter to be as fulsome as it could have been. It was felt by some PNGEI staff that they were not consulted, or consulted too late, to have an influence over the substance of the syllabus and support materials. It was argued that a closer collaboration may have been

mutually beneficial in developing the syllabus, the pre-service courses and SIUs, the in-service SIUs, teachers' resources etc. It is noted that there was significant consultation at a senior level, but that the view was put that a more 'grassroots' consultation and collaboration would have been useful to all parties.

### **3.4 The perceptions of teachers, head teachers, elementary trainers and elementary inspectors of the quality of the syllabuses and their effectiveness in supporting community-based learning**

#### **3.4.1 The perceptions of teachers and head teachers of the quality of the syllabuses.**

In the Second Six-Monthly Report, it was noted that the majority of teachers are supportive of the new elementary curriculum and state that the syllabus materials are very helpful although not always fully understood.

Teachers who had used the Scope and Sequence Book previously were confused by the format of the new elementary curriculum. A large number of teachers mentioned that the Scope and Sequence Book was often referred to when information and content in the new elementary curriculum proved difficult to comprehend. The comments of teachers in their reflective journals suggest that the formatting of the new elementary curriculum is difficult to understand.

*I have to move pages back and forward to understand the learning outcomes and to see what the indicators are. When I want to see the overview then that's in another place or what they might have done in E1. So we rewrite the syllabus on a big piece of paper A3 so that we can see it in front of us in one go. (Teacher Journal)*

The layout of the document explains why a number of teachers have complained to the research team about the constant writing and rewriting that teachers have to do with the syllabus. Teachers copy the learning outcomes, the strands, sub-strands, outcomes and indicators in the weekly program, the term programs and the yearly program. They do this for convenience, as indicated in the excerpt from the teacher journal above, but they are also told by inspectors and trainers that it is necessary to rewrite entire sections of the syllabus. Teachers who look for a shortcut and use the numbering system included in the syllabus to track outcomes and indicators are admonished and told to copy the statements in full. This appears to the researchers to be a waste of time that could be used more productively in terms of producing resources for the classroom.

Classroom observations during the first and second round of visits indicated that teachers were using the teaching strategies recommended in the new elementary curriculum with varying competence. It was also highlighted that few, if any, comments were provided by trainers to teachers after they had completed their in-service activities.

The length of interaction with the new elementary curriculum and the quantity of workshops attended facilitated confidence in use and more understanding of the new elementary curriculum materials. This was observed during the second visits to the site

schools as some changes were observed in the teachings methods, classroom organisation and more positive comments regarding the new elementary curriculum materials.

There does appear to be a period of some two years in which teachers have difficulty coping with the demands of the new curriculum. Teachers who have been working with the curriculum materials for two years or more are much more positive and confident about their understanding of the curriculum and their ability to implement and manipulate the curriculum to suit local circumstances. The experience of using the curriculum, in-service activities attended, and working with colleagues during the first two years, results in more confident and successful teachers by the third year of teaching.

The members of the research team have noticed that teachers are receptive to imaginative ideas about teaching and grasp ideas that the researchers might make on the basis of classroom observations.

By the time of the third round of visits, teachers had nothing but praise for the syllabuses which is a contrast to their views expressed earlier. The following are some positive comments teachers have regarding the new syllabus:

- set out in a logical way and is user friendly;
- set out clearly and in most part, can be understood;
- more structured and the knowledge, skills and attitudes to be taught are specified through the outcomes, indicators and the activities;
- provides much needed guidance and helpful hints;
- makes planning for teaching and learning quite easy;
- adopts a child-centred approach to teaching and learning which is in direct contrast to teacher talk;
- English usage is clearly understood by most teachers;
- initial difficulties with new terms and concepts have been overcome through training;
- signposts for planning of teaching and learning in order to achieve outcomes;
- better than Scope and Sequence and flexible; and
- related to all subjects, assists us to integrate.

A comment from an East New Britain teacher is indicative of the responses from teachers across all provinces.

*Now that we work with outcomes to prepare our lessons, they help us to teach the particular skills better. We are able to develop appropriate activities to teach the skills. The children are eager to learn and they understand much more of the lesson content. This new syllabus is similar to the Scope and Sequence so we refer to the Scope and Sequence Book to strengthen our understandings of the content in the new syllabus. Both are good but some of the wordings are different.*

Many teachers reported the close connection between the Scope and Sequence and the new syllabus. The teachers seem to see similarities between the Scope and Sequence and the new elementary curriculum. They referred to the Scope and Sequence when they did not really understand some of the content in the new curriculum at the beginning of the

implementation stages. At this stage, they are more comfortable with it. They seem to think that the main difference between the two curricula is that the Scope and Sequence provided them general information on how to teach the curriculum and therefore they had to work out activities for what they perceive to be the objectives of the lessons. On the other hand, they perceived the new curriculum to be more specific or to the point or clearer and this assists them to focus on the outcomes of the lessons/activities which makes the preparation of lessons and the assessment of students' learning easier.

Teachers, trainers and inspectors have indicated that the new syllabuses are better organized for teaching and learning. The syllabuses are flexible in the sense that when an activity in the syllabus does not suit a particular theme, teachers select other activities to ensure the outcome is achieved.

The use of new terms such as strand, sub-strand, outcomes and indicators confused teachers initially. Teachers now understand what these are and believe that the English used in the syllabus is quite easy to follow. Teachers are able to locate information in the syllabuses. Regular use of syllabuses by teachers has led to better understanding of the syllabuses and the way they are packaged. Teachers can now refer quickly to the sections of their choice in order to get information.

However, there seems to be little understanding of the educational significance of an OBE or curriculum. Teachers have begun to use the outcomes for planning and seem to have an understanding of the connection between the indicators and outcome statements. So does it matter that the teachers do not seem to understand the theoretical implications of implementing OBE? At the classroom level they are planning using outcomes, teaching using indicators, and some are even developing assessment tools that are based on this pedagogical approach.

*We use the outcomes and indicators based on the environment and we assess the students using the indicators. It helps us to teach the children better. We use it when planning our themes and to transfer knowledge out into the community. For example, in the theme 'Shelter' students know the different types of materials used to build the type of houses in their village because we take them out to see them.*

*We are able to integrate and break down teaching to the level of the children. Teaching and learning activities are interesting and we can relate these to our community. This makes learning easy for children to understand and apply.*

It is of concern that the indicators for achievement of outcomes seem to be interpreted as ideas for learning activities. At this stage, many teachers are closely following the materials provided, seeing them as procedural texts rather than as guidelines. There is no evidence, for example, of teachers who are adapting the indicators to their own contexts.

According to teachers the indicators help with the theme for the week and bullet points relate to the activities in the syllabuses. For example, teachers at Gon (Simbu) are sticking very closely to the bullet point indicators that follow the outcomes in the syllabuses. They regard the indicators as possible activities that their class pursue in order to achieve intended outcomes. When asked whether they ever choose activities of their own outside the syllabus, the response was negative.



For most schools, it is only the second year of implementation and it can be argued that teachers are yet to be competent in the use of the syllabus and that strict adherence at this stage is necessary. On the other hand, the regularity of using syllabus ‘activities’ can become a problem if not addressed early. Teachers need to understand that more innovative and interesting activities that are provided for children’s learning will lead to the achievement of learning outcomes.

Certainly the issue of child-centred learning opportunities seems to be now integrated into elementary schools. There is some evidence that this is a result of the long-term emphasis on this approach. Schools were first introduced to child-centred learning as part of TPPS or as part of the initial elementary curriculum.

### **3.4.2 *The perceptions of elementary trainers and elementary inspectors of the quality of the syllabuses***

The elementary inspectors and trainers interviewed were generally positive about the quality of the syllabuses in terms of the structure, educational principles and the production quality. Their concerns were more focused on matters to do with the distribution, support for teachers (especially workshops), support for trainers (especially to visit schools and run workshops) and the capacity or willingness of some teachers to implement the new syllabus. Language and culture is at the heart of the new syllabus and, in different ways, these matters are at the heart of the implementation.

In a sense there is an unavoidable contradiction between providing syllabus and other documents in English that exalt the virtues of the vernacular and laud local cultures. The provincial authorities and elementary trainers are of the view that the level of qualification and number of years of teaching enables an elementary teacher to cope with the English content of the new elementary syllabuses, teacher’s guide and other support materials. For example, a provincial education advisor commented: ‘I looked through the content of these materials and find that I can understand them well because I took time to read them’. A trainer advised elementary teachers to: ‘use your intelligence to read and understand the content’. The researchers found that other interviewees, and many of the teachers involved in the action research were less sure of teachers’ capacities to understand the English. As an example an experienced teacher reported: ‘The English level in the elementary materials is a bit difficult to understand. We do not understand some of the new words’. Some elementary teachers are not keen readers and some have difficulty with writing in their reflective journals. The level of English exhibited by most of the teachers in their journals is at a lower level than that contained in the 2003 elementary curriculum. For such teachers, their lack of competence in English contributes to their inadequate comprehension of the syllabuses and teacher’s guides. Similar findings were obtained through the survey results.

In addition, the professional culture of the experienced teachers is rooted in the Scope and Sequence approach of the previous syllabus. They are required to make an intellectual shift to the new OBE. The first in-service unit ostensibly addresses the changes required in the reforms, but it is mainly about the broad educational reforms, and not about the real shift in thinking between Scope and Sequence and the OBE approaches. Some elementary

trainers expressed feelings of uncertainty or inadequacy regarding the elementary teachers' understanding of OBE. A District Elementary Trainer from Milne Bay made the following observation.

*A lot of my teachers were trained in Scope and Sequence. They were trained before the OBE was introduced and they haven't been updated. So they struggle to learn themselves what it is all about. You talk to them and they still start with the culture calendar. Their teaching is about that. They don't think about outcomes yet. There is a lot to do yet.*

This may be because the elementary teachers have implemented the elementary curriculum the way they perceive it to be. The data seem to suggest that the trainers may not have had adequate training on the new elementary curriculum content and particularly in the integration across curriculum in order to assist the teachers. The same trainer, who is in his second year of work as a trainer, observed that he felt inexperienced in this regard.

*In my first year I did not know much. I was primary trained and I had to find out what this elementary was all about. I did my course in Port Moresby but I don't have the experience of working in an elementary classroom with OBE. It's how you say, theory without practice. So I must be careful what I say to teachers because some of them might know more than me.*

The Provincial Elementary Teacher Training Co-ordinator pointed out an obvious weakness in the makeup of elementary trainers.

*Ah, most of us are primary teachers. There is a problem in the book. It is well-written, but the sequencing. Here is the book. There are strands and outcomes and indicators. The column Teaching and Learning Activity is where most teachers and trainers get stuck. Teachers need a standard lesson plan format to help them.*

Most teachers seem comfortable with the curriculum after two years, but not the trainers. As we note from the action research, in effect, several experienced teachers seemed to re-interpret the new syllabuses in terms that fit with their current Scope and Sequence practice. For example, the inspectors we interviewed noted how the cultural calendar, which was prominent in the Scope and Sequence syllabuses, remains an anchor for many teachers when they plan lessons under the new syllabuses. Several of them have made strong attempts to help teachers make the adjustment, but it appears that their own inexperience in elementary education leaves them devoid of a practical professional basis upon which to draw when confronted with real classroom situations.

### **3.4.3 The perceptions of teachers, head teachers, elementary trainers and inspectors of the effectiveness of the syllabuses in supporting community-based learning**

In the first and second round of visits, classroom observations by the research team indicated that the subject content taught in the classrooms was linked to everyday community activities. This was particularly evident with the Culture, and Community and Language programs in all site schools. Themes such as fishing, gardening, ceremonies,

families, festival and transport are linked to familiar community activities of which students are aware. Students and teachers share much information during such sessions and seem to enjoy them. Integration across curriculum and catering for different ability groups on the other hand, were not evident in all lessons observed. Teachers were not confident using such teaching strategies. Many teachers in the site schools also stated that they are not confident in teaching the new cultural mathematics syllabus. Teachers point out that they have insufficient knowledge of traditional mathematics. Some teachers in some of the provinces were able to share their traditional mathematical knowledge they have with the research team. However, most could not relate such knowledge to that recommended in the new cultural mathematics syllabus, until discussed with the researchers. The weaknesses identified in the teaching of all the subjects and classroom management were discussed during teacher meetings held with the researchers, and changes in teaching approaches were observed, including the teaching of cultural mathematics during the period of the first visit. Marked changes and improvement in teaching practices and classroom organisation were observed during the second visits to these site schools.

The evidence indicates that Elementary Teacher Education Support Project (ETESP) and TPPS teacher training has had some impact on the teachers' current practices as these programs emphasised integration of formal learning with the students' everyday community activities. There are teachers and schools in the sample that have had a long history that commenced in the TPPS period. The organisation, experience and resource development displayed by those teachers and by such schools is invariably at a higher level than teachers and schools that are contemporary to the elementary school movement.

Some Grade 3 teachers were interviewed during site visits and the perception seems to be that elementary graduates are well grounded in cultural understandings. Children have a wider knowledge of language and expressive arts including drawing, dance and song, have experience with written stories, and talked about important cultural activities that occur in the community in comparison to children who have not participated in the elementary program.

Tok Ples as the language of instruction in many of the site schools has had a significant influence on the link between classroom lessons and the students' lives in their communities. The teachers referred to activities in the communities that the students could relate to during the lessons observed, such as land, family, animals in the communities and use of water, feasting, and ceremonies. This practice is particularly notable in the semi rural and rural schools in the eight provinces. It is also apparent that the integration of classroom knowledge with the community knowledge varied in each province and within each school in each province. In some schools, the students were taken into the community to participate in a mortuary ceremony, a wedding ceremony, and church activities. Participation in the mortuary ceremony was linked to some of the classroom themes, including 'shell money' and ceremonies.

One of the teachers in this particular school in East New Britain used *tabu* (shell money) to count in sets of 20 in the cultural mathematics class the morning before the ceremony.

Sets of 20 pala tabu (small shells) are used by those who do not have much Western money to buy a small bundle of peanuts in the community. Small bundles of peanuts are often sold during mortuary ceremonies. She posed this problem to the students on the board: 'How many bundles of peanuts can you buy with 60 pala tabu and 80 pala tabu? This exercise was written in Tok Ples. The sentence was followed by the abstract symbols of  $60 \div 20 = ?$ ; and  $80 \div 20 = ?$ . The students were asked to bring 'a tura malmalikun na tabu' (a length of tabu threaded in strips of cane and measured from the tip of the middle finger to the elbow) to class for this exercise.

It must be mentioned that most of the teachers did not make connections with mathematics at home and the formal classroom mathematics, nor did they integrate across the Language, and Culture and Community lessons. The weekly lesson programs seen by researchers did not show integration across the curriculum. However, they showed integration of Language, and Culture and Community lessons with community activities. It was interesting to note that in two provinces the weekly teaching programs placed Cultural Mathematics in separate boxes. Teachers reported that they had limited knowledge about integration across the curriculum and mathematics was placed in a separate box.

While by the third visits these community connections and integration had improved and strengthened across all sites, in some cases these community connections seem to be reduced to 'taking children outside'. While there are many examples of teachers taking students to participate in community activities, there is little evidence of work done inside the classroom that connects educational outcomes with this community participation.

*Now we build on the knowledge that the children come with in school. Our integration with school content and home knowledge is stronger. Now we cook, grow things and learn traditional medicine in school as well. Now too the understanding of the links between elementary school and lower primary is stronger. The people now understand the purpose of elementary education.*

Teachers generally agree that the syllabuses support community-based learning. Most themes are based on community activities. Community based learning takes place when events within the community are related to the theme on the community calendar. Children are taken out into the community to observe or participate in the activities. For example, if the theme is food, children are taken to see 'mumu' in the making and the types of food being roasted. If the theme is 'house', children are taken out of the classroom to observe.

There are other examples of community-based activities such as the coffee festival in Goroka. Children were taken to the festival to learn more about coffee and even tasted it. In one school the theme 'food', was celebrated with World Food Day in the school with parents and the community invited to school to cook a variety of food that was then shared. The children observed and participated. These types of events are often followed up in the classrooms with children being asked to identify different materials or food used and the processes to monitor their understanding of what they had observed.

Teachers in the three elementary schools that are aligned to Wagifa Primary School in Milne Bay Province joined with the primary school students for one day in Term 3, 2006 to participate in a traditional food exchange (*vevutuvutuga*) in which parents demonstrated appropriate behaviour and language that celebrated the exchange and the strengthening of inter-village relationships. Elementary children with their primary brothers and sisters joined in and imitated the adult behaviour and presented their own contributions to the food exchange.

Teachers found integration easy, although it depended very much on the theme. There are those that can be integrated across all subjects and there are those that can integrate Language, and Culture and Community. For example, the theme Fishing can easily be integrated through all subjects including cultural mathematics.

The elementary inspectors, trainers and most teachers agree that classroom teaching and learning relate very much to the community. The syllabuses contain suggested activities, many of which are community-oriented. According to teachers, there are many activities that involve community-based learning and are easy to teach. Students are able to understand and participate in these activities because they have observed and participated in them at the community level.

For example, children's learning at Fissoa is not confined to the classroom. Outside learning has been used and thoroughly enjoyed by children. Themes that are adopted for teaching are community-based and revolve around the community calendar or are from the national education calendar that indicates national and international events.

In order to ground the concept of community-based teaching and learning, and strengthen the relationship between Fissoa elementary, the primary school and the community, Tuesdays are observed as 'culture days'.

*This idea was introduced in 2005 with the introduction of the new curriculum. On Tuesdays, boys come to school dressed in 'laplap' tied around their waists with baskets on their arms while girls are dressed in laplap and 'meri blouse' with 'ruai' (type of basket) hanging from their heads. Activities children are involved in that day are community-based activities, for example: weaving of mats by girls and cutting of bamboos for the classrooms by boys.*

The syllabus encourages community-based learning and with some teachers having experiences in TPPS and the former Scope and Sequence, implementation of the new curriculum and community-based activities did not pose major difficulties. Indeed this previous experience with integration across subject areas and with community activities seems to have had an impact even on schools that have not had much support for implementing the new syllabus. For example, in one school in Morobe, all classes (EPrep, E1 and E2) were teaching the same theme (Diwai-Tree). The students brought from home parts of trees that were discussed in the lessons. Traditional medicine (leaves, bark, fruits, roots), fruit trees and nut trees grown in the homes were discussed in class. All classes had varying activities based on the theme-Tree. The students were engrossed in these activities.

This success is not completely widespread, however. In particular, it seems that urban schools find problems with learning outside the classroom. Children's education could be further enhanced by parents' interest and participation in schools. In a particular school in Simbu, parents' involvement and interest in their children's education is weak. Consequently, the next best thing for teachers to do is to take children out into the community to learn. Children need to observe what they learn in the classroom such as insects, outside the classroom and see them in their natural habitat. Teachers at this school were refused permission to take children into the community to learn.

Some trainers felt that although there was initial confusion with the new terms and concepts used in the new syllabuses, teachers have now worked with them for two years and have come to understand their meanings. The researchers experience is that such understanding is likely to be fairly superficial and based on the practical implementation of everyday teaching strategies. Given that community-based learning is taking place through the use of themes from the new syllabuses, some trainers expected that these would be good foundations for children to fit easily into the community if they are unable to go further with their schooling.

### **3.5 The perceptions of teachers and head teachers about the quality and effectiveness of the teachers' guide, the implementation support booklet and other teacher support materials supported by CDD**

#### ***3.5.1 The perceptions of teachers and head teachers about the quality and effectiveness of the Teachers' Guide***

During the first two rounds of visits it was found that the perception of the quality and effectiveness of the Teachers' Guide differed among the teachers and head teachers. Insufficient copies of the teacher's guide were sent to most schools and most teachers were sharing the materials. In New Ireland Province, teachers received one copy of the Teachers' Guide in 2004. The province provided photocopies of the Guide, which were sent to some schools. In others, the Head Teachers, acknowledging the need for each teacher to have a copy, took the initiative to have the book photocopied. Teachers in schools that could not photocopy received their copies in 2006.

In concert with the survey findings, many teachers state that they find that Teachers' Guide is effective, especially after prolonged use. In the first two rounds of visits, teachers commented in journals and during focus group work that sections of the Teachers' Guide, especially programming and planning, are complex and require time and re-reading in order to understand the language and the concepts. It was found that the two-year exposure to the material and attempts in the classroom to implement the ideas are important and are required before teachers begin to comment positively about their ability to manage the Teachers' Guide.

There were also strong comments from teachers who want more examples in the Teachers' Guide about programming, planning and teaching activities. The following excerpts are from the journals of two teachers:

*They should break down indicators – they are too broad at the moment. Also give more activities. It's time-consuming for teachers to break them down in planning. Lesson plans should be made by CDD so that teachers follow the same format. Not all teachers have a lot of education. One of my teachers only has Grade 6 education.*

*The Teachers' Guide shows me how to put three syllabus areas into order – samples are in the Teachers' Guide. I was not doing annual program after TDT because of no Teachers' Guide. TDT did not look at the Teachers' Guide. Trainer used it but we did not see it. We had to write down lessons from the black board from the trainer. Maybe some more ideas and samples of planning and how to teach are needed.*

There were many more positive comments about the quality and effectiveness of the Teachers' Guide during the third round of visits. In discussing the Teachers' Guide, the teachers stated that it:

- contains a clearer explanation of what is in the syllabus;
- has specific explanation regarding skills, knowledge, and attitudes;
- assists us in the preparation of lesson plans; and
- helps us to understand the activities that relate to skills, knowledge, and attitudes.

This supports the claim that teachers need at least two years' experience with the new curriculum documents and exposure to in-service activities before they can implement changes in classroom practice and make regular use of materials, such as, the Teachers' Guide.

Teachers acknowledge that the Teachers' Guide is a document that assists with team planning, multigrade teaching planning, integration across the curriculum and the community, catering for different ability groups, and subject content links between all grades. It is also viewed as a document that enhances the understanding of the syllabuses, which results in better teaching practices. These examples from teachers' comments in East New Britain demonstrate the growth in knowledge about the purpose and efficacy of the Teachers' Guide.

*School 1: The Teachers' Guide helps us to see the connection between all the grades, and the integration across the curriculum. They help us to use the syllabus better. They assist us to plan lessons because some of the words in the syllabus are difficult to understand, so we just look at the examples in the Teachers' Guide to get more understanding. They help us to plan lessons as a team. We use the same theme each week, so that when one teacher is away, we can easily do multigrade teaching.*

*School 2: We use them to guide us when planning our lessons. We think of good activities that will help our children learn skills better. The students now enjoy coming to school because they enjoy learning.*

Teachers, when talking about the new curriculum, almost always differentiate between it and the Scope and Sequence.

*The Scope and Sequence outlined skills, knowledge, and attitudes worth teaching, but we had to find the materials and plan our lessons. We learned how to persevere in the preparation of our lessons, big books, and other resources. The new curriculum is different in that it outlines how these areas can be treated, and provides examples.*

There are some teachers who use the Teachers' Guide each day, while others use it two to three times a week, especially in the preparation of weekly and daily lesson plans. The guide is perceived to be useful and provides teachers with examples of how an outcome can be planned and taught.

*There are instances when we do not understand something in the syllabus, so we refer to the Teachers' Guide for assistance. The guide contains specific information on knowledge, skills, and attitudes, and contains activities to support teaching.*

Teachers provided examples of the themes which they have taught, and how the guide has helped them to plan lessons. An example was given concerning the theme 'clothing'. In the syllabus, there was no mention of activities, so the teacher referred to the Teachers' Guide for assistance to plan the lesson.

Another example that was cited concerned the theme 'fishing'.

*The syllabus has two bullet points that helped, but this was insufficient. I referred to the Teachers' Guide, which contained more activities and examples, and a clear break-up of what could be done each day.*

Teachers felt relieved that they are being provided with materials that are laid out for their use. They do not have to look far for examples of activities or materials that they can use in their lessons. The initial feeling of being overwhelmed by the new curriculum was often replaced by eagerness to attempt its implementation.

A common view of teachers is that the ideas and procedures in the Teachers' Guide are all that they are allowed to put into practice. This view seems to be reinforced by the advice teachers receive from trainers that there is one way to program, plan and teach. The teachers are not encouraged to be imaginative or flexible. They comment that if the Teachers' Guide gave them more ideas that encouraged flexibility then they would feel more confident about trying new ideas in the classroom. Even by the third round of visits, teachers were generally still closely following the Teachers' Guide, rather than experimenting with new ideas about possible activities. What has changed, however, over the course of the study, is the widespread acceptance of the Teachers' Guide as a source for assistance in using the syllabuses.

### **3.5.2 The perceptions of teachers and head teachers about the quality and effectiveness of the implementation support booklet and other teacher support materials supported by CDD**

The new curriculum has been supplied to schools with a number of support materials, including the Elementary Activity Books 1–3, which contain stories and activities, reams



of A3 paper, and packets of crayons. The Elementary Implementation Support Booklet, the Elementary Outcome Charts, plus many other materials, including policy documents, were also part of the kits.

In the first two rounds of visits it was found that some schools had not received the materials and many of the teachers were uncertain about the nature of support materials even where they had received them. There were examples of schools in the study that had not used the kits forwarded to provide support materials for each of the elementary grades. The shell books in these kits, which are meant to be the basis of Big Book and Small Book production, were unused.

The common reason given for this lack of interest was that they were too busy.

*We are so busy implementing the new curriculum that we just don't have the time to look through the support materials. We do not know how they could help us in our preparation for teaching. We have Elementary Activity Books 1 and 2, but they are stored in the primary school storeroom.*

Two particular schools' contrasting use of the support materials in New Ireland Province provide some illumination on the issue. One school had a Head Teacher who encouraged her staff to read and use the support materials. It would seem that the Head Teachers' active encouragement of the use of the materials had an impact on this particular school. The other school's other support materials were still in the box that they were sent in. This school did not have the Head Teacher's Handbook in their set. The researchers and the teachers did not find it among the other materials.

In Sandaun, the other support materials arrived with the Teachers' Guide and syllabuses. The researcher was shown these books when she asked for them at the beginning and at the end of the study. However, even by the third visit, there was still a general reluctance to use these other support materials. In two site schools, all of these materials were still in the boxes in which they arrived. The Head Teacher from one school was using the Head Teacher's handbook, but the only other materials being used were students' and teachers' resource books from the TPPS program and ETESP.

In EHP, schools that have received the correct materials are not using many of the books. Teachers are using the syllabus and Teachers' Guide because they have been in-serviced on how to use them. One of the sample schools has actually distributed Elementary Activity Books 1–3 to its teachers. The preparatory teacher has been provided Book 1, E1 teacher Book 2, and E2 teacher Book 3. According to the Teacher In-Charge (TIC), *'We've read through them, but have not used any of the stories and activities in teaching.'*

Teachers are using the A3 paper and the crayons, but will not go out of their way to interest themselves in new policies relating to material procurement and distribution, or the assessment and reporting policy. Materials are being left in the kits, collecting dust, because teachers do not know how to use them. The attitude seems to be that the trainer or inspector has not told them how such support materials could be used. The initiative is not there for teachers to discover for themselves what is available in the kits that will be useful to them, as teachers.

In Simbu, the materials that were often used were the Elementary Activity Books, 1–3. These assist teachers with activities that are suited to the themes that they teach.

*We are busy trying to understand and implement the new curriculum that we have, and have not looked at the other materials in the kits. We are using some of the stories and activities in the Elementary Activity Books 1–3, that suit our class levels.*

Teachers state that the local Curriculum Committees have not met and so the Big Books have not been produced. There is a poor understanding of the role of the Curriculum Committees by many teachers, which may account for the fact that few of the site schools in the study have an operating Curriculum Committee. There are several schools in the study that report having no Big Books at all.

A number of site schools with large libraries of Big Books have used all of the shell book support material and would like further shell books. Some teachers encourage students to write the stories for the Small Books from the shell series rather than the teacher doing it. This is done more so with E2 children.

A particularly innovative E1 teacher indicated that when the shell books have run out he uses A4 paper cut in halves and encourages children to develop their own small books using stories that the children create or he provides a topic for them. The small books are hung in the classroom and read regularly by children.

The same teacher is no longer prepared to wait for CDD to send support materials, but produces his own posters using A3 paper and uses cut-outs from newspapers and magazines in the classroom to stimulate reading.

In Simbu, the general feeling among teachers consulted was that the shell books are not relevant to the Highlands regional setting, because they contain pictures which are more relevant to the coastal and island provinces.

There are three significant issues to be drawn from the use of these support materials by teachers:

- There seems to be a distinct relationship between the use of the materials and key individuals, e.g., headteachers, inspectors, trainers. If headteachers or trainers provide advice or guidance on the use of the materials then teachers are much more likely to use them;
- The perceived relevance of the materials. While packaging materials as diverse as the Materials Procurement and Distribution Policy handbooks, Elementary Activity Books, with crayons and paper, may have been advisable for delivery and distribution reasons, unfortunately it seems there has been an impact on teachers' use of valuable classroom materials. Teachers' understanding of the nature of support materials is impacted upon by the contents of any box or kit. It seems that to many teachers, the kits only contained policy documents and were, therefore, not perceived to be useful. The shell books, crayons, and activity books therefore remain unused in many schools;
- Time. As with any systemic change to curriculum, the implementation of the new elementary syllabuses has meant that teachers have had to balance the time needed to understand the new curriculum with the time needed to plan and teach. For many

teachers, it seems they perceived the time needed to read and understand the support materials as not a priority.

### **3.6 The processes used by teachers to implement the new syllabuses and their effectiveness**

Processes related to the work done in workshops are dealt with in 3.7. This section reports on the planning and programming processes used by teachers in the implementation of the new syllabuses.

In the first two rounds of visits, the most common concern from teachers about the new syllabus documents related to planning and programming. These skills were usually the first weaknesses that teachers raise with the researchers.

The data are somewhat confusing as to the basis of this weakness. Time is spent on planning and programming at the initial teacher training stage and during professional development activities. A number of teachers reported that they are continually being given conflicting advice from trainers, inspectors and CDD officers about the proper approach to programming.

*I thought I knew about how to program my weekly and term teaching but one time the trainer ran a session at the school and he said I was doing it the wrong way. So I changed. Then the inspector came along and said I was doing it the wrong way so I changed. When we did the TDT some people from CDD came and told us to do programming another way. Now I don't want to program. I am tired of too much writing all the time. (Teacher journal)*

The teachers in an urban school in the National Capital District have rewritten syllabus documents using the themes and indicators in the syllabus, but developed their own set of indicators and the timing of each outcome in the yearly program.

Teachers point out anomalies in terms of indicators not fitting outcomes and that some outcomes are irrelevant for their communities. For example, the outcome for E2.1.1 of the Language syllabus states: 'Communicate with people from the community for a range of purposes'. This outcome refers to communication with the community and yet only one of the eight indicators suggested in the syllabus actually relate to children communicating with the community. The remaining seven indicators do not require interactions of any kind with the community.

Most of the teachers, including those who had graduated, were of the view that the content included in the elementary curriculum materials was prescriptive and therefore they should not explore other ways of teaching. These views are often reinforced by inspectors and trainers who, because of their own lack of training and experience in elementary education, tend to advocate a strict alignment with the syllabus documents more or less as a safety net.

Cultural calendars, program maps and weekly lesson plans were seen in most classrooms visited. They are usually pinned on a wall almost as a sign of legitimacy that the teacher is well in control of teaching. Most teachers, however, do not keep up with their weekly

lesson program preparation. The weekly lesson plans do not reflect integration across the curriculum. This is mainly due to poor understanding of integration, especially by relatively new teachers.

Most of the timetables seen in the classrooms follow standard sequencing beginning with Religion, followed by Language, Cultural Mathematics, and Culture and Community activities. However, some variations are evident. Some teachers, for example, allocate two days for Cultural Mathematics, and three days for Culture and Community or vice versa. This compartmentalisation restricted possibilities for integration across the curriculum by teachers.

Teachers also received conflicting information regarding timetabling during in-service training. This calls into question the uniformity of the implementation of the new elementary curriculum materials and the nature of the training, or the translation of training into practice, by trainers and inspectors in provinces.

By the third round of visits it was noted that teachers in only one school perceived the whole process of planning and preparation as time consuming. Most of the schools reported an improvement in school attendance. The majority of schools reported varying levels of community support and an increase in interactions between the teachers and members of their communities. Teachers in Milne Bay stated that community support remained weak except for special events in which parents were particularly interested. Such as, cultural activities, graduations of E2 children and the presence of special visitors to the school. Earlier data in the study showed a general lack of support in these areas.

*We are planning our lessons by ourselves. We teach different themes during the week. We plan our weekly lessons, and look for, or prepare, suitable materials for our teaching. We spend too much time on this. We do not usually take children for lessons in the community. We ask them to bring materials such as leaves of traditional medicine, shell money, cooking stuff, and other things. We also ask people from the community to come to school to talk to the children. We link the subjects, when planning.*

*The Teachers' Guide has helped us to sit together and plan our lessons for the week. We use the indicators and outcomes in the three subjects to plan our lessons. We also include how we assess our children. We allow children to spend more time on activities that they are really interested in, and we make up time for the other subjects later. We take our children (the whole school) to take part in death and marriage ceremonies in our community. We also take them to do gardening in the community. The children enjoyed learning more when we take them to the community. They now come to school everyday. We now focus on integration across curriculum and the community when planning our lessons. We also now think more about the different ability groups in our classes. We spend more time planning.*

*The Teachers' Guide has helped us to plan together. This is good because when one teacher is away we can do multigrade teaching because we use the same themes every week. We now think more to integrate the same ideas in language,*

*cultural mathematics and culture and community. We find suitable big books to help with this. We try to make the lessons interesting for the children. When we use the outcomes and indicators to plan our lessons we find that we can assess each child's learning progress and this is good. Assessment is easy now. We also ask our children to bring teaching materials from home like cooking stuff, tools and leaves from plants. We also go with our children to take part in death and other ceremonies in the community. But we spend a lot of time when planning our lessons.*

There are instances where teachers feel that there is too much paper-work in the preparation of lessons and, therefore, if they are absent for one reason or another, some of the lessons that they need to teach and have not taught are not covered.

*...you asked about lessons that are not taught in my absence. As for me, these lessons should be taught. I have to find time to make sure I teach them, and teach them to the fullest. To tell you the truth, I sometimes just leave them and continue on with the next. But that is total laziness. I apologise.*

Teacher absenteeism has become a significant issue for one of the NCD elementary schools particularly during TDT activities. The teachers decided to carry out a piece of action research to understand the issue better and the implications for the curriculum and the learning of children.

The school has a total of fourteen teachers and five of them went to the TDT program in 2005. As well, the staff have a high absentee rate and many of these absences are unaccounted absences. The researchers requested the daily attendance book that is kept by senior teachers and analysed the absentee rate for Term 2 in 2005. The absenteeism data were analysed on the basis of gender and grade level. The E1 classes were the most affected by absences and women teachers from E1 had the highest rate of absenteeism. A sample of these teachers was taken and a questionnaire designed to inquire as to what actions were taken to provide education for the children during periods of teacher absence. The school policy is that teachers in attendance would cover classes. In effect, this meant that the children were given work to do by themselves and may or may not be visited occasionally by a teacher. It was calculated that E1 children, on average, lost three hours of instructional time per week in Term 2, or 17% per week. Teachers further reported that they did not talk with other teachers upon their return to school to gauge what work had been completed by children. The teachers simply commenced teaching activities planned for the week of their return with no attempt to compensate for the missed activities.

In Morobe, the teachers are now working as a team to plan weekly lesson programs. Planning takes into account integration across the curriculum and the community. One school could not teach cultural mathematics because they had lost this knowledge and the teachers were not fluent in their Tok Ples anymore. Teachers also spend time planning their weekly lesson programs. School attendance has improved in one school because of the strong focus on community-based learning, and the provision of a variety of activities in lessons. Students enjoy practical lessons in the community.

*We plan our weekly program as a team now. We are able to teach the content in the curriculum materials. Our integration across the curriculum and the community is now stronger, but our people have lost their cultural mathematics. We are not fluent in our Tok Ples anymore. We spend every afternoon on planning and preparing our lessons. The students are more interested in coming to school and the school attendance has improved. The children like outside and practical activities. The community has also noted this change. We have an effective BOM and the teachers come to school everyday.*

In Sandaun, one of the site schools is now planning lessons as a team. Two other site schools use the same theme for all grades, at the same time. More outdoor activities were also noted. The researcher also noted a change in classroom management, and with integration across the curriculum and the community. This was reflected in the teachers' lesson programs, and the lessons observed in the final visits.

*We now teach lessons that link up with the children's learning at home. We use outcomes and indicators when we prepare our lessons and assess the children's learning.*

*The Teachers' Guide has helped me to plan my lessons for three grades. I use the outcomes in the three subjects to plan my lessons.*

*The Teachers' Guide has helped us to plan together, which is good. We now think more about integrating the subjects. When we use the outcomes to plan our lessons, we find that we can assess each child's learning, which is good. We now take children into the community more, so we can link their classroom learning with that in the community.*

In EHP, teachers work as a team to prepare term and yearly programs. Teachers then take out the themes, and because they have programmed to teach each theme for two weeks, can prepare weekly lessons. Whether the same idea from the theme is taught in all grades cannot be gauged. However, it seems that each teacher takes a theme, and breaks it up into a two-week lesson, with each teacher teaching a different component of the theme.

After two years of implementation, teachers are now able to find short-cuts when planning lessons. In three provinces, Milne Bay, New Ireland, and Eastern Highlands, there has been support for these kinds of short cuts. The New Ireland and Milne Bay Provinces are working towards a standard program guide, which will assist to minimise the time and amounts of paper used by teachers for short-term planning activities. EHP has developed a trial daily/weekly teaching program book that teachers are using in the schools to minimise the amount of time and paper used by teachers to prepare daily and weekly plans.

Some teachers found that using the syllabuses was 'time well spent'. Teachers spend from one hour to two hours a day, using the syllabuses, because of the amount of writing and preparation that they have to do for teaching.

Teachers were comfortable with implementing the Scope and Sequence. They perceived that they were producers of their materials and curriculum writers. With the new curriculum, it is different in that teachers now perceive they are extracting information to

plan lessons. The teachers at one school compared the differences between the two curricula in the following way.

Scope and Sequence	Reform Curriculum
Time dictated	Timing flexible
Objectives — Not sure whether it is achieved or not	Outcomes — we are sure — can be achieved within a lesson
Limited to one objective	Flexible learning
Most of the work undertaken by teachers	Provided outcomes, indicators, and activities for themes already in place
Small big book resources	Some already in place, and need to identify activities for two-week themes

They further commented on their experiences as being positive.

*The syllabuses assist us to plan teaching and learning activities, evaluate our teaching, and assess children’s learning. It is geared towards student learning and making learning relevant. We had the influence of a mentor to help us understand, whereas the previous Scope and Sequence was too broad, and it was difficult to integrate subjects.*

This is quite a significant change in the attitudes of teachers to the differences between the old and new curriculum. In the first two rounds of visits, the researchers generally found that teachers were unwilling to engage with the new curriculum because of their comfort with the Scope and Sequence. In this particular school at least, the teachers have been able to identify the shortcomings of the old curriculum and recognise the advantages of the new syllabuses.

The reported problems with writing out of plans and programs in the first and second visits seem to have been alleviated in many areas. Certainly the work done at the provincial level to provide templates for planning is to be commended. There is the sense now among teachers that, even though the development of plans is still time-consuming, it is time well spent. This issue of the time spent writing plans is in many ways related to the trainers’, inspectors’ and Head Teachers’ perceptions of the value of written plans. For many people working on the implementation of new curriculum (not only in PNG but elsewhere) it is difficult to evaluate teachers’ uptake of new teaching practices. In many cases, therefore, the production of written plans becomes the evidence of the success of a new curriculum. Whether these written plans actually become the basis for new classroom practices is much harder to assess, especially in this case where the time spent in elementary classrooms by trainers, inspectors and head teachers appears to be negligible.

***Willingness to Use the Curriculum***

After the initial reluctance, the teachers were willing to implement the new curriculum, after they attended workshops. There were innovations in their interpretations of it, and a general determination to make it work.

*When we first received the books, we were too scared to touch them. After attending some workshops on how to use the curriculum we were more confident in using them. We were willing to 'burukim bus', even when we did not fully understand it. Now we are happy.*

*Some in-service courses were conducted to introduce the new curriculum. We all attended. We were not happy about the new curriculum, but when we attended the in-service courses and worked with the curriculum for a longer time, we were happy to use it. The trainers gave a little, so when we started implementing, we learned more. We were willing to 'burukim bus tu'.*

*When we got the new books we read them and tried to understand them. After the workshop, we now understand more, 'na mipela i burukim bus pas taem'. Now we are more confident in teaching the new curriculum.*

*When we first received the books, we did not want to use them. After attending a workshop on how to use the curriculum, we were still not confident about using them. We were willing to 'burukim bus', even when we did not fully understand it. Yu save stap wantaim mipela tu i givim strong long mipela. (Your work with us has given us confidence). Now we are happy.*

*Two half-day in-service courses were conducted in order to introduce the new curriculum. We all attended them. We were still not sure about using the new curriculum. Tasol mipela i 'burukim bus. Halivim long yu long tu i bin strongim mipela. (Your assistance gave us confidence.) Now we are more confident.*

*When we got the new curriculum, one of our teachers who had attended a CRIP workshop helped us to understand how to use the curriculum. We went ahead and implemented the curriculum. Behain yu kam na saptim mipela, na mipela i kisim strong gen long usim dispela curriculum. (Your support gave us the confidence to continue with the implementation). Now we are using it better.*

These comments illustrate a general willingness to implement the new elementary curriculum, even when feelings of uncertainty prevailed as reflected in, 'mipela i burukim bus', which means, 'we made our own pathways'. This supports other evidence in the study that the teachers implemented the curriculum, as they understood and interpreted it. These data also suggest teachers' willingness to take ownership of this new curriculum, adapt it, and make it work with new initiatives and innovation. The data also support other data in the study, which show that the longer teachers interact with the curriculum, the more confident they become.

### **3.7 The impact of the syllabuses on teacher practice, student participation in schooling, students' attitudes to school and community support for elementary education**

#### **3.7.1 Teacher practice**

The 2005 classroom observations indicated that some teachers have developed a professional teaching style and have benefited from previous ETESP, and in some cases



TPPS teacher training, along with professional development support provided by PNGEI. There were, however, a large number of teachers who were either unable to adopt a student-centred approach, or do not care for that approach, and employ a strongly teacher-directed approach.

Most children's attention is on the blackboard and the teacher in elementary classrooms does the majority of the talk. There is an assumption by many teachers that desks are desirable and schools will often allocate the few financial resources they have to the construction of expensive desks. In those classrooms without desks children are often expected to sit in three or four lines in the classroom for the duration of the day. Researchers have been in some classes where classroom order is non-existent and children are allowed to walk in and out of classrooms at any time and to engage with the teacher and other children as and when they desire.

Lessons tended to be lengthy. There was little stimulus variation and children could spend the entire morning on a set of maths questions which are written on the board and the children transcribe them to exercise books, or more often to slates, and then carry out the function. Much of the teaching of maths follows an abstract process in which children solve addition and subtraction sums. There is little talk about the way maths occurs in all aspects of everyday life. The talk is invariably an answer to a calculation. Although concrete materials may be used this does not seem to happen enough in order to fully develop mathematical concepts at an early age. There are classrooms where there is no evidence of the use of concrete materials by teachers. Researchers have been in classrooms where Prep children and E1 children are expected to do the same abstract mathematical activity.

Questioning is used widely in the classrooms, but the majority of teachers are content to receive chorus answers. Few teachers were good at questioning. For example, few directed questions at particular children or ensured they spread questions across all children.

In the third round of visits, there has been a significant change in the interaction between the teachers and the children. Children are very much involved in learning inside as well as outside the classroom. Lessons that tend to be lengthy for six to eight year-olds have become, in some classrooms, more interesting, with a variety of activities to keep children interested.

The researchers noted a marked change in classroom management, integration across curriculum and the community, and a slight improvement in catering for different ability groups. The researchers also noted that the integration of cultural mathematics with the other two subjects was stronger.

In Sandaun, the researcher noted a change in teaching practice and lesson preparation during the last visits. Teachers put in more effort when preparing materials to support their teaching. More concrete materials are used in all subject areas to support teaching in all of the site schools.

In EHP, most teachers are able to prepare lessons containing a variety of activities for children. As such, children's participation in schooling is quite good. Teachers are now

able to prepare lessons that can be conducted inside and outside the classrooms. Teachers are comfortable with community-based education, as most of the themes are known. Schools take children out on excursions much more often, but this depends entirely on the theme of the day.

The majority of teachers share their difficulties and accomplishments about the new curriculum. They assist each other, whether in programming, or planning weekly units of work. However, there are other areas that teachers still need assistance with such as those identified during the Training Needs Analysis (TNA) conducted by provincial trainers in EHP. Assistance is especially needed in the area of assessment, with which teachers are still confused. The researcher was assured that this area will be looked at thoroughly during the next scheduled workshops.

Observations of a teacher in Simbu using the syllabuses in 2005 showed an interesting lesson. The theme was food and throughout the whole lesson, children were captivated, as was the researcher. The teacher was able to go from one activity to the next once the children became a little restless. The teacher made the transition to another activity with ease and the children were kept interested throughout the fifteen-minute lesson. The teacher at Gon Elementary School was the first teacher in the school to teach the new curriculum. She is now assisting the other two teachers — including the TIC — to implement the new curriculum in 2006.

Generally, teachers in their second year of implementing the new curriculum are able to transfer statements from the syllabus, to the classroom, with assistance from the Teachers' Guide, and elementary activity and shell books. They are beginning to work as a group, although at different levels of implementation. The teachers' whole process of planning has changed in the second year of using the new curriculum. Teachers are better able to relate outcomes to themes.

Teaching has become more flexible. In many classrooms, children are very much involved in activities, whether one or a number, or in groups or individually.

### ***Classroom organisation***

Displays on classroom walls vary across provinces and classrooms within each school. Some classrooms are flooded with student and teacher print displays, some have minimal displays, and some only have teacher displays. In some classrooms the lack of display was due to vandalism, or extreme weather conditions, which blow displays away. Some teachers are unable to mount displays because of the lack of materials to do so. The school may have run out of funds to purchase paper and card. There are elementary schools that handle funds more efficiently and students have exercise books all year round and there is an adequate supply of materials for teachers to develop interesting and displayable activities for children.

All classrooms observed in ENBP were flooded with Tok Ples prints. Students' section and teachers' section displays were seen in all classrooms. It was noted that the site elementary schools with Tok Ples Priskul experience had more print materials in the language of instruction than those with no experience.

In a number of provinces, desks take up much elementary classroom space, which hinders free movement around the classrooms. This matter was raised with teachers and discussed. Subsequently, a number of schools in some provinces removed desks from their classrooms and stored them elsewhere. These teachers reported that students were happier sitting on the floor and being able to move around more freely.

Storage desks and shelves were also seen at the back of the classrooms. Materials displayed on them varied between provinces and schools within the provinces. Some had books and other materials stored neatly on them while others had all sorts of materials stacked on top of each other. Storerooms vary in size and organisation of materials. There are schools that have no storage facilities and materials are either left overnight in an unsecured classroom or teachers carry them home on a daily basis. One researcher asked to look at the Big Books only to be told that they were at the teacher's house some two kilometres away. The teacher kept them there for safe-keeping and brought them in when they were to be used. However, this restricted the access by other teachers at the school to this valuable resource.

Discussions with teachers after lesson observations focused on the strengths and weaknesses of classroom organisation. Such discussions generated overwhelming willingness for the immediate changes in classroom organisation and teaching strategies. Teachers are willing to change current teaching practices and classroom organisation if professional guidance is provided to them.

By the third round of visits there was a general improvement observed in classroom organisation. The classrooms were organised to suit students' and teachers' movements in them. Integration across the curriculum was evident in teaching, especially the integration of cultural mathematics in culture, community, and language. An increased number of practical lessons was conducted in the communities and the schools. Students seemed interested in the class activities that were observed. These changes were reflected in the teachers' lesson programs and the lessons observed on the final visits.

The themes reflect community life, and elementary children in one particular lesson that was observed recently, participated in and out of the classroom. The theme was 'transport'. Children identified different modes of transport in the classroom, and later were sent to the beach to make models of the types of transport they see around them. One group decided to make trucks and cars, especially the Hino trucks that they see carrying oil palm fruit every day. There were others who fashioned toy canoes out of soft driftwood. Children know that they will be allowed to work at their own pace. Teachers are flexible with times for each lesson. For example, while the interest was still there, the teacher went from the topic 'transport' that they were discussing, to an art and craft lesson on the same topic.

In Simbu, the classrooms that the researcher visited are flooded with displays and prints. Children's work is displayed on the classroom walls, or is hanging from ceilings. Teachers are sharing the limited resources that they have available. Most lessons that were observed had a lot of student-centred activities, except for a few classes where children were involved in only one activity for the entire lesson. This brought about some

discipline problems for teachers (who were in training), who seemed to have limited control.

### **3.7.2 Student participation**

In East New Britain during the third round of visits, most of the schools reported an improvement in students' participation and willingness to attend school. Community support seems to have an impact on teachers' and students' varying attitudes to school. The stronger the community support, the more positive the teachers' and students' attitude to school.

*School 1: School attendance is not good. Some parents do not prepare lunch for their children. They are not poor. Teachers still come late to school and also stay away from school. The community is not happy about this. We do not take our children to the community for lessons but we ask some members of the community to come and talk to the children and they come sometimes.*

There is a weak relationship between the school and the community. There seems to be some degree of non commitment from community members and teachers. The teachers' lack of commitment to the school seems to have a negative impact on community support for the school.

*School 2: The children come to school everyday now. They bring their lunches to school. The BOM chairman sometimes comes to the school to talk to us. The teachers also try to come to school on time and everyday. We take our children to take part in death ceremonies, gardening, and cooking in the community. The children like this very much.*

*School 3: The BOM members, teachers, relatives and parents encourage the children to come to school. The parents now give food for their children everyday. Our teachers come to school everyday. Only when we are sick, we do not come to school. We take our children to take part in church activities, death and other ceremonies in the community. The children like coming to school now. They like to learn. We cook and we do gardening in the school with the children. The children enjoy this very much.*

This shows that community interest in the school and students' learning has some impact on the teachers' and students' attendance and punctuality. The site studies indicate that participation in schooling and attitudes to school vary in the site schools. Marked improvement in school attendance and general interest in schooling are evident in schools with strong community support. Students' participation in schooling is still an issue in schools where community support is still weak. Earlier data showed a general poor school attendance in all site schools.

In New Ireland Province, participation and attendance by children in schools are based on a number of factors, including location. In the urban and district town schools, children are more inclined to attend because of the parents' positive attitude towards schooling. In rural settings, some parents are not very particular about their children's attendance. There are children who miss school because they either have not had breakfast, or

because parents have not paid the school fees. Teachers' attitudes to teaching can also impact on student participation.

*Now, children are able to understand what I teach through their involvement. With the introduction of the new curriculum, my attitude to teaching has changed. I spend more time with the children, and I try to be more creative in the activities that I provide. My lessons are more child-centred than before.*

In a rural school, the teacher arrives late in the mornings or takes off to the district town without telling anyone in authority, such as the chairperson of the BOM. This has affected parents' attitude towards their involvement in school projects, and the children's participation in the school. According to a parent who is a primary school teacher:

*Em (name) I save kam leit long skul na mipela ino amamas. Ol lain long ples oli kros olsem na oli no halivim long wokim niupela classroom. Ol pikini tu isave les long kam long skul bikos long kain pasin bilong tisa taso'.*

Translated:

*He (named) comes to school late, and we are not happy. Villagers are angry and that is why they are not helping to build the new classroom. Some children are not attending school because of the teacher's attitude.*

The gradual handover of supervision and monitoring of teachers to the community and school administration will no doubt address situations such as this. Teachers are selected by their communities, and should be responsible to them in the provision of education services. Therefore, the community should play a bigger role in ensuring that teachers attend attentively to their duties.

In Morobe, the teachers in one site school informed the researcher that students now enjoy coming to school everyday because they enjoy learning. One community encourages the children to come to school. The other site school had problems with community support, and this seemed to affect students' attendance.

*School 1: The students enjoy lessons outside the classroom and practical work. The children come to school everyday. The community has noted this.*

*School 2: The children do not come to school everyday. The parents have money but they are not committed to paying school fees. They do not value their children's education yet.*

In Sandaun, the teachers informed the researcher that the students now enjoy coming to school because the lessons are interesting. The researcher noted the students' interest in learning during class observations. School attendance in one particular site school was still poor. This could be a consequence of the continuous absenteeism of one of the teachers. However, there was an improvement in school attendance in the other site schools.

*School 1: The children like coming to school. We link our lessons with the community activities and the children like this.*

School 2: *The children enjoy learning outside, but I cannot take all the children outside when the other teacher is not here. She is away a lot. Parents now encourage their children to come to school, but many still do not come.*

School 3: *Students now like coming to school. They enjoy learning. They like it when we take them to learn in the community, like the beach and comparing traditional and modern houses.*

In EHP, the majority of children attend schools. There has not been any change in the frequency in which the children attend school, except on special occasions. The occasion could be a death in the family, or a visit with parents to another location.

However, a marked drop in attendance is evidenced during the coffee season. The coffee season means ‘money’ time. Many children do not attend school during this season, or attend irregularly, because they are picking coffee berries to get some extra pocket money. This was the practice five years ago, and still is current today. The province is aware of this, but there has been no policy to effect a change. Although school boards have taken action on regular absenteeism, when it is the result of the coffee season, nothing is done because they seem to understand that it is important as well.

Students are very involved in learning, inside and outside of the classrooms:

*There are times when we take children out for excursions, but that depends very much on the theme. Attendance at the school is very good. Absenteeism is not a problem because of the child-centred learning on which the new curriculum focuses. Lunches are available at the school, and on special occasions, parents assist by dressing their children (such as the Children’s International Day which falls on 22 November). Mothers will cook for the children, and on Fathers and Mothers days, children are encouraged to make cards for their fathers and mothers.*

According to this, when it is not coffee season, children are very much part of the lessons. They enjoy participating in indoor and outdoor activities.

In Simbu, it was reported that children like schooling and have always attended school. One of the reasons for children attending school regularly is that learning is more interesting. The change by teachers to child-centred lessons has made children more interested in attending school, to learn with their friends. Lesson plans include a variety of activities, catering for short attention spans, and the practical application of abstract concepts.

It is the out-of-school factors that, in some ways, prevent children from attending school. The non-payment of school fees, and parents going away for visits impact on the children’s presence within schools. The BOM of one of the rural Milne Bay schools refused to allow children who had not paid their school fees to attend school. The result was that the majority of students left school only to be invited back when the Board chairman realised the implication of his decision. The school reduced its fee from K10 to K5 to K2 and parents still did not pay. The TIC commented that free education at this level was the only reality.

A site school in East New Britain is addressing the issue ‘How can we improve class attendance in our school?’ using an action research strategy.

The teachers worked as a team and interviewed parents, students and observed lessons of each other in order to establish the reasons for poor school attendance. These data have been analysed. The findings of this research were used to draw up an action plan to address this issue. The research showed that the major reasons for the poor attendance of students are hunger and uninteresting classroom activities and displays.

The teachers called a parents meeting to discuss the provision of lunch for students everyday. The teachers also made every effort to make their lessons interesting and worthwhile for the students. The teachers plan that the next data will be collected in November 2006. Analysis will enable comparisons to be made with first data collected and then a written report will be completed about the process of this action research by the end of the year. The teachers reported that their teaching approach and the provision of enjoyable and worthwhile lessons, and parental support for the students in terms of prepared lunches, have largely contributed to the current improvement in school attendance. The researcher confirmed increased school attendance, increased use of prepared lunches, increased teacher and student work displayed in the classroom and delivery of more interesting and meaningful lessons during the second visit.

### **3.7.3 Community support**

#### *Curriculum Committees*

In the Second Six-Month Report it was noted that there were no functioning Curriculum Committees in any of the site schools. During meetings with researchers, the community representatives and teachers claimed that they were not aware of the role of the community in the school curriculum development. Furthermore, many of the communities’ representatives had not heard of elementary Curriculum Committees. Some stated they had literacy committees, rather than Curriculum Committees, whose main function was to support transition from elementary to lower primary education.

In the third round of visits it was noted that although Curriculum Committees exist in all site schools in East New Britain, they are not fully utilised by the teachers because they are not certain of their role in curriculum development. Earlier data showed lack of involvement from the Curriculum Committees.

There is some evidence from one of the rural Milne Bay schools referred to earlier that awareness of the importance of a Curriculum Committee within the community and a clear role for the committee, or at least a few responsible parents with an interest in language maintenance and the school, can lead to worthwhile benefits in terms of curriculum materials production.

#### *Community as a teaching resource*

In the Second Six-Month report it was noted that teachers reported that community members are requested to assist in arts and crafts, and community and culture lessons. However, such involvement is minimal in a number of the site schools. Discussions with

the researchers facilitated fresh communications and realisation of the value of using members of the communities as a teaching resource. Some elementary schools did not use members of the communities because they demanded monetary reward for their services.

These data suggest that although teachers are aware of the importance of the school subject knowledge and community knowledge they are unsuccessful in engaging communities and community members as teaching resources. The data also indicate that community members are not involved due to the fact that most are unwilling to volunteer services to the school and many schools cannot afford paid labour.

### **3.7.4 Boards of Management**

Each site school in the eight provinces has a separate BOM from that servicing the local primary school. The two NCD schools, however, do not have their own boards and are placed under the authority of the primary school BOM. Both schools believe that the elementary subsidy is not used on the elementary school and much of the money gets used to purchase supplies for the primary school.

The elementary school BOMs constitute a chairperson, treasurer, secretary and three to four community representatives. The BOMs in most site schools are not effective. The frequency of BOM meetings varies in all site schools. Some meet regularly, others infrequently and some none at all. Attendance at BOM meetings is also problematic. The working relationships between some schools in the study and their BOMs are difficult. Some BOMs do not inform the school regarding expenditure of school finances and some do not support the schools financially. Fundraising activities in many of the site schools are generally poorly organised.

In the third round visits to Morobe, one school reported having an effective BOM, while the other did not. In the school with the effective BOM, there is a lot of interaction between the teachers and the community, while in the one with the lack of support, there is little or no interaction between the teachers and the community. This school has a Curriculum Committee, but the researcher could not establish what its role was in terms of curriculum development.

*School 1: Our BOM is good. They assist the school well. The community encourages the students to come to school. The students enjoy lessons in the community.*

*School 2: Our BOM is not strong. They are not aware of their responsibility in elementary education. Most of the parents have not paid their children's school fees. The community does not support the school well. We do not talk much with the parents.*

In EHP, community support for schools is varied, and is very much dependent on the school BOMs and the commitment shown by teachers to their responsibilities. School BOMs are the middlemen between the communities and the schools. Whatever needs maintenance in the school is the responsibility of the school BOMs and the communities at large. In a particular school, the BOM has assisted in the following way.



*Our school needed maintenance on one of the classrooms. The Board identified a parent to do this. The community planted a new lawn for the children and this was because the researcher saw the need for a grassy field instead of the dusty ground that our children used to play on. We also have new school toilets that parents helped to build.*

The BOM takes an active role in getting the community involved in programs that will involve children. The BOM ensures that school buildings are available and maintained. The BOM is also the caretaker of the school, and its Chairperson is a signatory to the school account. Parents and the community clean the school area every Thursday and contribute to ideas regarding the location of new classroom, and toilets. The BOM monitors teachers' attendance at the work place. The BOM also assists with basic school materials, and at one school, a member of the BOM donated a First Aid Kit to the school. There are Cultural Committees available to assist the schools with stories, and even edit stories in the Big Books. The Curriculum Committee comprises some Board members

A strong and fair BOM ensures that the community plays its part in the education of the children, whether directly or indirectly. Schools with weak BOMs are not able to function properly.

### **3.7.5 School-community relationships**

Statements from the teachers and community members established that in the first two site visits, the relationship between school and the community was weak in the majority of site schools. The only contacts the teachers have with the community are Parents and Citizens meetings and occasional fund-raising activities. One school reported that during the initial implementation of elementary education the community support for the elementary school was overwhelming; however such support deteriorated over the years.

Community involvement in many cases is restricted to an annual cultural day or week rather than a planned and regular engagement with the community as a teaching resource and the community as helper within the school. There are schools where community involvement, particularly in the area of Culture and Community is positive, regular and strong.

It was noted, during scheduled meetings with community representatives, that they were not aware that elementary schools are the responsibility of local communities. Researchers observed that in some provinces the meetings conducted with both the teachers and community representatives facilitated a better working relationship between both parties.

In two provinces, communities pledged support for the school as a result of community meetings with researchers. It remains to be seen if this translates into action. One of the schools was labelled a problem school by the provincial education authorities. There was initial reluctance to grant approval for this school to participate in the study. The local community was critical of the teachers' poor attendance and punctuality. The community was encouraged to assist teachers to improve such practices, which resulted in meetings between the teachers and community representatives and improvement in attendance and

punctuality. One of the rural elementary schools is using a run-down building constructed some twenty years ago. The building needed urgent repairs at the time of the first site visit by the researcher. A ladder and railing was repaired, two new pit toilets were built and a water tank was installed by the time the second site visit took place. The teachers in some of the site schools reported that the relationship between the school and the community had improved considerably since the previous visit while others had not experienced any change. Teachers indicated their appreciation of a better working relationship between the two parties in their reflective journals.

These data suggest that awareness about the relationship between the school and the community, and community support for the elementary school, is generally inadequate. A small amount of awareness raising by the researchers produced immediate positive responses from a number of communities visited. This seems to suggest that the elementary teachers' professional training on interaction skills with their surrounding communities is inadequate.

Several teachers have indicated in their journals that the school is often at fault in that it does not produce a program of activities for the term or year negotiated with the community. Therefore, the community does not prepare for such involvement. Often the invitation from the school for community participation comes at very short notice and the community is unable to respond.

By the time of the researchers' third visits, schools that reported increased interaction with their communities also secured more community support than those who had fewer interactions. Earlier data in the study showed that the researcher's involvement initiating interaction between the schools and their communities had an impact on the teachers and members of the school communities. All schools reported increased community support for their schools after the initial school visits.

Awareness during the study on the links between the elementary curriculum and the lower primary curriculum had an impact on community support for the elementary schools. Most previously viewed elementary education as not worthwhile or important because of the vernacular instruction.

During the third round of visits it was found that in New Ireland Province, community support is declining, and the reasons are varied. However, one that was heard most often related to teachers' attitude to schooling and participation in community activities. In the Fissoa community, it is evident that there is a lack of commitment to the school in terms of the building of elementary classrooms, in the community's effort to ensure that the school area is a clean and a safe learning environment, and in the lack of commitment of the Curriculum Committee.

*Fissoa Elementary School did not have a well-constructed elementary building and the classrooms were awash every time there was rain. A new classroom had to be built, but no community assistance was forthcoming. The male elementary teacher took out both primary and elementary boys on a couple of Tuesdays to cut bamboo and sago palm leaves, and built a small but adequate temporary elementary building that now houses both EP and One classes.*

Much of the support is being borne by a small number of parents, not whole communities. The reason according to the community is the teachers so called 'lack of commitment'. They either come late to school or absent themselves without good reason from school. The Curriculum Committee on the other hand was working well prior to the implementation of the new curriculum. It is still in existence but is not working and the reason according to the chair is presented below:

*Mi no save onem samting is rong. Ol teacher ino save kam na askim long halivim moa. Mipela ino save onem samting oli laikim halivim longen. Oli no save bung tumas waintaim communiti moa, mino save onem samitng I rong.*

#### Translation

*I do not know what is happening. Teachers are not coming to the Committee to ask us for help anymore. We do not know what they want, or which areas they need assistance. They do not mix much with the community anymore, so we do not know what is wrong.*

There seems to be no clear channel of communication. It is clear who should take the lead in this communication: the TIC. However, this is not happening, and the Committee cannot understand why. The Curriculum Committee is there to facilitate teachers' work, but nothing is coming from teachers.

Clearly, working together and communicating is not working quite well for this school. The community seems to view the church and economic benefits (through the oil palm), as priority. The schools are generally being left entirely in the hands of the teachers. Continuing awareness should be conducted regarding the responsibilities of the communities, BOMs and Curriculum Committees so that they are reminded of the roles each should play to make their school a good and safe learning environment. Memberships to boards and committees do change, and the need for sustained awareness is important.

Greater interaction between the teachers and their communities in New Ireland was initiated by the researchers' first visit. The researcher noted an increase in community support during the subsequent visits. However, community support varied in all site schools. In one school, the parents assisted with preparing teaching aids, such as models of houses and canoes, standardising Tok Ples spelling, and in fundraising activities. In another school, the parents cleaned around the school, installed a new water tank, and electrified the classrooms.

In Sandaun, earlier data showed a lack of community support for the schools. Curriculum Committees are working in two of the site schools, but are almost non-existent in the other. These Curriculum Committees are not fully utilised in curriculum development, although one school is now utilising them to assist to standardise Tok Ples spelling. The other two site schools do not seem to have much use for them, primarily because they are not aware of their role in curriculum development.

*School 1: Our BOM members fixed our classroom, put lights in the classroom, and cleared off the trees near the classrooms. Many parents turn up for P & C meetings. However, many parents have not paid for their children's school fees.*

*School 2: We do not have very good community support. We have to pay a youth group to clean around the school. Students' class attendance is not very good. Most of the parents have not paid for their children's school fees.*

*School 3: We have a new BOM. We now work well with this new BOM. The community is now beginning to support us well, but many parents have not paid school fees. They are planning fundraising activities for this year.*

Community support in the schools in Simbu is seen mostly in terms of cleaning the school grounds, maintenance, or building new temporary classrooms. There are times when mothers come to school to sell cooked food to the children. Any support for the schools is usually organised by the school BOMs and the teachers. Teachers have expressed concern that community support is only provided by a handful of parents. There are two schools that needed assistance with either more spacious classrooms, or a new and larger temporary classroom. The school's TIC approached the BOM and was told that a new classroom block will be constructed in mid-2005, but nothing has happened.

There is an awareness of communities' roles in elementary education by the BOMs and the schools themselves. However, this has not changed the views of communities. The school BOMs, because of their responsibility to their schools, are the bodies that support the schools in maintenance.

According to the TIC at one rural school:

*Hardly any parents, or the community come to clean around our small school yard. You can see them out there selling their goods at the roadside. Times are hard and people now concentrate on selling to get money.*

Most communities are concentrating on growing food and vegetables for marketing, or they are selling store goods at the markets and on the roadsides to earn money.

The other reason could be the selection of the language of instruction for elementary schools. Parents and 'education' members of the communities wanted English as the language of instruction, but trainers stated that the language of instruction has to be the language which children speak at home. Communities resisted this move, and Tok Pisin became the language of instruction instead.

The school fee is the major means of income for all the site schools. A school in one province encouraged parents, who could not pay school fees in Kina could do so in *tabu* (shell money). The fee is K75.00 so parents pay ten adult-arm lengths of *tabu* and K20.00. The school then trades the *tabu* for K50.00. Fund raising activities vary among all the site schools and provinces. Those communities that understand the importance of community support for schools have done more fund raising activities than those who have not been informed about the need for it. In some schools, parents are encouraged to

contribute a small amount of money a term. Other schools have means of generating additional income, such as, the exchange of baskets and selling foodstuff. Some schools did major fund raising activities in 2004, while most did not do any fundraising in the past two years.

Communities are willing to support the elementary schools and the implementation of the new elementary curriculum. However, inadequate awareness of the responsibilities of communities for elementary schools and the curriculum has contributed to the current lack of support for elementary education.

Parents' commitment to paying school fees is still an issue in all site schools in East New Britain even though parents have been encouraged to pay in *tabu* (shell money). The elementary schools exchange these for the Papua New Guinea currency in order to buy school materials. These examples of comments from schools visited in East New Britain indicate the variety of success in interacting with the community.

*School 1: We have elected new BOM members but they are not really working with us. Most of the students have not paid their school fees. Of those who have paid, only a few of them have paid in full. We have not had any P & C meeting for a long time and our Curriculum Committee had not had any meeting. We talk with our BOM members sometimes and since your last visit, they fixed the roof and floor of this classroom. The people now see the link between elementary school and lower primary. We do not really talk with our community about the school. Our TIC lives in another community. Sometimes she doesn't come to school and she often comes late.*

*School 2: We have a Curriculum Committee. Members of the community do our drawing for big books. We now work well with our parents and BOM members. The BOM chairman visits the school sometimes. The community has built a new toilet and put up a water tank. They also fixed the classroom steps and railings. We have a stall in the primary school celebrations on Friday. Parents of children in each grade will sell food. We now work well with our primary school. They do not say bad things about us anymore.*

*School 3: Our community does not really help us. I have a hard time with them. Most of the children have not paid their school fees. The school needs one more classroom and a water tank. We do not have a stall in the primary school celebrations because we had not prepared for it but we now work well with the primary school teachers.*

*School 4: Our BOM members visit us often. They help us to do awareness on the importance of school attendance. We have exchange of baskets to raise money for the school. We are now talking a lot with the parents and we are happy. They now see the link between elementary school and lower primary. Only a few parents have not paid their children's school fees.*

The teachers in the site schools report that the working relationship between the schools, the churches, health services, police and NGOs is weak. There were, however, reported cases of visits to the school by members of such organisations.

It was also reported that some of these organisations were willing to support the schools as a teaching resource if they were invited. However their support of the school curriculum is usually at a low level because schools rarely seek assistance. Teachers were encouraged, during discussions, to involve such organisations as teaching resources. It was observed, during the second visits to the schools, that involvement with other organisations was a little more commonplace.

In EHP it was found that there are individuals and organisations operating within and near communities who are able to assist schools in one way or another. Schools and communities need to know from whom they can seek assistance.

*The church has assisted with buildings for classrooms. Parents do general clean-up, and individual parents who work in town supply typing and photocopy paper. The Research and Conservation Foundation has in-serviced us on plants and animals, and children were taken to visit their centre at North Goroka. The police have talked to children about crossing the road, and health has conducted an immunisation program within the school and held a dental clinic. A private business has supplied stationery, including exercise books, pencils, and three A4 ream. We will soon have a signboard on the main road, near the entrance to the school. Members of the different Christian denominations conduct RI at the school every Wednesday, and a community representative ran an in-service course for us on how to discipline children.*

In Simbu, it was found that community organisations have visited schools for a number of reasons. The churches visit schools on a weekly basis for religious instruction, and the health centres have visited for immunisation programs.

### **3.8 The relevance, quality and effectiveness of the teacher in-service materials and the processes used to implement the in-service training**

#### **3.8.1 Teacher in-service materials**

This section refers specifically to the three in-service self-instruction books distributed as part of CRIP. In the first and second round of visits in 2005, most schools had received Unit 1, but no schools had records of receiving Unit 2: Understanding the New Elementary Curriculum and Unit 3 How to Use the Teachers' Guide. However, schools had received these materials by the third visits in 2006, although several reported that they had only just arrived (see Appendix 6.1 for list of materials distributed).

The survey results support this data from the site visits. In 2005, 74% of respondents had received Unit 1. A little over half reported using it (2005, 52%, 2006, 59%), while even fewer found it useful (2005 36%, 2006, 54%).

In 2005, many teachers stated that they had not seen any of the books. A common response from teachers who had access to Unit 1 was: 'We do not know how to use them!' Some said they had seen the material, but had not studied it in depth. Others said they had skimmed through it, but had not used it. There is an assumption that because the

teachers used SIU materials in their pre-service training that they would be familiar and willing to adopt this approach in their in-service training. The experience in the site schools, and information from some of the interviews, reveals a more complex position. In PNGEI's recent approach to pre-service education, SIUs are preceded by six weeks' face-to-face instruction that, amongst other things, helps to prepare for the self-instructional period. The trainers are also expected to provide support to the trainee teachers during their self-instruction and to assess their work towards final grades (which affect progress to the next year of study and salary). These two key elements (not to mention the salary incentives) help ensure effective engagement with the SIU materials. The in-service materials operate on a 'free-standing' basis; they do not require initial face-to-face instruction, nor do they have anyone assessing the study undertaken. This self-instructional approach breaks down in practice because some teachers wait until they have a workshop before they start their SIU, and others merely scan the contents and do not authentically engage in the learning and conduct the self-assessment.

By 2006, the majority of teachers had seen in-service Unit 1, and some of Units 2 and 3. In New Ireland, a few schools in the outer islands of the province have yet to receive Units 2 and 3. However, most teachers have not looked through these books. They have concentrated only on the books that relate directly to their teaching, the syllabuses, and the Teachers' Guide. The teachers in one site school are using the in-service materials. The Head Teacher assisted the teachers in using them. For the few who have examined Unit 1:

*It is a very useful and helpful handbook. It provides a lot of background information on the reform curriculum. It is useful that it is in the form similar to the SIU. It contains follow-up questions on the reading, and helps our understanding.*

Teachers in East New Britain reported that Units 2 and 3 arrived in the schools a few weeks before the final visits and these have not been used yet.

*School 1: They are still in the box. Most of us have not seen them. We have not used them yet. We have forgotten about them. We do not have the time to sit down and do them. We are only using the elementary syllabus and Teachers' Guide at this time.*

*School 2: We just glanced through but we have not used them. We are using the syllabus and Teachers' Guide only. We have not committed a time for them. We do not use them because we had some training. Units 2 and 3 have just arrived.*

*School 3: We have just received Units 2 and 3. No, we have not used them at all. We are only thinking about the syllabus and Teachers' Guide at the moment. We have only glanced through them. We do not really need them now.*

A comment from teachers in EHP points to one of the issues with these materials, 'we need someone, such as the inspector, to advise whether we are on the right track or not'. The conversations with trainers in this province reveal that they may not be much help in this area because, according to them, the units have been seen, but they have not taken the time to read through them. Teachers in Milne Bay responded in a similar fashion.

Teachers saw Unit 1 as unnecessary because they already understood the framework of the reform. The unit was written several years ago and it is out of step with the needs of teachers which are expressed in terms of programming and lesson planning, rather than the structure of the reform.

There was little evidence that the teachers in these schools had worked systematically through the self-instructional materials to construct their own in-service learning about the new syllabus.

A broader perspective of the curriculum reform could have been acquired, if teachers, trainers and inspectors took the time to work through these units. It seems that the units will only be used if teachers are taken through them in the same way as the syllabuses and Teachers' Guide. There seems to be lack of initiative on the part of teachers to discover what the materials contain. This could jeopardise the impact of the reforms and the associated curriculum. The whole focus seems to be on the new syllabuses and the Teachers' Guide.

These reports indicate a number of important issues related to the use and distribution of in-service materials:

- There seems to be some confusion about the relationship between in-service delivery and in-service materials. For some teachers and trainers, if training has been delivered, then there is no need to engage with the materials. For others, the materials are seen to be complementary to the training. For many teachers they perceive a need to be trained on how to use the materials;
- The timing of delivery of the in-service materials has affected teachers' usage. Once teachers become engaged with the actual syllabus documents and the Teachers' Guide they do not see a purpose for engaging with the in-service materials. This may be related to something as simple as the title for Unit 3. If teachers are already using the Teachers' Guide, they do not see a need for working through in-service entitled, How to use the Teachers' Guide;
- The content of Unit 1 may have affected teachers' engagement with Units 2 and 3. While the background to the Education Reform in PNG is important knowledge for practising teachers, it can be perceived as knowledge that does not have an immediate and practical impact on their classroom teaching. The data in this report suggests that elementary teachers are continually on the search for ideas and strategies to improve their classroom teaching and put into practice the philosophy of the new curriculum. The content of Unit 1 of the in-service materials did not provide them with any assistance in this area.

### **3.8.2 Processes used to implement the in-service training**

There are a variety of processes used across provinces in the implementation of in-service training. The processes used in each province differ in terms of success and style. Therefore in this section of the report an overview of these processes is provided followed by specific information from each province.

Trainers and Inspectors received training based on the new in-service books (in addition to their training on the new syllabus) and are expected to be the initiators of in-service



activity for the previously qualified teachers. This initiative is expected to be enacted through their visits to, and inspections of, teachers and their work in the Cluster Curriculum Workshops. The survey showed that the majority of teachers said that they had some in-service on the new syllabus (2005, 83%, 2006, 86%).

The first two rounds of visits indicated that in most cases, elementary inspectors and trainers are capable of monitoring the implementation of the new elementary curriculum. However, poor logistical support hinders such activity. It was also noted that continuous professional development was an established in some of the provinces even though the quality of support was reported by most teachers to be insufficient. Teachers also reported that inspectors' and trainers' visits to the schools were generally inadequate. A number of schools reported regular visits by inspectors and trainers, but there are also schools that have experiences such as the one reported by in a teacher's journal.

*No trainer in 2004 or 2003. Last time we saw the trainer was in 2001/02. He only came over for familiarisation. Nothing since then.*

Most of the schools in the eight provinces, including NCD, have conducted in-service training workshops with the focus on the use of the new elementary curriculum. Some provinces conduct workshops solely for elementary teachers while others provide workshops for both elementary and primary school teachers. Despite having participated in these workshops, in 2005 the teachers in the site schools stated that they did not fully understand 'outcomes', 'indicators', 'catering for different ability groups' and 'integration across subjects'. On one occasion, trainers in one province were asked to explain the meaning of these terms to the researcher. They had problems with their explanations. Also, the elementary teachers in the site schools in one province did not quite understand why language was in the centre of the chart, its links with cultural mathematics, and culture and community in their program map. The teachers had participated in developing the map during one of their workshops. A teacher commented:

*I do not understand why we did this mapping, and why language is in the centre of the chart, but it's colourful so I put it up to decorate my wall.*

All the teachers in the site schools in this particular province did not really understand the purpose of this map. Focus group work with the researcher about mapping led to a better understanding by the teachers about the value of mapping their lessons.

Some of these teachers also expressed the need to use Tok Ples and Tok Pisin during workshops to facilitate better understanding of the content of the new elementary curriculum. Several teachers commented: 'The English used in the curriculum material and workshops is too expensive!' This translates to the language level is difficult to understand. The general view of teachers is that the material 'is a bit difficult to understand'.

The conversations with teachers in all provinces suggest that follow-up professional support during the implementation of the curriculum after workshop participation is generally inadequate. Researchers have found insufficient monitoring of the actual implementation of the new elementary curriculum in all site schools.

The irregular visits by inspectors and trainers often leaves teachers with a lack of confirmation or approval of what they are doing is appropriate, or could be enhanced with some classroom observations and the benefit of experience of others. The senior teachers in some schools are confident enough to perform this role with younger teachers, but the senior teachers may be as uncertain themselves about the new curriculum as anyone else.

### **3.8.3      *Teacher development workshops***

Seven of the provinces continue to conduct a six-week workshop during the year to cater for teachers who are still undergoing training. Sandaun, on the other hand, has not conducted any new elementary teacher training for the past three years.

A focus of this training is the implementation of the new elementary curriculum for early career teachers in their first two years of service, although teachers state that they may only work through one outcome during the TDT. It has also been suggested that TDTs concentrate on helping teachers complete self-instructional units (SIUs) rather than classroom and teaching issues. Early career teachers believe that too much TDT time is spent on administrative matters and how to complete forms rather than on professional activities. The TDT for Year Three trainees concentrates on administration matters. This is intentional to assist them to take up senior teacher duties in elementary schools.

In 2005, the timing of the TDT workshops in most of the provinces disrupted classroom teaching because it was conducted in the middle of the year. The qualified teachers carried the teaching load while undergraduates attended training. In some provinces, this meant half or more of the teaching staff were committed to teacher training for six weeks. Timing for such teacher training needs to be reconsidered by the provincial elementary teams to minimise disruption of normal teaching activities. It is noteworthy that, during the life of ETESP, the elementary teacher training for undergraduate teachers was usually scheduled for the first six weeks of the school year to minimise disruption to normal school activities. Students stayed home for an extra six weeks and started the year later than the other levels of education.

In 2006 only two provinces, Central and the National Capital District, have been able to conduct TDTs because of the lack of funds to the remaining provinces from DOE.

### **3.8.4      *Cluster organisation***

In most of the provinces, Cluster workshops established during the life of ETESP are still being used for the professional development of teachers. Several provinces use this framework well and the organisation of the workshops is the responsibility of head teachers, senior teachers and confident elementary teachers in the Cluster groups. Scheduled times for Cluster workshops over the year are displayed in all teachers' classrooms in one province. The current focus of such workshops includes the use of the new elementary curriculum. It was reported that teachers share teaching difficulties and strengths during such sessions. Consequently, teachers learn from each other and improve their teaching practices.

Several Clusters reported that a Cluster member, who attends a provincial or district in-service activity, is more effective in professional development activities than the district trainer. The local Cluster member is more easily available and tends to have the interests of the local community at the forefront.

Some Cluster groups no longer operate. The value of a Cluster often rests with the organisational capacity of the appointed Cluster leader. Some Clusters meet irregularly and are inefficient in the allocation of workload and sharing of resources. One of the Clusters in the study has a number of schools, which either do not have any Big Books, or have a relatively small number of such. The teachers would like to have more, but after discussions with the researcher it was apparent that neither the members of the Cluster, nor the leader of the Cluster, had conceived that the Cluster offered a solution to the lack of Big Books. The nine schools in the Cluster all share the same language and culture. If each school in the Cluster agreed to produce four books, and these were copied by each of the other schools, then each school would have 36 Big Books relatively rapidly.

#### ***East New Britain processes for in-service training***

Clusters in East New Britain comprise elementary schools that feed into the same primary school. Schools from each Cluster meet at a common venue for Cluster workshops. The Cluster workshops are organised by the head teachers and senior teachers of the schools in each Cluster group.

The study found that Cluster workshops can be used effectively to disseminate information about the new curriculum. It was found that the effectiveness of the Cluster workshops varies in each Cluster. Some are functioning well, while others are not. It was also found that Cluster workshops are the responsibility of the teachers in each Cluster and their effectiveness is dependent on the teachers' commitment in each Cluster.

*School 1: Our Cluster workshop program was developed at the beginning of 2006, so we can meet every second Wednesday. However, this has not been implemented. We also did not have any Cluster workshop last year. Only a few people were involved in developing this program. We are not happy with the program because we were not involved in the planning stage. It would have been better, if we were all involved in the first place.*

This suggests that the leadership in this Cluster is weak. The team leader does not seem capable of facilitating team work and commitment from teachers in this particular Cluster. Earlier data from the study showed a similar work attitude. This shows that strong leadership is lacking in this particular Cluster.

*School 2: We have a Cluster workshop program. We met regularly last year, but we have not met this year. This year we have gone slack because our trainer has not visited us. Last year, we focused on understanding indicators, outcomes, assessment, planning, and programming. We have to commit time to having our Cluster workshops this year.'*

This suggests that this particular Cluster is currently not functioning well because of the trainer's lack of support and suggests there is a lack of teachers' commitment and confidence.

*School 3: We attend Cluster workshops on Tuesdays, twice a month. All the teachers from the elementary schools in this Cluster attend. We share some of the information that you have shared with us on the curriculum, with the other teachers. We also do sessions on outcome based planning, integration across the curriculum and the community, assessments, and production of big books and small books. We also focus on other issues relating to elementary education. Sometimes, we invite the trainers to assist us with some of the sessions.*

There is strong leadership and trainer support in this particular Cluster. Other data in the study show that this Cluster has an effective Head Teacher, as the team leader, and the schools in the particular Cluster are situated near the Provincial Education Office.

Earlier evidence from the study indicated that workshops were conducted for all elementary teachers in East New Britain in preparation for the implementation of the new elementary curriculum. The focus was on the content of the new elementary curriculum. The teachers claimed that they learned more about the curriculum during these workshops.

*Teachers: The Year 2 and 3 attend teacher development training (TDT), and one of the focuses of training is the new elementary curriculum. We find this useful.*

*Headteachers: The trainers conduct workshops for us. What we learn from the workshop, we have to pass on to the teachers in our Cluster group. The last time, we learned more about assessments. At the moment, the focus is on OBE.*

*Trainers: We focused on the elementary curriculum last year. We are currently conducting OBE workshops for the teachers-in-charge (TICs) in the Cluster groups. However, we are not speaking the same language (make different interpretations of content). The teachers find this confusing, when I teach them this, and then somebody else says something different about the same thing.*

### ***New Ireland processes for in-service training***

Support for teachers in New Ireland has come mainly from the Provincial Education Office, in terms of training, and trainer and inspector visits. There are cases where infrastructure assistance has been provided by the provincial government and the local-level governments. Classroom buildings and housing for the PEC were built through ETESP.

The Provincial Education Office has organised awareness, in-service courses, and training, with funding assistance from staff development, and training at the national level. Prior to the implementation of the new reform curriculum, awareness was conducted for teachers in 2004. In-service courses have been held for selected teachers, such as TICs, on school management, and for elementary teachers, both in-service and trainer-directed training (TDT) have been conducted. In early 2006, a follow-up

workshop was conducted for all teachers, revisiting grey areas in the new curriculum. Support for this workshop came from the DOE and AusAID.

Support in training is good, but what most teachers requested during the first year of implementation was monitoring by trainers and inspectors of their implementation of the new elementary curriculum. The first year was crucial for teachers wanting inspectors or trainers to be around to approve or provide suggestions. This support was lacking then, but is poor now. The Education Capacity Building Program (ECBP) provided a 4WD double cab, and a boat for use in the Kavieng District. Currently, neither is available. The boat's motor has broken down, and the vehicle has been acquired by the provincial administration.

In the second year of implementation, teachers are not insisting on inspector or trainer monitoring. However, teachers will welcome the presence of the trainers and inspector during Cluster and sub-Cluster workshops. It is the more personal contacts between teachers and the inspector and trainers that are needed. Such contacts are more personalised and teachers are able to converse easily in Tok Pisin and the vernacular, exchanging ideas with the inspectors and trainers on areas related to teaching of the new curriculum

In New Ireland province, Cluster groups are determined by language while sub-Cluster groups refer to the smaller units which comprise elementary schools that feed into the same primary school. It is also seen as a strategy through which teachers can help teachers.

In-service training in 2004/2005 was conducted in Clusters by the provincial elementary inspector and trainer/inspectors. TDT for teachers-in-training was conducted by elementary trainers. The TDT lasts six weeks, and teachers from this training were generally better able to plan for, and implement, the reform curriculum. For many qualified teachers, the in-service training was inadequate. Elementary teachers highlighted the need for follow-up training on the reform curriculum. Teachers felt that the training which was provided in 2004 did not provide them with adequate information on the processes for implementing the new curriculum.

Teachers are finding it easier to implement the reform curriculum, after they attended a second in-service training course in early 2006. The in-service course was an outcome of an initiative of the researcher during a teachers' discussion group late in 2005. The in-service activity was funded from DOE in-service 2005 funds that arrived too late to be spent in that year. A trainer, and when asked about the possibility of conducting such workshops, responded that this was not a trainers' responsibility.

*Elementary teachers are not trained by us (trainers), but by the elementary inspector. We are responsible for the teachers still undergoing training. We conducted TDT training in 2005 for a period of up to six weeks. We went through the whole process of programming and planning, identifying outcomes, activities, and assessment criteria. We are not responsible for trained teachers' in-service training.*

Nevertheless, the trainer felt obliged to help the teachers and she arranged for, and conducted, training for both qualified and trainee teachers.

Evident at the provincial level in New Ireland is the division of responsibilities in regard to the training and in-service training of teachers. Inspectors and trainers/inspectors are responsible for the training of graduated teachers and those who have completed training, while trainers are responsible for those still undergoing training.

Schools try as much as possible to cooperate on their programs of work so that they are covering the same themes over a two-week period. Teachers tend to get together more often with teachers in the sub-Cluster than in the larger Cluster. For example, teachers at Fissoa Elementary School have frequently met with teachers from the other two elementary schools (sub-Cluster) to work together on community-based themes, and prepare for combined activities, such as the theme 'food', and the ensuing celebration of World Food Day.

The Literacy Committee has held workshops with representatives from the elementary schools and the primary school in preparation for the development of a dictionary in the vernacular. Other workshops have included health awareness on HIV/AIDS. Elementary teachers also participate, through their own initiative, in their Cluster or sub-Cluster groups to discuss aspects of planning and teaching.

The researcher saw an example of a Cluster program on the new curriculum at one of the schools. The Nalik and Kuot (NAKU) Cluster group had a timetable covering the months, February to November. The timetable identified the different types of educational activity to be pursued, the target, and the venue. Educational activity pinpointed areas of planning, in-service on the new curriculum, program preparation for Terms 2 and 3, general administration, and an evaluation of the teaching of the reform curriculum.

The frequent use of the Cluster and sub-Clusters by teachers, to talk through the reform curriculum and planning for subsequent terms, indicates teachers' eagerness to understand the new curriculum. One obvious change brought about as a result of training is an attempt by the province to develop a standard format for weekly and daily plans. This has resulted from teachers' comments regarding the amount of time and paper that weekly and daily lesson planning consume.

### ***Morobe processes for in-service training***

The researcher could not establish a clear definition of Clusters or Clustering from Morobe province. It is not certain if the Clusters are organised according to common language groups, or elementary schools that feed into the same primary schools or districts. However, a kind of Cluster was mentioned by the provincial teachers' trainer coordinator. It seems that district trainers organise schools to attend workshops in their particular districts.

Workshops have been conducted on the new curriculum. However, it was stated that the lack of funding hindered the organisation and staging of more workshops on the curriculum.

*School 1: The TIC attended the workshop on the syllabus and Teachers' Guide. She showed us how to use them after the workshop. We had continuous discussion during the implementation. We also read the syllabuses in order to understand them.*

*School 2: We had only one Cluster workshop in which we talked about the syllabus. We need more. Our trainers do not visit us.*

The elementary teacher trainer stated that: 'Cluster workshops should be conducted each term, but there are no funds.' It was also reported that only one district out of the nine prepare a budget for elementary education support. The female trainer of this particular district has conducted three Cluster workshops in 2006. The focus was on OBE. The elementary teacher training coordinator reported as follows.

*A three-day in-service on the elementary curriculum was conducted. Individual trainers have their own training program. There was a three-day curriculum Cluster workshop for Lae Urban District. There are no organised Cluster workshops.*

The researcher was not provided with a printed copy of the district's workshop programs when she asked for such.

These data show that elementary professional support systems are in place in Morobe to assist with the dissemination of information on the new elementary curriculum. However, they are not adequately funded or well-organised.

### ***Sandaun processes for in-service training***

The researcher could not establish a definition of Clusters or Clustering in Sandaun province. It is not certain whether it is used to refer to elementary schools in the same LLG, or elementary schools in the same district or sub-district. It seemed more like groupings by districts or sub-districts. The trainers did not specify a definition for it, but they presented a number of workshop programs for 2006.

Some workshops covered the use of the elementary curriculum. Earlier data showed that a two-day workshop had been conducted for the teachers, a week before the initial visit. Other workshops were conducted on OBE.

*School 1: We had a two half-day workshops on the elementary curriculum, and this year we are supposed to have one every two weeks.*

*School 2: We only had two workshops on the new curriculum last year. This year, we attend a half-day workshop every two weeks. We are supposed to have another one this week.*

*School 3: We had two workshops last year. Now we have one every two weeks. We are not sure if we are having one this week.*

The researcher later learned that the workshop which was planned for that particular week did not occur.

### ***Eastern Highlands processes for in-service training***

Provincial support for elementary education comes in the form of assistance to teachers through training. According to trainers in Goroka, once a supervisor or mentor identifies weak areas in teachers' knowledge, Cluster workshops are organised. There have also been in-service courses and these are mainly held for trained teachers. Counselling services have been provided by trainers, for teachers who have problems (whether personal or professional) that may affect their work. There is supervisory support for teachers and training-of-trainer workshops. Training of Trainers (TOT), where teachers — usually the TICs — are trained, and they, in turn, return to their schools and provide training to their teachers. Occasionally, TIC meetings are held to discuss administrative changes that occur, or other changes that may affect elementary education.

Teachers perceived a need for additional workshops on the new curriculum have been identified through a TNA, and are being conducted by trainers in the district Clusters. In the event that there are many teachers in a Cluster, the Cluster is then further divided into zones. Although for many teachers this is the second year of implementation of the new curriculum, the TNA identified the need for training. There were teachers who still needed assistance in implementation. Although many teachers are teaching the new curriculum, many others are taking time to become competent. These teachers believe that involvement in additional workshops will boost their understanding and confidence in teaching the new curriculum. Another reason for teachers wanting another workshop was the absence of materials in the schools. Some materials were received as late as 2006.

Teachers returned to schools after the first in-service course and worked together to develop the themes for the year, and for each term. They assisted each other in grouping outcomes. They talked to each other and asked questions about the things that they could not understand.

There have been occasions when assessors or mentors from the primary schools have implemented joint sessions with the primary schools. Teachers also learned through such gatherings. In the first year of implementation, it was through trial and error that teachers were able to understand the processes of planning, using the syllabuses and the Teachers' Guide.

Although teachers were able to complete programs and prepare lessons, they were generally not confident. A TNA that was conducted towards the end of 2005 brought out some grey areas in which teachers need assistance. An outcome of the TNA was the first two workshops conducted in Cluster zones in April, and again in July 2006, which covered the areas of planning and programming, and teaching and learning, respectively. The third workshop on assessment and reporting was planned for the September 2006.

In EHP Clusters are usually homogeneous groups within a district. A Cluster could be identified by a common language or by the location of the schools. A number of Cluster workshops have been run in this province, in zones (location of schools within a Cluster). Trainers allege that they do not have adequate time or funding to conduct adequate training. A provincial allocation of K2000 a term is said to be inadequate for school visits.



Trainers have Cluster leaders who organise and contribute in-service courses and the use of operational funds. In-service courses on the new syllabuses and Teachers' Guide are conducted by trainers for both graduated teachers, and teachers-in-training: there is no differentiation made. Different models are used for training teachers: TDTs, train-the-trainer, whole school, and cascade. TDTs are used for in-service courses, and school-based in-service. There is no problem with language use in training, which is mostly English and Tok Pisin.

Eastern Highlands trainers were particularly critical of the training that was held for them in Lae in 2004, and in Goroka in 2005. The 2004 workshop was for awareness of OBE, which looked at the nine steps of planning and programming. The 2005 workshop introduced the reform syllabuses and in-service Book Unit 1. Each of the sessions lasted for two to three days, and according to them was not sufficient. The new curriculum needs more time spent on it, so that trainers are better able to pass on the knowledge to teachers.

One elementary school had two workshops in 2006 — one with the trainer and another with the PEIC. For the third workshop, teachers were requested to pay K20 each. Teachers from this particular school could not pay and were refused entry to the workshop.

*Our board is very strict and wants acquittals, from the trainer, of materials purchased for the second workshop where the school paid for our attendance. That is, before it will pay another K20 for us to attend this workshop. When we asked the trainer, he got angry and threw us out of the workshop. We are not attending the workshop.*

The PEIC who was visiting with the researcher assured the teachers that he would speak with the trainer. The researcher attended the Goroka Zone 2 training. The training was for both elementary and primary teachers. This type of training was necessary, so that the links between elementary and lower primary schools can be seen. So far, schools within the Goroka district have had two workshops. These were held over the school holidays in April and July, and covered the areas identified by the TNA. In the planned September training, assessment and reporting will be covered.

Teachers seem committed to change, even though some of them may not yet quite understand the processes and content of the new curriculum. They have gone from the unknown to the known, through a series of workshops. The workshops provided teachers with a better understanding of the whole syllabus. The implementation of the findings of the TNA, in 2006, instilled some confidence in teachers that what they have tried to implement in the schools was not too bad after all. According to the PEIC, two to three years of workshops are needed for the whole province to enable teachers to become more confident and competent in the implementation of the reform curriculum.

In one of the semi-rural schools, the TIC has assisted in running a week-long Cluster workshop, and was working with her own teachers on the new curriculum. An area of concern that was shared during the discussion was assessment. That was an area that was

rushed during the TDT, and therefore they could not competently share information on this area during the Cluster workshops, with their own teachers.

Schools try as much as possible to work together on their programs of work, so that they are covering the same themes over a two-week period. Teachers in elementary schools that feed a particular primary school work together to plan combined activities on particular themes. There have been occasions when the elementary schools can work with the primary schools.

In-service courses run by the mentor at the primary school facilitate opportunities for elementary and primary teachers to work together. The workshops that are currently run by trainers during the school holidays also provide this avenue. The initiative is commendable, because teachers at different levels will come to understand what the other level does in relation to teaching and learning. Workshops enable teachers from different schools to compare notes with each other. They may learn or hear about something of interest which they can try to implement in their own schools.

The whole school model of training helps all teachers. For those teachers who can understand well and can handle the new curriculum teaching has become interesting for the children. They are either learning in the classroom or learning through observation of cultural activities. For example, in celebration of 2006 Education Week, the children from a sample elementary school danced as 'Asaro mud-men' to welcome the official delegation.

### ***Simbu processes for in-service training***

Officers at the provincial level ensure that elementary education in the province progresses smoothly. Training and in-service workshops are initiated at the provincial level, when funding is made available from the Department of Education, or through AusAID.

The provincial and district-level elementary officers understand the need for elementary trainers to be trained, so that the reform curriculum can be implemented with some degree of success. In 2005 trainers used horses for transport to visit and supervise teachers, and conduct Cluster workshops in Kundiawa and Kerowagi Districts. This form of transport was very useful, as the horses could go where there were no roads. In mid-2006, when the researcher visited again, the horses were no longer available. Trainers and provincial officers are able to use provincial motor bikes to visit schools along the highway.

In the other five districts, elementary trainers as well as the provincial-based officers are not able to move around because of insufficient, or lack of, logistical support. In those districts where vehicles are available and in working conditions, trainers and the primary inspectors conduct visits together.

Selected head teachers and senior teachers from the primary schools have been trained by DOE to carry out supervisory, mentoring, and assessing roles in the feeder elementary schools to their primary schools. In Simbu, the elementary trainers and the primary teachers run Cluster workshops. Trainers and mentors provided the first workshops. Primary school senior teachers or Head Teachers conducted follow-up workshops.

The majority of teachers viewed the second lot of workshops, which were conducted by the mentor, more favourably. The second workshop instilled confidence in them to implement the new curriculum. The researcher noticed that, in the Catholic agency schools, the mentors were conducting in-service training for both elementary and primary teachers. It was also highlighted that more visits to elementary schools have been conducted by the mentors since the workshops, than elementary trainers. This regularity of visits could be attributed to mentors who have easy access to these schools.

In one elementary school, teachers are using themes that were identified through training which was conducted by mentors and assessors. They have discarded those identified with the assistance of the elementary trainer, during the Cluster workshop. It was pointed out to the researcher that the elementary trainer was not happy with the outcome. According to the PETTC, the mentor, trainer, and head teacher should ensure that teachers from the primary and elementary schools work together. The ideal situation would be that trainers and mentors, or assessors, should have constant dialogue, where training or mentoring is concerned, according to the PETTC. However, in reality, this ideal is not working.

Schools in Simbu province are arranged in Clusters. Each Cluster is then subdivided into zones. For example, the provincial coordinator in charge of training described the circumstances.

*Kundiawa is made up of two zones. Zone 1 is made up of schools within Kundiawa town. Zone 2 is made up of schools on the outskirts of the town. A trainer is responsible for a zone.*

The same type of Clustering is found in the districts, although some may have more than two zones, depending on the number of schools and their locations. In 2005, workshops were conducted in Clusters by the trainers, then by the mentors. All teachers, irrespective of the level of training, are included in Cluster in-service courses.

Teachers acknowledge that they have understood the new curriculum better when the workshops were conducted by the mentor rather than the trainer, especially when it came to planning for weekly and daily lessons. The reason for this could be in the sequencing of training, and the understanding of the new curriculum. During the first workshop, everything was new and teachers did not understand the new curriculum. However, the second session of training by the mentor assisted to clarify and reinforce knowledge that was gained during the first training session.

In July 2006, another training workshop was scheduled to be conducted. The researcher was present at the meeting to organise the workshop. Teachers were being asked to pay K30 each, to cover shortfalls in funding, which was made available by the DOE. The DOE funding had to be divided between primary and elementary in-service courses. An alternate plan, in the event that teachers are unable to pay K30 each, was that only TICs will attend.

During the first group of Cluster workshops, Cluster schools identified themes for their programs. A sample rural school has decided against using the themes developed during

the Cluster workshop. In their place, it has adopted the themes developed with the mentor and the primary school.

*I am not following the themes identified with the trainer. I am using the themes that were identified and worked out with the mentor. My trainer was not happy when she found out that I was not using the Cluster themes. She wanted to know why. My children will one day attend this primary school, and because I understood clearly the in-service that the primary school head teacher conducted, I want to also follow the themes that we identified then.*

The urban school did not have the privilege of attending a combined workshop with the primary school. Teachers feel that working with the primary schools, that will eventually take in their elementary children is important. This link is not evident unless the elementary schools were actually situated on the primary school grounds.

Since the first workshops, teachers have been visited by the trainer and mentor on separate occasions. In the urban area, a sample format for daily and weekly unit of work has been provided for the teachers. Teachers at the town elementary school are now working together, more so than in 2005, when they were teaching different curricula. They are all teaching the new curriculum. Teachers are attempting to understand it, by talking and planning with teachers from within the school, or with other teachers from within the Cluster. Teachers stated that the whole-school approach to in-service activities is more beneficial than training through other methods.

#### ***Milne Bay processes for in-service training***

There are four major in-service processes conducted within the province. They are:

TDT sessions are six weeks in length and are conducted by the provincial trainers with funding provided by DOE. An officer from Milne Bay Division of Education observed that there are funding difficulties.

*The major problem that the province faces is the timely release of funding to conduct in-service activities. Previously when AusAID was funding TDTs direct to the provinces they ran smoothly but now we didn't run any for the years 2002, 2003 and 2004. In 2005, yes, but funding was a problem. PNGEI is slow to pass on the funding from ECBP. I don't know why. In 2006 only two provinces have received funding. They tell me we might get money in term 4. We scheduled TDT for the middle of the year not the end.*

The officer was critical of the timing of the funding and how this impacts on student learning. The TDTs should be conducted in January of each year not during the school term. Other officers stated that the value of TDTs is limited. They are often affected by poor funding and invariably funds for food run out before the end of the TDT and teachers have to support themselves which affects their morale and they do not get a lot of benefit from the activity. Trainers do not receive an allowance for taking TDTs and are invariably out of pocket as a result of the in-service session especially those trainers who travel out of their district. Officers suggested a move towards fulltime training in place of

TDTs using a combination of six-month residential sessions and six months of supervised practical teaching in their home villages.

### **Curriculum Cluster workshops**

The Cluster workshop process continues in Milne Bay. The lack of transport in this maritime province and the isolation of many islands require local solutions to in-service processes. The elementary schools in the study all participate in active Cluster groups, which meet on a monthly basis wherever possible. The comments from teachers indicate that the Cluster workshops are valuable although inefficiencies in terms of productivity and results occur from time to time. All the TICs from the elementary schools on Goodenough Island attended a four day workshop in Term 2 which was claimed to be useful in equipping TICs with information about a new format for the province. The TICs were meant to take the knowledge to their schools and provide school based in-service for the other teachers, however, four of the six TICs in the sample schools in the Goodenough sample indicated that they did not run a school based activity because they did not have copies of the materials used in the larger workshop. The cascade approach is difficult to conduct in rural areas. TICs were unanimous that all elementary teachers should have been given the opportunity to attend the in-service session and learn about the new format from the trainer facilitator.

### **Supervised teaching**

This is a weak area for Milne Bay. The TICs do not want to visit the classrooms of other teachers. Many of the TICs do not have the outcomes based knowledge of the younger teachers and are wary of being challenged if they provide inappropriate advice.

Trainers are unable to carry out this activity because of the number of teachers that trainers are responsible for and the distances involved in reaching the schools in a trainer's area.

### **Self-instructional units**

Elementary trainees complete these units of work and they are forwarded to PNGEI. Milne Bay has had a backlog of 52 teachers who completed all SIUs but they have not graduated. The province is working with PNGEI to reduce the backlog by ten in 2006 and to achieve the graduation of all elementary teachers working in the province by the year 2009.

### **Summary of provincial processes used for in-service training**

The reports included here show the varying degrees of success as well as the different styles of in-service training operating in the provinces included in this research. It is quite obvious that the provincial commitment to delivering and supporting in-service for teachers has had an impact. The relatively short sections of the report devoted to Sandaun and Morobe, for example, reflect the general lack of availability of in-service support for teachers in these provinces. Other provinces, at least in their commitment, are much more successful. If there is a culture of professional development operating within a particular province, for example, in Simbu and Milne Bay, then the likelihood of in-service appears

to be much greater. Even in provinces where the in-service support has not necessarily been successful in implementation, for example, in New Ireland, the will and intention to deliver is strong. It would appear therefore that it is important to build on these good intentions in some provinces, while in other provinces it is more important to actually develop an attitudinal change so that provincial staff are made aware of their responsibilities.

It is also apparent that to many elementary teachers the source of in-service training is immaterial. It does not seem to be of any concern whether training is offered by trainers, inspectors, primary school teachers or elementary head-teachers. What is of concern to them is that they are provided with some kind of personal in-service training where they have the opportunity to talk to 'experts' about their attempts to implement the new curriculum. Equally important is the acceptance of the diversity of opinions and ideas expressed by these different groups. It seems to be unproductive, for example, for trainers to criticise training provided by primary school teachers. Across the world there is a growing understanding of the differences between teachers' interpretations of curriculum and the intentions expressed by policy developers. In this context, elementary teachers' willingness to engage with the new curriculum and to 'try it out' seems to be more important than whether their attempts are in line with the views expressed by trainers and inspectors who are, after all, themselves coming to terms with new ideas about teaching and learning.

## 4. Conclusions

The following conclusions represent a selection of the major ones that may be derived from the data in this study. The nature of the research conducted, especially due to its multiple research methods, ensures that conclusions may be drawn from both within and across the type of data collected. What follows are the major conclusions deduced from the survey and site study data respectively.

### 4.1 Survey data

A total of 1499 teachers responded to first survey and 1610 teachers responded to the second survey. Treating the two data collections as a single data collection and allowing for teachers who responded to both surveys, a total of 2459 teachers responded to one or the other survey, representing an approximate response rate 50%, representing approximately 54% of the schools. The major conclusions concerning the schools are:

- Schools are mostly small, and are located in rural areas and in villages and settlements. Larger schools tend to be located in urban areas and in primary schools;
- Most schools have received the 2003 Elementary Syllabus documents;
- A little more than half the schools (2005: 59%; 2006: 55%) have a Curriculum Committee that involves members of the community; and most schools have their own BOM;
- Even though only half the schools have a Curriculum Committee, schools are more likely to have a Curriculum Committee if they are located in rural areas, or in villages and settlements.

The major conclusions concerning the demographics of the teachers including their experience and training are:

- The majority of teachers have completed Grade 10 or higher at school;
- More than half the teachers have graduated from the elementary training program;
- More than half the teachers have been teaching in elementary schools for five or more years;
- More than half the teachers have been using the 2003 syllabus documents for four terms or more, and the majority have had some in-service training on the documents;
- A Tok Ples language is preferred overall in classrooms, but Tok Ples is even more preferred in schools located in villages in rural areas, in multigrade classrooms, and in classrooms taught by teachers who have had TPPS experience. Tok Pisin is the preferred language in schools in urban areas;
- Fewer teachers teach in multigrade classrooms than in single-grade classrooms, but multigrade classrooms are more popular in small rural schools located in villages;
- Most teachers have received *In-service Unit 1: Education Reform in PNG*, but about half the teachers have used it, and even fewer have found it useful;
- There is evidence to suggest that the provision of in-service training, if not improving, is at least getting to teachers who reported missing out on in-service in the earlier

survey. There is also evidence to suggest that the distribution of the in-service units, if not improving, is at least catching up with teachers who, in the earlier survey, reported that they had not received the *In-service Unit 1*. Also, there is evidence to suggest that there are increasing numbers of teachers who have found the *In-service Unit 1* useful.

Teachers generally claim that aspects of quality and effectiveness are emphasised in the syllabus documents; that the syllabus documents help them to achieve objectives and outcomes stated in the syllabus documents; and that they experience little difficulty with the layout and formatting of the syllabus documents, and with the ability to distinguish between key terms and phrases used in the documents.

There are distinct dimensions of thought underlying teachers' perceptions of aspects of the quality and effectiveness emphasised in the elementary syllabus documents. The underlying dimensions are: a focus on students; a focus on the content of the syllabus; and a focus on the social and cultural context in which learning takes place. There also distinct dimensions of thought underlying teachers' perceptions of the amount of help given by the syllabus documents to achieve stated objectives and outcomes. The underlying dimensions are: a focus on help with organising planning; and a focus on help with organising the integration of teaching programs with past and future learning, across curriculum areas, and with aspects of the social and cultural environment in which the syllabus is to be implemented. Of interest here is that that there is no distinct dimension concerning assessment and evaluation issues.

Teachers' attitudes, beliefs and perceptions concerning aspects of quality and effectiveness of the syllabus documents, the amount of help offered by the syllabus documents in achieving stated outcomes and objectives, and the difficulty they experience with the layout and formatting of the syllabus documents and with an ability to make key distinctions between key terms and phrases used in the documents are associated with in-service training received by the teachers, with the establishment of Curriculum Committees, and with the size of their schools. An interpretation of these effects is that teachers' attitudes towards, and perceptions of, the syllabus documents become more positive if formal and informal support mechanisms are in place.

Teachers' attitudes towards and perceptions of the quality and effectiveness of the syllabus documents are associated with the length of time that teachers have been using the syllabus documents. Teachers who have been using the syllabus documents longer tend to have more positive attitudes and perceptions. However, this effect may be confounded with inservicing: Teachers who have been using the syllabus documents for longer periods of time are also more likely to have received some form of in-service on the syllabus documents.

Teachers' attitudes towards and perceptions of the quality and effectiveness of the syllabus documents are associated with their English language abilities. Teachers with better English language abilities have more positive attitudes of the quality and effectiveness of the documents, and, more crucially, less difficulty with understanding the documents.



## **4.2 Site data**

A total of 31 elementary schools and 135 teachers participated in this part of the study. The data reported here is derived from at least three site visits to elementary schools during 2005 and 2006 and data collection using a range of techniques such as teacher reflective journals, surveys at the school site, interviews, action research activity and some focus group work with teachers and members of local communities.

The data allow the study to make a strong statement that children are learning to speak, read and write in the language with which they are most familiar. This is consistent with the wider education reform agenda and the intent of the new elementary curriculum documents. This conclusion is supported by elementary teacher responses to questions, classroom observations by researchers, and the responses of primary school teachers. Elementary children are also gaining a stronger understanding of culture and their place in it than children in the past as a result of the activities contained in the elementary syllabus guides.

In 2005 it was reported that teachers were apprehensive of the new curriculum after a lengthy period of time working with the Scope and Sequence methodology. This is understandable especially given the difficulties that teachers and provincial elementary co-ordinators have identified in providing adequate professional development opportunities for all elementary teachers. There is some concern about the level of English in the curriculum documents and the layout and complexity of the ideas. The coping ability of teachers varies with their own education background, the experienced leadership in elementary schools and the attitude of teachers to take risks and to reflect on the kind of experiences that the local environment offers for teaching rather than conceiving education in terms of a prescriptive syllabus delivered within a classroom.

In 2006, there were marked changes in the teachers' attitude to planning weekly lessons, classroom organisation, teaching practices, students' interest in learning, and community support. The integration of cultural mathematics with other subjects was stronger towards the end of the study. The integration of school subjects and community knowledge were already strong at the beginning of the implementation of the new curriculum, as this was emphasised in the previous elementary programs.

During the final visits to the provinces, changes were noted in the site schools. The changes varied between provinces and between schools in each province. The changes and progress were dependent on the Head Teachers of the site schools. If the teachers perceived their Head Teachers to be committed, hard working, and encouraging teamwork and respect among the teachers and their communities, then they were given good support. Teamwork became stronger in many of the site schools at the end of the study.

Head Teachers took the lead in implementing the new curriculum. The teachers interpreted the elementary curriculum, made sense of it, and implemented it accordingly. They perceived that Scope and Sequence and the new curriculum were similar, even though 'experts' may not agree. They perceived that working with outcomes to prepare lessons made the assessment of students' learning easier. Initially, the teachers were

reluctant to use the new curriculum, but with longer interaction they became more confident with its use.

Prior knowledge from previous elementary curricula impacted on the interpretation and implementation of the new curriculum. Ownership of the new curriculum, adaptation of knowledge and application, and the use of innovative activities, to implement the new curriculum were noted in some site schools. The teachers in these schools were determined to make the new curriculum work, after they had gained sufficient confidence to implement it.

This attitude, expressed in much of the data as, *mipela burukum bus*, is to be commended and encouraged. On the whole, elementary teachers are committed to implementing the new curriculum. Their modes and processes of implementation may not be those favoured by trainers, inspectors, primary school teachers, or indeed, by the developers of the curriculum within CDD, but this general willingness should not be underestimated.

The research has also confirmed what is already well known: that most elementary schools are affected by a lack of financial and material resources to successfully deliver the kind of a program that teachers are capable of delivering and want to deliver.

There are teachers in the study who take the attitude that it is government responsibility to provide all of the resources for teaching. They are not prepared to find ways to access the richness of the local communities or to produce teaching resources themselves. There are teachers who take opposing views and find ways to produce their own resources which may not have the style of commercial or professionally produced materials, but are perfectly adequate to develop concepts and provide materials that children can read and complete as an educational activity.

The implementation of the action research part of this study seemed to have an impact on the attitudes of teachers involved in relation to solving problems themselves. The method for the action research component was derived from well known exemplars in this field in Australia and in PNG. The researchers found that these methods had to be redeveloped and realigned to take account of a number of specific contextual factors, including the elementary teachers' level of education, their experiences with writing in English, and the relative difficulties of developing a relationship between the research team in Port Moresby and the teachers completing the action research in their own schools. It was decided that the main focus of the action research model would be to assist teachers to: a) identify a problem, b) try to find ways to solve that problem, c) try out some of these solutions, and d) write a record of what they had done. Within this limited framework there were some surprising results. Mostly, these related to teachers' new understanding of the work they could do to solve problems themselves rather than waiting for external assistance. So, while the model of action research used was not necessarily the complex kind more often used with teachers in other countries such as Australia, it does provide a good basis for further research in PNG. As noted earlier in this report, critical reflective skills are important tools for teachers and this model does help their development. The model also supports a teacher-as-researcher approach that is currently gaining international favour. It is becoming obvious that teachers do not welcome research that is 'done to them' but find great rewards in participating in research that involves them as

equals. Teacher-as-researcher methods are particularly well suited to the PNG context given geographical and economic constraints in travelling, and given the linguistic and cultural diversity across the country.

A further positive outcome of the research, at this stage, is the interest of the majority of teachers to improve. They are eager to listen to ideas from the researchers who at times take the place of the absent trainers and inspectors. The research team has debated our role in the study. Should the researchers be observers documenting what teachers do and refrain from offering advice when we are confident that our advice would remedy a particular problem encountered by a teacher? The research team has taken the view in the case of the site schools, which is consistent with the original research proposal, that the researcher is a part of an acknowledged group of people interested in understanding elementary education, the implementation of a new curriculum approach, and working together to seek ways to improve the delivery of learning in the classroom.

This continued search for methods to improve teaching is a feature of the data collected during 2006. It seems that elementary teachers do not particularly worry about where this advice and guidance comes from, as long as it is delivered through some kind of personal interaction, and as long as they do not become the subject of conflict between different groups offering the assistance.

It would seem from the final data collection that the role of the researcher during the site visits has had an impact on school improvement. Schools have reported improvements in community relations, in staff attendance, in use of cultural mathematics, and in general use of the curriculum, that have occurred because of intervention by the researchers. This finding has implications for further research in PNG, where it could be suggested that researchers should be cognisant of their roles as advisers to teachers.

Teachers look upon the three syllabus documents favourably. In 2005 the focus of their comments seemed to be on suggested improvements to the layout, but that the outcomes and indicators were helpful and allow them to prepare interesting lessons and to understand what they should be achieving over a year of teaching. CDD and CRIP produced a large format chart several years ago, which detailed all of the outcomes for elementary and primary education. It is understood that a copy of this was sent to all elementary schools but not all elementary schools received all of the materials forwarded by CDD in 2003. There would be a lot of sense in reproducing this chart and making it available to all elementary schools.

Certainly the 2006 site visits revealed many teachers actually working with the outcomes and indicators from the syllabus documents. There is ample data indicating that teachers have overcome their initial difficulties with understanding the layout and have been able to transform the indicators into classroom activities that have engaged their students' interest.

In 2005 teachers commented that the Teachers' Guide was a very useful document, referred to in times of programming and when the teacher is looking for ideas in terms of teaching. There is a great deal of information in the Teachers' Guide and teachers have commented that pages 21 to 48 are a challenging read for them. They report reading the

section many times before they begin to understand the activities and processes expected of them in planning, programming and developing lessons.

In 2006, the work that teachers do with the guide has become clearer. They are using it as a method for interpreting the syllabus documents. So for example, many teachers have spoken about working with documents together, first examining the syllabus and then going to the guide for further clarification or ideas for teaching.

There is also a view expressed by teachers that there could be more examples of programming, school organisation and classroom strategies and delivery than at present. This is supported by the research in that at present there is an attitude that 'I cannot go outside of the book'. This seems to be reinforced by some inspectors and trainers in their training and conversations with teachers. Inspectors for their part are concerned about standards and see value in a uniform approach that does not celebrate diversity. And yet this is contrary to the spirit of an outcomes based education approach, which establishes an outcome, but gives teachers the freedom to take different pathways in order to achieve that outcome.

The use of the indicators from the syllabuses as specific activities by many teachers is an example of this close attention to the materials supplied. However, this is not necessarily surprising, given that in any implementation of new curriculum, it takes some time before teachers feel they can interpret it in new ways. There is also an historical connection here. Given that these elementary teachers were themselves educated in a system where teachers relied heavily on centrally developed and distributed materials and where uniformity was encouraged, it is not surprising that they seek these kinds of materials now.

The research has identified a number of issues that were investigated in relation to the Cultural Mathematics and Culture and Community syllabuses. The store of knowledge and skills held by elementary teachers in relation to traditional mathematical concepts is not as strong as is required by the syllabus document. By the time of the third visits in 2006, there were many improvements identified in this area, but there are still areas for concern. The main impact on the use of Cultural Mathematics is the teachers' own knowledge and experience with traditional forms of mathematics. As the elementary system grows, and as the movement of people across the country continues, this aspect is going to be of continual concern, especially as it is not an area that could successfully be improved through in-service or training.

The importance of communities contributing to the Culture and Community program requires a lot more attention by teachers to secure the kind of assistance that is required by the syllabus. Parents and communities surrounding the site schools do not fulfil their roles in supporting elementary education. Parents do support the schools in that children do attend elementary schools and in most cases do so regularly. There are schools that can call on help from the community and receive it, but they tend to be schools that are characterised by good forward planning and arrange assistance well in advance.

In 2006 the data show a marked improvement in community support for all site schools. The communities are now aware of the links between elementary curriculum and the

lower primary curriculum. As a result, community support is stronger in the site schools. The data also show that greater community support is dependent on the amount of interaction between teachers and their communities. The more the interaction between the teachers and the communities, the stronger the community support for the schools. Also, the data show that teachers' professional attitude to their work has an impact on the level of support from the communities. Support is generally weaker when the communities perceive the teachers not to be working well. However, parents' commitment to paying school fees is still an issue. This could be because parents do not understand why they have to pay school fees.

It should be noted that the relationship between these changes in community support and the implementation of the new elementary curriculum is not strong. There are many factors affecting the ways in which communities support their elementary schools and it was difficult to identify the specific influence of the new curriculum. At best, it can be said that the curriculum has an indirect affect on community support. For example, new teaching practices learned from the curriculum have led to a greater level of student engagement in classroom lessons. This has led to higher levels of student participation in schooling. Because their children seem to be more interested in school, parents are more inclined to support the teachers. Our data seem to suggest that the most direct affect on community support is the professional attitudes of the teachers, rather than the new curriculum.

The research team is encouraged by an outcome that emerged during the 2005 visits and is substantiated by further data collected in 2006. Teachers who have less than two years first hand experience with the curriculum documents report that they are unsure about programming, the meaning of outcomes and indicators, and are constrained by a range of interpretations from people who are meant to advise them on procedural and professional issues, or are discouraged because no-one seems interested in helping them after they attend a TDT. After two years' experience, however, the common responses from elementary teachers include understanding of the outcomes based approach, and confidence and an articulateness to have a professional conversation with the researcher about the new curriculum. The uncertainties are no longer apparent, and teachers display a new and strong commitment and confidence about what they are doing in the classroom. The widespread acceptance of the new curriculum and widespread use of ideas and practices derived from it that was evident in the 2006 round of visits is indicative of the impact this time period has on the implementation process. The relationship between the time spent on using the syllabuses and the comfort of teachers in their usage is also reflected in the survey findings.

The teachers, as a general point, do not receive the kind of follow-up attention from trainers and inspectors that they are looking for to confirm that they are teaching in appropriate ways. Teachers lack the confidence, the skills to reflect on their own performance, to establish local structures within Cluster groups of schools or within their own school environment, to be critical of existing practices and to seek improvements. There are examples from the site studies of teachers and schools who have taken initiatives in these areas, and once again the success of these seems to depend heavily on the role of the head teachers.

The study has found that the Cluster-based approach to professional development matters should be reconsidered with a view to strengthening it. Some Clusters are effective and indicate that they get more assistance from the Cluster members than the trainer. Other Clusters have collapsed for a range of reasons but there are large benefits in terms of funding, efficiencies, rationalisation and immediacy that are not achieved from the cascading model of professional development that is also in use at the present time.

It would seem that the Cluster-based approach to in-service is perceived to be much more valuable by the teachers themselves. Those provinces that have strong Cluster organisations seem also to be much more successful in delivering widespread in-service to teachers.

Elementary teachers are not making use of the in-service booklets produced by CDD and CRIP. While in 2005 a large number of teachers had either seen in-service material Unit 1: Education Reform in Papua New Guinea, or had a copy of it, they were unsure what to do with it because 'we have not been in-serviced on it yet'. By 2006 most teachers were aware of this Unit, but were still not making use of it. There is a question about the relevance of the content of this particular Unit, which was written several years ago. There would be greater value in redeveloping that Unit to incorporate issues and weaknesses that have been identified in this study and that are contemporary rather than dated. The remaining two units in the series: Unit 2: Understanding the New Elementary Curriculum, and Unit 3: How to Use the Teachers' Guide have only recently been received by most of the schools in the site studies. It would appear that teachers perceive these materials as irrelevant to their daily practice and they will be of little use to the majority of teachers unless there is realignment of in-service resources to assist teachers to understand the materials and to see the value in completing the activities contained in the Units.

This perception also seems to be relevant to the use of other support materials provided as part of CRIP. In the main, teachers report their immediate concern to understand the syllabuses and Teachers' Guide, and to transfer this understanding to changed classroom practices. They see little relationship between this daily work and the support materials provided.

## **5 Recommendations**

It is recommended that:

- 1 Inspections and Guidance Division take the findings of this study into consideration during the implementation of SLIP (School Learning Improvement Plan);
- 2 Elementary Unit/CDD ensure that the consultative process involves groups of users that authentically represent the diversity of elementary teachers experiences, contexts and competencies;
- 3 Elementary Unit/CDD use trialling processes that involve a range of users reflecting the diversity of elementary school, community and teachers' contexts;
- 4 Elementary Unit/CDD maintain closer consultations with PNGEI in the development of curriculum to ensure in-service and pre-service courses are harmonised to ensure effectiveness and sustainability;
- 5 PNGEI and TE&SD (Teacher Education & Staff Development) continue negotiations with TSC to develop a career path for experienced elementary teachers to move into training and inspectorate positions;
- 6 PNGEI and TSC develop a professional framework and in-service materials that have an assessment component to enable accreditation towards further study;
- 7 Elementary Unit/CDD and PNGEI ensure that teachers, inspectors and trainers have an understanding of 'community activities' which takes account of the diverse urban community contexts, activities and experiences;
- 8 PNGEI assist trainers and inspectors to encourage teachers to be imaginative and flexible in their interpretations of the Teachers' Guide;
- 9 CDD improve the distribution, packaging and delivery of support materials to Elementary Schools. It is recommended, for example, that: an overview and explanation of the package of materials be provided; delivery is timed for the beginning of the school year; stronger links are developed with provinces to obtain current information about schools and their locations, and to provide a provincial electronic repository of all materials to enable local printing and access if delivery fails; and reliable methods of delivering materials directly to elementary schools are identified and/or developed;
- 10 PNGEI, and the Inspections and Guidance Division, commend and encourage elementary teachers' adaptability and efforts expressed as "mipela i brukim bus";
- 11 PNGEI, in collaboration with Provincial Divisions of Education, conduct regular training needs analyses of elementary teachers to ensure that training and support materials are directed to their contemporary needs, such as, the assessment of students;

- 12 PNGEI, and the Inspections and Guidance Division take immediate action to ensure communities are aware of their responsibilities for supporting elementary schools and working with teachers, the connections between elementary and lower primary schooling, and the role of Curriculum Committees and BOMs;
- 13 PNGEI and the Inspections and Guidance Division, through trainers and inspectors regularly consulting BOMs, develop and sustain a role for BOMs to monitor and assess the performance of elementary teachers;
- 14 PNGEI, in collaboration with Provincial Divisions of Education, strengthen cluster based in-service delivery with the understanding that there is a diversity in the organisation and practices of clusters across provinces;
- 15 PNGEI develop in-service materials to include a face-to-face component delivered through school Clusters;
- 16 TSC and PNGEI review the numbers and locations of trainers to ensure an effective distribution of trainers in districts and sub-districts;
- 17 PNGEI review the role of elementary trainers to include providing professional development for all elementary teachers through Cluster organisations;
- 18 PNGEI and the Inspections and Guidance Division encourage and strengthen the role of primary school teachers as mentors/assessors in their Clusters;
- 19 PNGEI and Provincial Divisions of Education recognise and promote effective leadership of Clusters provided by a variety of people; for example, experienced elementary teachers, head teachers, trainers, and primary school teachers;
- 20 The Top Management Team (TMT), and Policy, Research and Communication Division (PRC) of the Department of Education advise researchers, when working in schools, should consider employing collaborative methods such as those deployed successfully in this project, for example, simple participatory and/or action research strategies;
- 21 DOE recognises the value of longitudinal studies (quantitative and/or qualitative) and identifies appropriate funding to continue to track students through elementary, primary and secondary school to ascertain the sustainability of the benefits of the new curriculum.



## 6 Appendices

### 6.1 Materials distributed

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#### 2003 Materials distribution

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National Curriculum Statement	2 copies
National Assessment and Reporting Policy	2 copies
Elementary Outcome Chart	2 copies
Upper Primary Outcome Chart	2 copies
Elementary in-service unit 1	3 copies
Elementary Syllabus Pack (x3), Language, Culture, Maths and Culture and community	3 sets of 3
Elementary Teachers Guide	1 copy
Gender brochure	3 copies
Gender Resource book	3 copies
Elementary Implementation Support Booklet	1 copy
Collegial Curriculum Leadership Program Unit 1	1 copy
Gender Policy	1 copy
Transparency International Posters - 1 set, plus 2 pkts crayons, 1 ream of A3 paper and various CRIP newsletters and circulars.	

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#### 2005 Materials distribution

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Elementary Unit 2 & 3	3 copies of each unit
Elementary Activity Books 1-3	2 copies per book
Elementary Teachers Guide	2 copies
Aids Awareness Package	3 sets
Materials Procurement and Distribution Policy	2 copies
Inventory Teachers Guide	2 copies
Helping our schools booklet - 1 copy, plus 3 pkts crayons, 2 reams of A3 paper and various CRIP newsletters and circulars.	

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## 6.2 Survey

### SECOND SURVEY

#### SURVEY OF THE QUALITY AND EFFECTIVENESS OF THE ELEMENTARY SYLLABUS

What is your name? \_\_\_\_\_

What is your file number? \_\_\_\_\_

What is the name of your elementary school? \_\_\_\_\_

What is the school code? \_\_\_\_\_

What province is your school in? \_\_\_\_\_

#### How to complete the survey.

The survey has three sections:

Section A) Asks for some background information about your school;

Section B) Asks for some background information about yourself;

Section C) Asks for your opinions about the Elementary Syllabus.

After reading each question, tick the box beside the answer that best fits your response.

For each question, tick one box only.

When you have completed the survey, give it back to the person who gave it to you.

#### SECTION A) These questions ask you about your school.

1. How many students are enrolled in your elementary school?      10 or less       11 – 50       51 – 100   
101 – 200       201 – 300       more than 300

2. How many elementary teachers are teaching at your elementary school?      1       2       3   
4 – 6       7 – 9       more than 9

3. In your elementary school, how many classes are there in:

a) Multigrade:    0     1     2     3     4     5     more than 5

b) EP:    0     1     2     3     4     5     more than 5

c) E1:    0     1     2     3     4     5     more than 5

d) E2:    0     1     2     3     4     5     more than 5

4. Is your elementary school in a:      town or city     semi-rural area     rural area

5. Is your elementary school in a:      village or settlement     primary school     Other

6. Has your school received the 2003 elementary syllabus documents and teachers' guide?      Yes       No

7. What kind of BOM does your elementary school have? It has its own BOM   
It shares a BOM with a primary school   
There are two BOMs under one head teacher   
Other

8. Does your elementary school have a curriculum committee that involves members of the community? Yes  No

**SECTION B) These questions ask for some background information about yourself.**

9. Gender: Female  Male

10. How old are you? 18 - 20  21 – 25  26 – 30   
31 – 35  36 – 40  more than 40

11. What was the highest Grade you achieved at school? before Grade 6  Grade 6  Grade 7   
Grade 8  Grade 9  Grade 10   
Grade 11  Grade 12

12. What level of elementary training are you up to? I have not started yet   
Year 1  Year 2  Year 3   
Graduated

13. Have you done any in-service training on the 2003 syllabus documents and teachers' guide? Yes  No

14. How long have you been using the 2003 syllabus documents and teachers' guide? one term or less  two terms  three terms   
four terms  more than four terms

15. When did you begin teaching as an elementary teacher? 2006  2005  2004   
2003  2002  2001   
2000  1999  before 1999

16. What is your position in the school? Head Teacher   
Deputy Head Teacher   
Classroom teacher

17. What grade do you teach? Multigrade  EP  E1  E2

18. How many children are there in your class? 10 or less  11 – 20  21 – 30   
31 – 40  more than 40

19. Have you ever worked in a Tok Ples Pre-Skul? Yes  No

20. Apart from teaching in Elementary (and in TPPS),

- have you had any other teaching experience? Yes  No
21. How would you rate your overall ability in English?  
 very poor  poor  average  good  very good
22. Can you read and write in a tok ples? Yes  No
23. What language do you use **most often** in your classroom?  
 Tok Ples  Tok Pisin  English
24. Is this the language that the children mostly use outside the classroom? Yes  No
25. Do you have a copy of the In-service Unit 1: Education Reform in PNG (2003)? Yes  No
26. **If so**, have you used it? Yes  No
27. **If so**, how useful has it been to you?  
 Not at all  Only a little  Some  A fair amount  A lot

**SECTION C) The remaining questions ask you for your opinions.**

**Please note: There are no right or wrong answers to these questions.  
 We want to know what **YOU** think about these things.**

After reading each statement, colour in one of the boxes beside the statement that best fits your response, according to this scale.

**28. The following statements are about syllabuses in general.**

How much does the Elementary Syllabus emphasise these statements?

	<i>Not at all</i>	<i>Only a little</i>	<i>Some</i>	<i>A fair amount</i>	<i>A lot</i>
a) A syllabus encourages children to have personal values.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) The content of a syllabus allows equal access for all students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) A syllabus is relevant to the learners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A syllabus encourages children to work well with other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) The content of a syllabus helps students to find new ways of doing things and to be creative.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) A syllabus encourages children to be independent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) The content of a syllabus is flexible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) A syllabus encourages children to be concerned for the cultural richness of the community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) The content of a syllabus clearly states what students need to learn.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) A syllabus encourages cooperation, not competition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- |   |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| k) The content of a syllabus is motivating for learners.                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l) A syllabus encourages teachers to interact with the community.                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m) The content of a syllabus encourages high standards.                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| n) A syllabus encourages children to contribute to society.                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o) A syllabus includes everyday experiences of the community.                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p) The content of a syllabus focuses on the learner.                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q) A syllabus includes realistic activities that are close to real life activities. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r) The content of a syllabus provides assessment for learning.                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

After reading each statement, colour in one of the boxes beside the statement that best fits your response, according to this scale.

**29. The following statements are taken from the Elementary Syllabus.**

How well does the Elementary Syllabus help you to do these things?

- |   | <i>Not at all</i>        | <i>Only a little</i>     | <i>Some</i>              | <i>A fair amount</i>     | <i>A lot</i>             |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Outcomes and indicators allow students' achievements to be described in consistent ways.                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Teachers provide opportunities for students to assess their own work.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Teachers develop lesson plans that describe the order of how teaching and learning will take place.                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) A successful classroom provides opportunities for students to work in small groups, pairs, individually, and as a whole class. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Outcomes and indicators help teachers to assess and report students' achievements.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) Students have the right to participate in any curriculum activity regardless of their gender, ability, or language group.      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Teaching should help students to develop pride in their culture and language.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h) Outcomes and indicators help teachers to plan their teaching programs.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) Teachers use assessment information to evaluate the effectiveness of their teaching.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| j) Teachers develop weekly plans to sequence the lesson activities from the unit of work.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| k) The learning that students experience in Elementary sets the foundations for learning in Lower and Upper Primary.              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| l) Opportunities are provided for students with special needs so that they can participate in a variety of learning experiences.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| m) Teachers use records of students' achievement to plan and program for future learning.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

- |   |                          |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| n) Elementary teaching is based on learning that is relevant to students' lives and values in the community in which they live. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| o) Activities in one subject are integrated with activities in other subjects.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| p) Students learn best when learning is built on what is already known.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| q) Outcomes and indicators help teachers to monitor students' learning.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| r) To ensure a student-centred approach to teaching and learning, students are the focus of learning activities.                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

After reading each statement, colour in one of the boxes beside the statement that best fits your response, according to this scale.

**30. These statements concern the layout and format used in the Elementary Syllabus documents.**

Indicate your level of agreement or disagreement with each statement

- |   | Strongly disagree        | Disagree                 | Neither                  | Agree                    | Strongly agree           |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a) I can easily find what I need in the syllabus documents.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) The format of the syllabus documents is easy to follow.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) I can easily understand the English used in the syllabus documents.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) The relationship between the Teachers Guide and each of the syllabus documents is clear.                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) I understand the differences between 'Strands' and 'Sub-strands'.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f) I understand the difference between 'Recommended knowledge' and 'Recommended skills and suggested activities'. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) I understand the difference between 'Outcomes' and 'Indicators'.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Thank you for completing the survey.  
We appreciate it.**

If you want to make any additional comments about the Elementary Syllabus, you can use the space below and the back side of this page.

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## 7 References

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