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ABSTRACT

Some results from the 1982 New Teachers survey will be related to the teacher training programme at Goroka Teachers college. These will be put in the context of the subject courses run at G.T.C. and the subjects taught in secondary schools. Indications of who chooses to teach and why will be found by examining the sociological background of the new teachers, and comparison with earlier research will indicate changes in the composition of new teachers in terms of their regions of origin. Some aspects of the social background of teachers will be related to the courses that they chose whilst at GTC.

Finally the subjects in which teachers qualified will be compared with those they were asked to teach in their first year of teaching with the conclusion that too frequently new teachers are asked to teach subjects in which they have not been trained. The views of the teachers in their own words will be included where appropriate. The paper contains eleven detailed tables which give unique data about new teachers in the Papua New Guinean educational system.

Beginning Secondary Teachers in PNG: Family Background, Choice of Subject and the Curriculum Needs of Schools.

W. P. Palmer

Introduction

Palmer (1983a) described a project (The New Teachers Survey 1982) which aimed at investigating the problems of Papua New Guinean neophyte secondary teachers This paper attempts to describe and interrelate the social background of these teachers, the subject choices and popularity of courses at Goroka Teachers College (GTC) and the subjects which the new teachers actually teach in provincial secondary schools. The

sociological data indicate clearly the family backgrounds of the sample and this with a previous paper by Palmer (1985) helps to explain why these new teachers chose teaching as a career. The New Teacher Survey (1982) consisted of a questionnaire modified from the survey carried out in the United Kingdom by Taylor and Dale (1971). This questionnaire was trialled in the Eastern Highlands Province with eight new teachers (Palmer 1983b), and further modified as a result of these trials. It was sent to all new secondary teachers in Papua New Guinea, but only responses from Goroka Teachers College graduates have been included. Seventy-seven competed questionnaires were returned which was a 58.3% return of the one hundred and thirty two respondents available for the survey. However the comparatively small numbers in the survey mean that few of the samples will be large enough for statistically significant conclusions to be reached. Table 1 indicates that the composition of the sample is broadly similar to the composition of GTC graduates as a whole, though the response rate from female teachers seems a little low. Overall the table shows that about one third of the graduates are female, which compared with other tertiary institutions in Papua New Guinea is a relatively high proportion (Brown, 1983).

Table 1. Composition of survey sample answering questionnaire by sex and by course taken compared with the composition of GTC graduates as a whole for 1982 (Murphy,1983).

GTC Course	Responses from the 1982 New Teachers Survey			All GTC Graduates in 1982		
	Male Percentage	Female Percentage	Numbers	Male Percentage	Female Percentage	Numbers
2 Year Diploma: D.S.T	68.3%	31.7%	63	65.3%	34.3%	118
1 Year Diploma (Agriculture D.T.)	100%.	0%	14	93.5%	6. 5%	31
TOTAL	74%	26%	77	71.1%	28.9%	149 (132*)

*This is the figure obtained when Solomon Islanders and the trial survey sample are excluded.

The Background of the new secondary teachers by region

The numbers in this survey are too small to see many trends when data is examined on a provincial basis (19 provinces) so following Weeks (1976), this section will look at the sample on a regional basis (4 regions). Table 11 compares the regions of origin of the new teachers with those obtained by Weeks (1976) at GTC, and with the population figures as a whole (N.S.O, 1981).

Table 2. An analysis of respondents by sex and by birthplace.

	PAPUA PERCENTAGE			ISLANDS PERCENTAGE			NORTH COAST PERCENTAGE			HIGHLANDS PERCENTAGE		
	SAMPLE 1982*	WEEKS 1976+	TOTAL POPU 1981#	SAMPLE 1982	WEEKS 1976	TOTAL POPU 1981	SAMPLE 1982	WEEKS 1976	TOTAL POPU 1981	SAMPLE 1982	WEEKS 1976	TOTAL POPU 1981
MALE	14.0	14.7	1 9.9	7·0	44.1	1 5 .4	17.5	23.5	28.0	61.0	17.6	36.7
FEMALE	5.0	23.6	19.2	50.0	26.4	14.0	20.0	25.0	29.0	25.0	25.0	37.7
TOTAL	11. 7	20.8	19.5	18.2	32.1	14. 7	18.2	24.5	28.5	51.9	22.6	37.2

* The 1982 New Teachers Survey with seventy seven respondents (57 male, 20 female)

+ The 1976 Survey by Weeks with 106 (Male 72, Female 34) GTC respondents (Weeks 1976, Tables 25 and 33)

Calculated from data by the National Statistic Office based on the 1980 census.

Whilst examining Table 2, it should be borne in mind that nearly twenty years ago Nelson (1966) studying the regions of origin first University of Papua New Guinea (U.P.N.G.) intake (at a time when there was no GTC) found that there were no highland students at all in the intake. One fact which emerges is the increase in the proportions of highlanders at Goroka over the years, so that they now make up more than half the survey sample.

However they were slightly over- represented in the sample as 45.4% of all GTC students graduating in 1982 were highlanders. Nonetheless the proportion of highlanders at GTC is now greater than their proportion in the population as a whole. The GTC teachers' courses are popular amongst highlanders. This is firstly because the College is situated in the highlands, which may encourage highlanders and discourage coastal students from applying. Secondly the short time between starting the course and qualifying (three years for Grade 10 entrants and two years for Grade 12 entrants), the high pass rates, and the negligible costs of training make the GTC course an attractive one for children of poor parents who want some return for the costs which they have met during the students

primary and secondary education. For example, the teachers college in the United Kingdom has been a traditional path to success for the hardworking but indigent child (Lynch, 1979:7). In Papua New Guinea, Goroka Teachers College may well fulfil this role for many of its intake.

A further observation from Table 2 is that there is a high percentage of female new teachers from the Islands region. Similarly there is a high percentage of male new teachers at GTC coming from the highlands.

The Home Background of New Teachers

The data relating to father's occupation and father's education from this survey will be compared with that provided in Weeks 1976 Survey (GTC data only), Categories relating to the education the teacher's fathers had received (some education or no education) seem the same between the two surveys, but there are some differences in the categories given for fathers occupation between the two surveys. Weeks' 1976 survey included the semiskilled with villagers and farmers whereas the 1982 New Teachers survey includes the semiskilled with the category of "other jobs".

Table 3 Father's education by sex for the 1982 New Teachers survey compared with father's education by sex for the full VATS Sample Results for Weeks 1976, Table 43.

Father's Education Education	Sex			
	1982 New Teachers survey percentage		Weeks (1976) survey percentage	
	Female	Male	Female	Male
None	15·0	75.4	37.9	65.1
Some	85.0	24.6	62.1	34.9*
Number	20	57	456	1215

Using calculations from the previous tables the present survey indicates that 59.7% of new teachers from GTC had fathers with no education (Weeks' overall survey 57.7% and Weeks' survey just using GTC, figures 53.6%) results show a slight decrease in the percentage of these respondents whose fathers received education, which is at first sight surprising as six years have elapsed between the two surveys, during which time the provision of education has been steadily improving. However, if the high proportion of the sample from the highlands and the late development of primary education there, are both taken into account the finding is less surprising. Weeks (1976, p. 85) quoted a figure of 15% for fathers over 35 receiving any education, (1971 Census). Similar figures might be expected from this sample of fathers, yet, in fact 40.3% of them have received some education which indicates the very marked effect which father's education has on the

child's life chances. Table 3 shows the strength of this trend for female new teachers 85% of whom had fathers who had received some education. This is most probably explained by the tendency of educated parents to encourage their daughter's education whilst uneducated parents will concentrate on the education of their male children. (Palmer, 1978 : 330). Previous research such as the limited survey of Pope and Jones (1974) did indicate that parents' education was likely to be a factor in educational achievement whilst Tuppen (1979) found that the father's education is a critical social background factor.

The present survey's results confirm this tendency for students starting a teaching career, particularly for females.

Table 4. Father's Employment by sex for the Sample Group 1982.

Father's employment	Sex	
	Female	Male
Peasant/Farmer	30%	78.9%
Other Jobs	70%	21.1%
Number	20	57

Table 4 shows similar trends to Table 3. The overall percentage of GTC new teachers whose fathers work as subsistence farmers is 66.2% (Weeks 1976, 74.8%). Although father's employment and father's education mediating through the education of the child give similar outcomes, the results in Table 4 are strongly polarised, indicating the major influence of the father in the choice of the child's career. 70% of female new teachers had fathers who had a job other than subsistence farming, whereas only 21.1% of the male new teachers had fathers with jobs other than farming.

Modern sector workers see secondary teaching as very suitable for their female children but perhaps less suitable for their male children perceiving it as a low status career. On the other hand the villager, who will probably not even be able to provide female children with an opportunity to obtain basic educational qualifications may well perceive secondary teaching as a relatively high status career suitable for his male children.

Table 5. Father's Education by occupation by sex for New Teachers Survey 1982 compared with father's education by occupation by sex (taken from Weeks 1976, table 44, GTC sample of VATS survey)

	Father's education							
	New Teacher Survey 1982				Week's VATS Survey 1976			
	Females		Males		Females		Males	
Father's Occupation	No Ed^{n}	Some Ed^{n}	No Ed^{n}	Some Ed^{n}	No Ed^{n}	Some Ed^{n}	No Ed^{n}	Some Ed^{n}
Any other job*	0	82.4	11.4	53.8	15	21	13	23
Farmer/peasant**	100	17.6	88.6	46.2	85	79	87	77
Number	3	17	44	44	13	19	39	26

*Any other job (1982 survey) or high status occupation VATS 1976.
** Farmer/peasant 1982 survey or low status occupation (VATS, 1976)

Table 5 compares the results of the 1982 & 1976 surveys for father's education by respondents sex with father's occupation by respondents sex. Interpretation is similar to that for the separate tables, but it should be noted that 14 out of 20 female new teachers have employed educated fathers whereas 7 out of 57 males new teachers have educated employed fathers. Palmer (1978:82) explains that "it is mainly girls from groups set apart by the advantage of income, status and education who make full use of the secondary education facilities available ignoring the more common prejudices against education for girls". This comment is certainly shown to be true for the new teachers in this sample. It is predicted that this trend will continue as the teachers college increases its entrance standards. Conversely only three females out of the twenty in the sample had fathers who were uneducated villagers whereas the great majority of males had fathers in that category. The cases where new teachers' fathers were themselves teachers will be examined as it illustrates the processes of ascription amongst teachers in PNG. Seven (9.1%) of the new teachers in the survey had fathers who were teachers. However in Weeks' survey of tertiary students as a whole only 4.0% of the sample were teachers or head teachers, but in the present sample nearly twice as many respondents had fathers who were teachers. This suggests that the home is influential in the choice of career of new teachers. It is also quite remarkable to observe that six out of these seven respondents mentioned above were female. In other words family tradition of teaching appears to continue through the daughter rather than the son. It may be that the son aspires to an occupation at least one status level higher than his father, (Cummings, 1975:162) and for example sons of teachers aspire to the medical or legal professions or engineering rather than teaching whilst daughters are satisfied with the same status level as their fathers. Twenty seven (35%) of the sample claimed that a parent or sibling was a teacher. Taylor and Dale (1971) in the United Kingdom obtained a figure of 32% and they considered that this must be a significant factor in the choice of teaching as a career. This survey also asked respondents if they had married or were engaged to a teacher.

Twenty one out of the thirty one teachers who were engaged or married, were engaged or married to a teacher. The evidence from this survey thus suggests a considerable ascriptive element in the choice of teaching as a career.

Marriage and mobility of new teachers.

So far the following trends may be noted; male new teachers tend to come from the highlands and to have uneducated villagers as fathers, whereas female new teachers tend to come from the islands provinces and to have educated and employed fathers. There is also a tendency for teaching as a career to run in families particularly through the daughter and for the spouse or intended spouse of new teachers also to be a teacher.

Forty six of the new teachers were single, eleven were engaged to be married and twenty were married. Of the thirty one teachers who were engaged or married only three were female. Thus at the start of their teaching career few female teachers had permanent family commitments, whilst about one third of male teachers had family responsibilities. These young men will start their teaching career with the strain of learning their professional skills, whilst carrying heavy teaching loads (an average of 30 Lessons per week) and a heavy load of extracurricular duties and whilst at the same time helping with increasing family responsibilities. There were no major age differences within the sample with all except three teachers being in the age range of twenty to twenty four and the oldest of these was only twenty eight years old. Palmer (1985) showed that the new teachers in the sample were extremely committed to teaching, though for those who chose teaching in spite of an initial first choice of some other career were generally less committed. The "moral imperative to teach" described by Wohlberg (1979) appeared still to be a very potent motivation. Table 6 indicates that male highland teachers are the group most likely to leave their region and perhaps they are following the patterns of migration of unskilled highlands workers described by Conroy & Stent (1970).

Table V1 Teacher origins by region and teacher destinations by region separately for male and female teachers.

Teachers by Region of origin	Teachers by Region of Destination					
Papua		Papua	Islands	North Coast	Highlands	Total
	Male	5	2	1	0	8
	Female	1	0	0	0	1
Islands	Male	0	4	0	0	4
	Female	2	6	1	1	10
North Coast	Male	0	2	6	2	20
	Female	1	0	2	1	4
Highlands	Male	5	5	8	17	35
	Female	0	0	1	4	5

The Course of Training at Goroka Teachers College

At Goroka Teachers College prospective secondary school teachers can take a number of different courses dependent on their qualifications. Those with four credits at grade 10 do a one year preliminary course before starting the two year Diploma of Secondary

Teaching; these are called Preliminary Year students (PY). Students with fair to good Grade 12 Certificates may enter this course directly and are thus known as Direct Entry students (DE). There is a third group, also destined to teach in provincial high schools, who only do a one year course. These are the Agriculture students with the Post Vocational Training, Commerce and Secretarial (PVCTS) Department who have previously qualified at a good level at an Agricultural College, or who have obtained a degree in Agriculture or Fisheries. These continue studies in Agriculture, but the major part of their course is in teaching method plus the study of a second subject of their choice, so as to be able to teach it to Grade 8 level. The numbers of students in each year varies considerably (Palmer, 1984b), but the trend does seem to be towards the reduction in size, and perhaps eventual elimination, of the Preliminary year. Direct Entry numbers are gradually increasing and the number of Agriculture students seems nearly constant.

For the 1982 graduates as a whole, the proportions are: PY, (52%), Direct Entry 27% and Agriculture (21%), whilst the survey results were not dissimilar giving: PY, 51%, D.E. 31% and Agriculture 18%. However for 1984 (new entrants only) 24.4% of the entry was made up of Preliminary Year students, showing a decrease in the proportions of Preliminary Year students. It is government policy to phase out Preliminary Year as soon as possible, preferably before 1988 (Neuendorf 1984: 3)

Table 7. Distribution of Survey sample by level of entry to GTC and by Region (seventy seven respondents)

Level of entry at GTC	Percentages			
	Papua	Islands	North Coast	Highlands
Preliminary Year	7.7	15.4	15.4	61.5
Agriculture(PVCTS)	28.6	14.3	7.1	50.0
Direct Entry (D.E.)	8.3	25.0	29.0	37.5
Total	11.7	18.2	18.2	51.9

Table 7 indicates that Highland students tend to come to GTC predominantly via the preliminary year so it be expected that the reduction in the size of the preliminary year will reduce the proportion of highlanders amongst GTC graduates.

Two questions in the questionnaire attempted to find out how satisfied or otherwise the new teachers had been with their courses at Goroka Teachers College. Palmer (1984a) analysed these questions on the basis of the questionnaires returned by November 1983, but the analysis has recently been completed for the full sample, so the latest information will be provided. Each of the major areas of teaching had some students expressing some dissatisfaction about their courses:

Professional studies, 22.1%
Teaching practice, 15.5%
Arithmetical and language skills, 31.2%
Subject areas, 9.1%.

It is interesting to note that the first three areas are compulsory for all students whilst the students have free choice in the academic subjects which they do. It is noticeable that compulsory areas are generally less popular than subject areas, where there is choice. Three out of four new teachers however, said that they had problems with one of the above areas. Further analysis of these problem areas showed that the problems could be divided into those which were alleged to be faults within GTC courses and those where the students recognised faults within themselves or within the national education system. Students tended to blame themselves for failure in arithmetical skills whilst the tendency was to blame the college courses for failure in professional studies. Typical attitudes would be similar to those expressed by Teacher 7:-

> Professional studies have not contributed much towards the practical side. The content taught was too general.

Whilst for arithmetical skills the attitude of Teacher 4 would be typical:

> Out of all the courses I took at College I found that arithmetical skills gave me quite a lot of headache, despite the fact that I did pass it. This was because of the very simple reason that I do find maths hard.

The comments made on the courses in individual subjects vary from the enthusiastic to the bitter. For example, of Teaching Practice which is generally popular, Teacher 70 writes:-

> I am personally most delighted with teaching practice because this is the session where students actually put into practice what they have learned in theory.

Whereas Teacher 66 believes that there can be considerable bias:-

> Teaching practice is the one, where I faced a bit of a problem. This is because some lecturers are not fair in the criticism they made. Some lecturers wrote false reports on students, which means they were trying to get rid of some students.

However overall there are few complaints about teaching practice, and its mode of operation and major advantages are described by Kuhlman (1984). Only 5.2% of the sample made allegations of poor supervision or of being insufficiently prepared by their lecturers. However, even though teaching practice is popular, the college should try to ensure that students do not have any grounds for complaints.

At Goroka Teachers College students choose the subjects which they will eventually teach. This choice is almost completely free, though admission to some subjects requires passing preliminary tests, whilst staff shortages occasionally prevent other subjects from accepting all applicants who would like to take their courses. Student myth has it that everyone should take at least one core subject, as future promotion for teachers is said to be less likely in non-core subject areas. Core subjects (English, Mathematics, Social

Science and Science) are believed by students to set more work and to be harder to pass. Students may thus choose two core subjects, one core subject and one non-core subject, or two non-core subjects. Table 8 shows how Preliminary Year Students tend to choose subjects, hedging their bets, so that they take one core and one non-core, subject whilst Direct Entry students tend to choose more core subjects.

Table 8. Type of entry of new teachers with subject choice.

Courses for new teachers	Number	2 core subjects Percentage	1 core, 1 non-core subject Percentage	2 non-core subjects Percentage
Preliminary Year	39	35.9%	61.5%	2.6%
Direct Entry (DE)	24	66.6%	33.3%	0%
Agriculture	14	Agriculture +1 core subject	Agriculture +1 non-core subject	
		42.8%	57.1%	

The figures for Agriculture are given, but few conclusions can be drawn for them in 1982, as entry to different subjects was far from free. Table 8 shows that student teachers appear to react in accordance with the myth previously described. Within the various subject areas the highest percentage of dissatisfaction was noted in English, but this probably related to the lack of completion of the National Syllabuses. Overall results of percentage satisfaction and dissatisfaction on a subject basis are shown in Table 9 below.

Table 9 Response rates and percentage favourable and unfavourable attitudes by subjects (77 respondents)

	ENG	MATHS	S/SCI	SCI	P.SKILLS	H.EC	COM	E.ART	AGR
Total Nos of teachers doing subject	48	38	50	36	13	16	36	17	30
Percentage answering	70.8	44.0	56.0	50.0	46.2	50.0	55.5	58.8	46.0
Percentage favorable attitudes	20.6	29.4	32.1	61.1	*	*	40.0	*	28.0
Percentage unfavorable attitudes	35.3	17.6	10.7	5.5	*	*	18.0	*	0

+ A third category of neutral attitudes explains why favourable and unfavourable attitudes do not total 100%.
*indicates return too small to calculate favourable and unfavourable attitudes.

Groups were analysed by region, by sex and by level to see which groups complained most frequently as having academic or other problems. Professional Studies was chosen as an example, as this is a subject all students take. Analysis indicated that male

highlanders appeared to have proportionately the largest number of problems in Professional Studies, though it may simply be that they were more forthright than others in expressing themselves.

Table 10. Percentage taking each subject by region

Regions	Percentage in Subjects								
	ENG	MATHS	S/SCI	SCI	H.SC	P.SKILLS	COM	AGR	E.ART
Papua	5.8	5.9	10.0	12.5	14.3	33.3	16.7	30.8	0
Islands	26.4	23.5	20.0	6.3	28.6	16.7	5.6	15.4	18.2
North Coast	20.6	5.9	23.3	18.8	28.6	0	5.6	0	18.2
Highlands	47.1	64.7	46.6	62.5	28.6	50.0	72.2	53.8	36.4
Numbers	34	17	30	16	7	6	18	13	11

Table 10 indicates the choice of subject by region of origin for the new teachers. The actual numbers of teachers were very small 1n some cases so conclusions need to be cautious but it is noticeable on comparison with the percentage of each group in the college as a whole that highland students tend to go for Science, Mathematics & Commerce. It is suggested that these subjects have the highest value to students if they were to leave teaching and are thus "sensible choices".

Subjects taught in the provincial high schools by new teachers

Planning decisions at Goroka Teachers College regarding the establishments of particular departments are continually complicated by questions of the national need for teachers of particular subjects. Two previous pieces of research have looked at this question which was not an aim of the New Teachers Survey 1982, though its results do give some indications as to subjects where there is a shortage of secondary teachers.

Murphy (1982) showed the main shortages of teachers in provincial high schools to be in Practical Skills, Agriculture Science by sampling headmasters opinions. Dunfee (1983) using a different methodology indicated the numbers of teachers of each subject required to fit the needs of high schools, the greatest numbers being needed each year in English, Mathematics and Science.

Teachers graduate from GTC qualified in two subjects and with a basic knowledge of teaching method which could help them outside their areas of expertise. The survey asked the new teachers in what subjects they had qualified and also what subjects they now taught and how many periods of each subject they taught. There is considerable flexibility in the system as each teacher is qualified to teach two subjects and the proportions of each can be varied to fit the needs of the schools. However, if there are gross, mismatches between the subjects which College graduates are trained to teach and the needs of schools, then GTC graduates will be asked to teach subjects where they have not been trained, though this could also occur through poor placement of GTC graduates. Secondly if there are shortages of teachers of particular subjects then schools will ask

teachers to teach high proportions of their total load in those subjects. Both these conditions appear to have occurred from the survey results. Fifty-four percent of new teachers taught some amount of a subject in which they had not been trained, though in some cases this amount was a very small proportion of teaching time. In fact one quarter of new teachers taught more than twenty percent of their timetable in subjects in which they had not been trained. This was the greatest, single worry for 30% of new teachers and amongst the top three problems for 42% of them. Looking at this in another way 30% of new teachers averaged 32% of their teaching time, teaching a subject 1n which they had not been trained. Table 11 summarises some results from Dunfee (1983) with data from the New Teachers Survey 1982. Before interpreting Table 11, some cautionary words are necessary. Firstly, the new teachers in schools only account for a part of the general movements, with experienced teachers also moving; also new expatriate teachers are recruited. However there is a tendency for new teachers to be used to fill in gaps: Teacher 2 makes the point when he says "I never knew why I should be pushed around", as he was moved from one school to the next. Studying the placement of new teachers will thus indicate the places where teachers are needed most, but perhaps only major trends may be seen as some of the placements are arbitrary and unplanned.

Table 11. A table of data about secondary school subjects from Dunfee 1983 and from the New Teachers Survey.

	Core teaching subjects				Non-core teaching subjects				
	ENGLI-SH	MATHS	SCIE-NCE	SOCIAL SCIENCE	HOME ECON	PRAC SKILLS	COM	AGR	EXP ARTS
Number of schools teaching	101	101	101	101	93	95	91	86	48
Total periods taught per subject	9064	6318	5849	5804	3898	3739	3429	3363	948
Number of new teachers trained in teaching subject	31	12	10	25	12	5	13	13	4
Number of periods taught by new trained	602	178	121	327	86	56	159	252	26
Periods taught per trained teacher	19.4	14.8	12.1	13.1	7.2	11.2	12.2	19.4	6.0
Number of new teachers untrained in teaching subject	1	3	2	1	4	5	6	12	1
Percentage of lessons in subject taught by new untrained teachers	2.3	10.8	9.4	5.2	22.8	36.4	23.2	33.4	13.6

The first two rows of Table 10 are taken from Dunfee and the order of the subjects is in order of the total numbers of periods of each subject taught each week and perhaps this indicates the order of importance of subjects for the National Department of Education and school headmasters. The other rows of data are from the new teachers survey (This data from a sample and not from all new teachers). Generally it can be seen for specific subjects that new teachers who are trained in the subject teach it where it is a core subject whereas untrained teachers are frequently used to teach it if it is a non core subject. In

other words new teachers will frequently be used to teach a high proportion of their time in a core subject in which they are trained with the remainder of their time on a non core subject in which they may or may not be trained. Thus it would be expected that the quality of teaching is better in core subjects, than in non core subjects. This is the way in which the schools utilise the teachers produced but says nothing about areas of shortage. The high number of hours taught by new teachers of English suggests a relative shortage of these teachers in schools, but schools have generally coped with this since few untrained teachers were used.

In agriculture however there does seem to be a serious shortage since the existing trained agriculture teachers teach agriculture a high proportion of their time and additionally large numbers of untrained teachers are used. The situation is so bad that two new teachers, graduates of different disciplines (not agriculture), spent all their time as new teachers teaching agriculture. Not surprisingly they considered this their greatest single problem. Table 11 also indicates that Expressive Arts is a subject in decline with the few teachers being produced not really being greatly utilised in the teaching of Expressive Arts. Physical education was not, at the time of the survey, on the curriculum to any appreciable extent and guidance and religious education have not been included as the College does not train teachers in these areas. Generally this section has shown that in 1983 there was a considerable shortage of teachers of agriculture and possibly also of English and that the small number of expressive arts teachers produced seems too many for the system to utilise. It also shows that the schools' curriculum priorities in the placement of teachers favour core subjects roughly in line with the order of subjects in Table 11. New teachers in PNG have a heavy workload averaging thirty forty minute periods per week. 34% of new teachers also teach above Grade 8 level which is the suggested highest level in the first year of teaching.

Rowe (1983:7) analysing inspectors expectations of young teachers points out:- "After a few years of such effort it is not surprising that the initially bright eager new graduates have become despondent and less enthusiastic towards extra effort". This is very much in agreement with the results of the survey which found that 86% of the new teachers had favourable attitudes to teaching in spite of the difficulties previously described, but for how long will these favourable attitudes remain?

Conclusion

The largest single group of students at GTC come from the highlands of Papua New Guinea. Highland students tend to be male and to have uneducated parents who are subsistence farmers. Female students tend to come from the Islands and to have educated fathers working in the modern sector.

Considerable evidence was produced about the tendency for students who become teachers to have some close relation who is a teacher, or for them to marry a teacher. Highland new teachers are the group most prepared to leave their home region to find employment. At GTC the preliminary year is the main entry point for highlanders and the numbers entering through preliminary year have been decreasing in the last two years. Preliminary year students prefer to take one core and one non core subject whilst direct

entry students frequently choose two core subjects. Highland students tend to choose mathematics, science or commerce which may be "useful" if they ever leave teaching. In the schools the new teachers are keen and eager. Agriculture appears to be a subject of major shortage at least in the year examined. Teachers frequently have to teach subjects in which they have not received training and this must be bad for the quality of teaching. Core subjects seem to be given priority in staffing over non-core subjects. It is hoped that the unrealistic expectations in terms of work load which the system sometimes has of the new teacher will not spoil the ideals which these new teachers bring to the profession.

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