MUSTER

Multi-Site Teacher Education Research Project

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Ghana Lesotho Malawi South Africa Trinidad & Tobago

Discussion Paper



Teacher Education in Trinidad & Tobago: Costs, Financing and Future Policy

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Centre for International Education University of Sussex Institute of Education

Multi-Site Teacher Education Research Project (MUSTER)

MUSTER is a collaborative research project co-ordinated from the Centre for International Education at the University of Sussex Institute of Education. It has been developed in partnership with:

- The Institute of Education, University of Cape Coast, Ghana.
- The Institute of Education, The National University of Lesotho.
- The Centre for Educational Research and Training, University of Malawi.
- The Faculty of Education, University of Durban-Westville, South Africa.
- The School of Education, The University of the West Indies, St. Augustine's Campus, Trinidad.

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MUSTER is focused on generating new understandings of teacher education before, during and after the point of initial qualification as a teacher. Its concerns include exploring how new teachers are identified and selected for training programmes, how they acquire the skills they need to teach effectively, and how they experience training and induction into the teaching profession. The research includes analytical concerns with the structure and organisation of teacher education, the form and substance of teacher education curriculum, the identity, roles and cultural experience of trainee teachers, and the costs and probable benefits of different types of initial teacher training.

MUSTER is designed to provide opportunities to build research and evaluation capacity in teacher education in developing countries through active engagement with the research process from design, through data collection, to analysis and joint publication. Principal researchers lead teams in each country and are supported by three Sussex faculty and three graduate researchers.

This series of discussion papers has been created to provide an early opportunity to share output from sub-studies generated within MUSTER for comment and constructive criticism. Each paper takes a theme within or across countries and offers a view of work in progress.

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LIST OF ACRONYMNS

ATEC	Agriculture Teacher Education Centre
CXC	Caribbean Examinations Council
ECIAF	Eastern Caribbean Institute of Agriculture and Fisheries
GCE	General Certificate of Education
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GNP	Gross National Product
OJT	On the Job Training Scheme
SOCS	School of Continuing Studies
UWI	University of the West Indies

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Teacher Education in Trinidad & Tobago: Costs, Financing and Future Policy

Keith Lewin with Carol Keller and Ewart Taylor

ABSTRACT

This paper explores primary teacher education in Trinidad and Tobago. The first section outlines general characteristics of the education system and its financing. The second provides an overview of the teacher education system and includes data on output, the delivery of the curriculum, and the costs of training. Section 3 uses the analysis of provision to develop projections of supply and demand under different scenarios which will shape future policy. Section 4 identifies the issues that emerge for future policy and Section 5 summarises the opportunities and options available.

In brief, teacher education is currently hampered by lack of investment in infrastructure, a lack of linkage between the "on the job" (OJT) training programme and other parts of teacher education, an overloaded curriculum, and salary scales for teacher educators which have made it difficult to attract and retain qualified staff. Demand for primary teachers in Trinidad and Tobago is likely to fall in coming years. This provides a window of opportunity to revisit the teacher education curriculum, especially in relation to the balance between teaching and assessment, pre- and post-training support, and the efficacy of teaching practice. There is scope for clearer links to be made between On-the-Job-Training and college programmes, for quality improvement designed to improve the competencies of trainees, and for mentoring of newly qualified teachers in their first teaching posts. Teacher education policy has been neglected over the last decade. The demands of government commitments to primary and secondary Education for All now make it imperative to devise a medium term framework for the development of this sector. Without this the achievement of quantitative and qualitative goals for education reform may be compromised.

CHAPTER 1

OVERVIEW OF THE EDUCATION SYSTEM

1.1 Context

Trinidad and Tobago consists of two islands that together constitute an Island state in the Caribbean located near the South American mainland. In the mid-1990s the population was estimated at 1.3 million with an average annual growth rate of below 1%. The size of the school age group began to decline in the 1990s and is now shrinking at up to 3% per year. The 0-14 year old dependency rate was 48% and life expectancy was about 74 years. GNP per capita was about \$US3800 but had been falling at more than 1.5% a year over the previous decade. By the late 1990s growth had returned and GNP was projected to grow by about 3% annually. Enrolment rates in primary are close to 100% and at secondary are between 75% and 80%. Two-thirds of primary teachers are female as are about 50% of secondary teachers.

The education system is divided into early childhood provision (mostly privately financed), seven years of primary, five years of secondary and two years of sixth form study. More specifically:

- Primary education for the 5-11 age cohort consists of two years of infant classes for children aged 5 and 6 and five years of primary schooling for the 7 11 age cohort
- Secondary education is for the 12-18 age cohort, and is divided between several school types:
 - Three-year junior secondary schools (Forms 1-3) for the 12-14 age cohort;
 - Two-year senior secondary/senior comprehensive schools (Forms 4 and 5) for the 15-16 age cohort;
 - Lower and Upper Sixth Forms for the 16-18 age cohort;
 - Five-year composite (government), government secondary, governmentassisted secondary, and private secondary schools (Forms 1-5) for the 12-16 age cohort;
 - Seven-year government and government assisted schools (Forms 1-6) for the 12-18 age cohort.
- Higher education is available to the 19+ age group.

At the primary level, in 1998 there were 476 public schools (135 government schools and 341 assisted schools), 10 special schools, and 54 registered private primary schools. There were 101 secondary schools: 49 Traditional Sector schools (19 government and 30 assisted) and 52 New Sector schools. The latter included 19 senior secondary/senior comprehensive, 24 junior secondary, and 9 composite schools. There were only 13 registered private secondary schools (Republic of Trinidad and Tobago, 1998a). The schools are either full day schools, generally 8.00 a.m.-2.30 p.m., or shift schools (20 of the 24 junior secondary), 7.20 a.m.-12.15 p.m. and 12.30 p.m. - 5.30 p.m. The numbers of primary and secondary schools have remained constant since the mid-1990s.

Trinidad and Tobago has several different types of schools distinguished by their governance. In brief these include:

- Government schools fully owned and operated by the state;
- Government Assisted schools, which are managed by a private body (usually a religious denomination) but given financial assistance by the state¹;
- Private schools, which are maintained and operated by private bodies without any assistance from the state²;
- Special schools, which are designed for those with educational disabilities.

The pattern of enrolment growth is shown in Figure 1. These show that numbers have been declining at primary and have remained fairly stable at secondary.



Figure 1: Enrolment Growth at Primary and Secondary

Total primary enrolment in the mid-1990s was declining - by 1.7% (1994/5), 2.9% (1995/6) and 2.7% (1996/7). Enrolment by age for the 59 year old age group declined even more in the same period (2.7%, 5.8%, 5.2% respectively) (Republic of Trinidad and Tobago 1998c and Romain 1997:32). The underlying reason for the enrolment decline is that the population of school age children is shrinking. Projections suggest that the trends will continue. Table 1 shows the most recent projections. Figure 2 shows enrolments by

¹ Government pays the salaries of all teachers and 75% of capital costs.

² Government purchases places from private providers. Teachers in these schools do not have to be trained.

grade in primary confirming that the size of the enrolled cohort is shrinking. This has significant implications for the numbers of teachers that need to be trained.

Level of Education	Sex	Projected School Enrolment					
		1990	1995	2000	2005		
Primary	Total	194,455	187,983	171,062	162,569		
	Male	98,550	95,270	86,694	82,390		
	Female	95,905	92,713	84,368	80,179		
Secondary	Total	98,766	111,503	111,707	101,342		
	Male	49,245	55,584	55,686	50,519		
	Female	49,541	55,919	56,021	50,823		

Table 1 Projected School Enrolment, by Level of Education and Sex, 1990-2005

Source: Central Statistical Office. Estimates based on Census Data



Figure 2: Enrolments in Primary by Grade

In the public secondary school system sex ratios are balanced (Figure 3). Small numbers succeed in continuing their education into Form 6 classes (grade 13 and 14) and the nominal selection ratio is about 15% from Form 5 to Form 6. Drop-out and repetition are small at this level, and automatic promotion operates in most schools.



Figure 3: Enrolments Secondary

The distribution of enrolments and teachers between school types is shown in Table 2 along with data on pupil-teacher ratios, average school size and average number of teachers per school. Most pupils are in government and Roman Catholic schools. Pupil-teacher ratios are fairly uniform across the school types and averaged 24:1 in 1996. Primary schools generally have 300-400 pupils and an average of 14 teachers.

Table 2: Enrolments	by	School	Type –	Primary	1996
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	Enrolment	Number of	Pupil-	Number of	Average	Average
		Teachers	teacher	Schools	School	No of
			Ratio		Enrolment	Teachers
						per School
Government	57914	2502	23	136	426	18
Roman Catholic	49814	2036	24	120	415	17
Anglican Catholic	21194	884	24	59	359	15
Presbyterian	26336	1126	23	72	366	16
Methodist	2201	97	23	9	245	11
Moravian	587	24	24	2	294	12
Seventh Day Adventist	1868	76	25	5	374	15
Hindu	18849	758	25	53	356	14
Muslim	5811	221	26	15	387	15
Other	1324	56	24	5	265	11
Average			24		349	14
						5

Enrolments at secondary level are distributed between types of school as shown in Table 3. Pupil-teacher ratios average 21:1

	Pupils	Teachers	Pupil-teacher Ratio
Junior Secondary	34795	1280	27
Senior Secondary	24002	1497	16
Composite	8024	350	23
Government Secondary	16455	862	19
Assisted Secondary	19602	956	21

 Table 3: Enrolments by School Type – Secondary 1996

At primary level the numbers of trained and untrained teachers are indicated in Table 4. This shows that about 23% (1,646) were untrained in 1997. Women represent 74% of primary teachers and 71% of those untrained. There is no significant difference between school types in the qualifications of primary teachers. The majority of these primary teachers are teacher training college graduates who have completed two years of post-school training. A small minority will have Advanced Level academic qualifications or above.

1 able 4: Numbers of 1 rained and Untrained 1 eachers in Primary Schools 199
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Total			Trained			Untrained		
Male	Female	Total	Male	Female	Total	Male	Female	Total
1913	5398	7311	1431	4234	5665	482	1164	1646

At the secondary level, there are differences in teachers' qualifications among different types of schools. Secondary schools generally have a mix of teachers. Some are university graduates with a degree in a subject specialty who may or may not have received pedagogical training, and some hold diplomas and certificates from non-university tertiary institutions, with or without pedagogical training. Others are secondary school graduates who may or may not have been trained in a Teachers' College³. In 1995, 3,148 of the 4,995 secondary school teachers (63%) held university degrees; only 2,557 of them (51%) were professionally trained. The junior secondary schools had the lowest percentage of graduate teachers (601 out of 1,303, or 46%), whereas the older, government assisted schools had the highest percentage of teachers who were university graduates (767 out of 931, or 82%). On the other hand, junior secondary schools had the highest percentage of trained teachers (911 out of 1,303, or 70%).

 $^{^3}$ There is a lack of policy on staffing arrangements with respect to the graduate:non-graduate ratio. There should be a 75:25 ratio but this is not observed in practice. Graduate teachers (normally Teacher II) may be designated a non-graduate (Special Teacher III) if they came from a non-accredited University; of if from an accredited University, the person is employed at a school which has fulfilled its ratio. Such graduates may have to wait for a transfer, retirement or resignation to be recognised.

These patterns are due to the ways in which teachers have been recruited into the different types of secondary schools in the past. Many junior secondary teachers were trained as primary teachers who later up-graded their academic qualifications through short courses and gained employment in the higher paying secondary sector⁴. Some, but not all, went on to acquire university degrees. In the government-assisted secondary schools (and in the government secondary schools) the main criterion for employment as a teacher has usually been the possession of a university degree. Many teachers enter these schools without professional training and a minority take advantage of the opportunity to acquire such training through the post-graduate, in-service Diploma in Education programme at the UWI. The ratio of female secondary school teachers to male, secondary school teachers in 1995 was about 1.3:1. In nearly all school types, female teachers are in the majority.

1.2 Financing

Trinidad and Tobago allocated about 4% of GDP to Education in the early 1990s, rising to 4.5% by 1995. This represented about 13% of government expenditure. The government "has made education reform the center piece of future social development strategies" (Republic of Trinidad and Tobago, 1995). The stated goals are: "(a) preparing children for primary school; (b) providing quality education at the primary level and easing the transition from primary to secondary schools; and (c) improving public institutional capacity to accomplish (a), (b), and other educational objectives effectively and efficiently" (World Bank 1995, Republic of Trinidad and Tobago 1993). Point (c) – improving institutional capacity – has not been reflected in investment in the teacher education system which has changed little.

Primary education accounted for 46% of the education budget, secondary 38%, postsecondary including Teachers' Colleges 4%, and tertiary 7% (World Bank 1995:112) in the mid-1990s. At this time primary recurrent costs per student appear to have been about \$TT⁵1,298, secondary \$TT 2,058, vocational and technical \$TT 3,767, teacher training \$TT 1,1341, and tertiary \$TT 20,953 (at 1985 prices). Teacher training thus costs about ten times as much as providing a primary school place. Direct student costs per capita as a percentage of GDP were 10%, 16%, 29%, 98% and 161% respectively for the different levels. 95% of the Ministry of Education's expenditure is recurrent, with salaries accounting for about 70%.

Table 5 shows the percentages of the expenditure on education allocated to various sectors during the period 1994-1998. The expenditure on teacher training is relatively low. There have been no major repairs or expansion works on the Training Colleges over the past five years. Expenditure on primary education is larger than that on secondary education because of the thrust towards improving education at the basic education level

⁴ There has been a strong migration of teachers from primary to secondary schools in order to fulfil the urgent need for teachers in the latter as the Secondary Education for All policy has been realised. Some of these teachers were trained under the UWI B. Ed. primary programme. This therefore robs primary schools of some of its better-trained teachers.

⁵ \$TT = 6.30 \$US

over the past few years. Capital expenditure on secondary education has been minimal in the last decade. Budgeting procedures are not apparently based on capitation and projected enrolments at the different levels. They appear to depend on historic, incremental budgeting with additions influenced by macro-economic conditions and the exigencies of the contemporary policy debate in any given year.

Year	Total	Pre-Primary	Primary %	Secondary %	Teacher
	Expenditure	%			Training %
1994	1,005,922,761	0.2	46.5	30.7	1.7
1995	1,127,957,927	0.2	44.6	32.9	1.9
1996	1,135,158,318	0.4	44.1	29.9	1.8
1997	1,149,513,400	0.8	45.7	30.9	
1998	1,365,567,800	0.7	44.6	25.3	

 Table 5: Expenditure on Education by Level 1994-97

It is important to note that the costs of primary teacher education include not only direct College costs but also the salaries of trainee teachers. In 1996 about \$TT18 million was allocated to the teacher education salaries budget. Of this about \$TT 3 to 4 million flows to lecturers and other support staff. The bulk of the remainder pays the salaries of trainees during a period when they are in full-time training.

CHAPTER 2

THE TEACHER EDUCATION SYSTEM

2.1 Overview

Training programmes for teachers at all levels of the educational system are offered at specialised institutions. The growing demand for early childhood education teachers has resulted in programmes being offered by the SERVOL Regional Training and Resource Centre, a non-governmental organisation, and the School of Continuing Studies (SOCS) and the School of Education of the University of the West Indies (UWI), St. Augustine. Training for teachers at the primary level is conducted largely at the two government Teachers' Colleges: Valsayn and Corinth Teachers' Colleges. A small amount of training also occurs at the School of Education, UWI and the privately operated Caribbean Union College. Although the programme of teacher training offered at the Teachers' Colleges is designed to equip the students for practice at the primary level, some students, especially those who have specialised in the areas of the Creative Arts, are allowed to teach at the lower levels of the secondary school system.

Training for teachers at the secondary level is conducted at the School of Education, UWI. A specialised programme for teachers of agricultural science is offered at the Agricultural Teacher Education Centre (ATEC) of the Eastern Caribbean Institute of Agriculture and Forestry (ECIAF). In addition, technical teacher training is offered at the John S. Donaldson Technical Institute. Almost all the initial teacher training is in-service.

Applicants for entry into the teaching service are expected to have at least a secondary level education, with the attainment of a satisfactory level of achievement in five subjects at the GCE O-level and/or CXC examinations. Further, these five subjects must include English language, mathematics and a science subject. It is not part of the requirement that these five subjects be obtained at any one sitting of these examinations. It is therefore possible to qualify for entry into the service by accumulating these subjects over an extended period of time.

Between 15,000 and 20,000 candidates take CXC examinations each year in the major subjects of English and mathematics. Pass rates in these subjects are between 30% and 40%, suggesting that perhaps 5,000 per year achieve the minimum qualifications for entry to primary teacher training (Republic of Trinidad and Tobago, 1998a)⁶. This is well above current capacity and implies that Colleges can be selective over who they enroll.

In 1993, the Ministry of Education, in collaboration with the National Training Board, introduced its On-the-Job Training (OJT) Pre-Service Teacher Training Programme. The rationale for this programme was to provide CXC and A Level graduates with

⁶ Generally, the 'better' qualified persons choose more lucrative jobs in the public service and private enterprise, and the residual are employed in the teaching service. This therefore means that entrants to teaching include the least qualified, along with some who genuinely want to teach and enter the profession better qualified.

employment and training with a view to enabling the Ministry to identify trainees with good potential for becoming teachers. Government schools and denominational authorities identify suitable applicants and propose them to the Ministry, which selects those thought to be acceptable within an overall target number.

The OJT programme extends over a period of about one year. It provides some instruction in the Foundations of Education, the Teaching of Reading and the Teaching of Mathematics. This is followed by placement in schools with mentor teachers. Trainees are required to attend Saturday classes which are designed to meet their needs. A Vacation School is also organised by the School of Continuing Studies of the University of the West Indies to provide experiences in the aesthetic area. To date no evaluation of the effectiveness of the OJT system has yet been conducted. MUSTER has conducted a separate sub-study on aspects of the OJT programme.

The OJT system and the supporting workshops are not undertaken with any input from the Colleges of Education. Workshops for OJTs are conducted by teachers employed specifically for the purpose. They follow a programme which is not linked to College work and which may therefore overlap with subsequent College training. College staff play no role in the selection process for OJTs, or in their subsequent allocation to Colleges for training which is handled centrally in the Ministry of Education.

In summary, students entering primary Teachers' Colleges have usually have two to three years of teaching experience in a primary school or, in the case of a small number of students, in a secondary school. Available data suggest that about 60% of entrants have between 2 and 3 years experience in schools before entering the college-based training programme. Nearly 40% have more than three years. Students are selected by the Board of Teacher Training on the basis of seniority in the teaching service and sent to the colleges on scholarship. This seniority is determined by length of continuous service in the teaching. Trainees are required to sign a contract on initial entry and, after their two-year tenure at college, they must serve the Government of Trinidad and Tobago for at least two additional years after qualifying. Student teachers are employees of the Ministry of Education and are paid full salaries during training.

Table 6 provides data on enrolment, by gender, in Teacher Training Colleges during the period 1990/91 - 1994/95. There has been a steady increase in the number of students enrolled in these institutions over the period shown. Corinth Teachers' College, which had been closed, was re-opened to cope with increasing numbers in 1994. Typically, the number of female students far exceeds the number of male students.

		Govt			Private		Total			
	Μ	F	Т	Μ	F	Т	Μ	F	Т	
1990/91	129	276	405	1	3	4	130	279	409	
1991/92	117	304	421	1	9	10	118	313	431	
1992/93	168	371	539	3	13	16	171	384	555	
1993/94	209	442	651	3	10	13	212	452	664	
1994/95	340	372	712	-	-	-	340	372	712	

 Table 6: Training College Enrolment 1990-95

Data for 1999 indicate that Valsayn had 197 students in the first year and 207 in the second. Corinth has 201 and 186 totalling 791 in training. Over two-thirds of trainees are female (1998).

In 1995, there were 38 teacher educators in Valsayn Teachers' College of whom 17 were male and 21 female. All members of staff had professional qualifications, and there were 22 with postgraduate degrees, of whom 9 were male and 13 female. In 1998 in Corinth 20 out of 29 were female and eight had post-graduate degrees. The 1998 establishment for the two teacher training Colleges provide for 38 lecturers at Valsayn College and 28 at Corinth. Valsayn had 32 lecturers in post in 1999 and Corinth 27, with two on sick leave (Table 7).

Ta	ble	7:	Staf	f and	Trainees	and	Staff-	student	Ratios	1999.

	Lecturers	Trainees	Staff-student Ratio
Valsayn	32	404	12.6
Corinth	28	387	14.3

The School of Education, UWI, St. Augustine offers teacher education programmes for different levels in the educational system with different levels of qualification. The four major programmes offered are the Certificate in Education (Cert. Ed.)⁷, the Bachelor of Education (B.Ed.), the Diploma in Education (Dip.Ed.), and Higher degree programmes. Only the Diploma can be regarded as initial training, since the other courses require applicants to be trained teachers⁸.

The Diploma in Education programme provides professional training for teachers who hold university degrees and who are teaching at the secondary evel. It is organized on an in-service basis. This programme normally lasts for one calendar year. The students, who must be working full-time in an educational institution in Trinidad and Tobago, undertake supervised practice (normally 20 weeks) during the calendar year, and attend the university during the vacation and in term time. Assessment is by means of a combination of university examinations, written assignments, and practical assessment of teaching competence. There has been a steady increase in enrolment in the Diploma each year, resulting in enrolment increasing from 85 in 1993/94 to 144 in 1996/97. Students on this course do not receive salaries and have to finance themselves and pay subsidised tuition costs. Graduates from this course are not guaranteed employment in the school system. Table 8 shows the output of graduates from 1992-1997.

⁷ The certificate programme is not initial professional training. Applicants must possess the Teachers' Diploma or equivalent from the Teachers' Colleges. The Cert. Ed. (UWI) is counted as Yr. 1 (Level I – L1) of the B. Ed. Programme. Students may choose to terminate their professional training here if they wish – there is no policy that encourages them to go on. However, they are free to go on for two more years to LII & LIII to complete the B. Ed. ⁸ The difference between the Dip. Ed. and TC students are that the former is on one-day release during the

⁸ The difference between the Dip. Ed. and TC students are that the former is on one-day release during the term while the latter are on full-time release. Some of the Dip. Ed. students carry full teaching loads while on the programme. Further, the Dip. Ed. students are also released during the last week of each of the Xmas and Easter Terms, and are also asked to attend classes in the first week of the Xmas and Easter vacations. Four of their six weeks of the July/August vacation are used at the start of the programme.

Year	В	Bachelors			Certificate			Diploma			Higher Degrees		
	m	f	t	m	f	t	m	f	t	m	f	t	
1992/93	-	-	-	na	na	35	na	na	92	Na	na	8	
1993/94	9	25	34	15	29	44	24	56	80	4	1	5	
1994/95	2	7	9	13	35	48	26	61	87	3	4	7	
1995/96	1	5	6	11	34	45	30	90	120	1	2	3	
1996/97	8	17	25	62	18	80	27	71	128	1	3	4	

 Table 8: Graduates of the School of Education, UWI, St. Augustine by Programme and Gender, 1992/93 - 1996/97

NA = Not Available

The most recent data from Corinth College indicate some of the characteristics of trainees (Tables 9 and 10). About 42% are under 25 years, 41% between 25 and 29 and 17% are over 30. The majority of trainees have CXC and O Level passes. About 37% have one or more A Level passes. Females are marginally better qualified than males (50% with an A level of 45%).

Table 9: Age Profile of Trainee Teachers at Corinth 1998

Age	Ye	ar1	Ye	ear2	Total			
	Male	Female	Male	Female	Male	Female	All	
20-24	21	54	18	68	39	122	161	
25-29	36	60	24	38	60	98	158	
30-34	7	12	4	24	11	36	47	
35-39	3	7	1	8	4	15	19	
40+		1		1	0	2	2	
							387	

Table 10: Qualifications of Trainees at Corinth 1998

Qualification	Y	ear1	Ye	ar2	Total			
	Male	Female	Male	Female	Male	Female	All	
5 GCE/CXC O Levels; 2 A Levels	18	40	15	46	33	86	119	
5 GCE/CXC O Levels; 1 A Level	2	9	5	8	7	17	24	
5 GCE/CXC O Levels	45	87	27	85	72	172	244	
							387	

Some insight into the characteristics of College staff can be obtained from an analysis of those at Corinth (Figure 4).





College staff can retire after 33.3 years service or the after the age of 60 whichever is sooner. Retirement is an option for those over 55 with reduced pension rights if they have not completed sufficient years of service. The age structure of staff at Corinth shows that more than a third had reached the age of 50 by 1998

2.2 Output

The total output of new primary teachers is made up largely of those graduating from the Colleges. Small numbers have graduated from the Caribbean Union College (less than 10 a year) and there are a small number of external candidates made up largely of those referred from previous year. Pass rates in the College system indicate that 20%-25% of trainees fail to complete successfully at the first attempt.

	Valsayn	Corinth	Caribbean Union	External
1993				
Entered	213		3	22
Passed	162		2	12
Pass Rate	76		67	55
1994				
Entered	329		na	na
Passed	279		na	na
Pass Rate	85			
1995				
Entered	324		4	32
Passed	263		4	15
Pass Rate	81		100	47
1996				
Entered	210	171	6	22
Passed	163	126	4	5
Pass Rate	78	74	67	23

Table 11: Number of Passes at the First Attempt in Training Colleges 1993-96

Annual output was about 176 in 1993 and rose to about 300 in 1996 because of the reopening of Corinth. In 1998 the number passing the final examination was about 350. Though not all trainees pass the final examination, most of those who fail are referred and failure is generally a result of non-attendance, rather than poor performance. If this is a result of poor performance on course work they have the opportunity to attend College to retrieve subjects that they have failed. If they fail the final examination they have two years to re-sit as external candidates. As a result most of those referred manage to retrieve their position and become qualified subsequently.

The pattern of examination results indicates that practical teaching is the most difficult of the core subjects to pass (Tables 12 and 13). Some electives have very small enrolments and should probably only be offered in one of the two Colleges. Pass rates for options fluctuate from year to year over a wide range.

Subject	Entered	Sat	Passed	Pass Rate
Practical Teaching	407	397	309	75.9
Psychology/Sociology	407	400	338	83.0
Principles/Practice of Ed	406	393	356	87.7
English Language	409	391	352	86.1
English Literature	407	393	354	. 87.0
Mathematics	406	395	338	83.3
General Science	405	393	358	88.4
Social Studies	406	401	350	86.2

 Table 12: Teacher's Colleges Final Examination Results 1998 – Core Subjects

Subject		1997			1998	
	Sat	Passed	Pass Rate	Sat	Passed	Pass Rate
Agriculture	52	48	92.3	34	23	67.6
Art	14	13	92.9	12	7	58.3
Craft	22	20	90.9	29	15	51.7
Drama	5	4	80.0	9	9	100.0
Educational Technology	19	18	94.7	23	18	78.3
Early Childhood	21	20	95.2	18	13	72.2
Geography	19	17	89.5	21	15	71.4
Guidance + Counselling	14	14	100.0	12	10	83.3
Heritage	25	25	100.0	21	17	81.0
Home Economics	35	34	97.1	10	10	100.0
Literature	8	7	87.5	6	2	33.3
Mathematics	39	37	94.9	26	19	73.1
Music	21	20	95.2	14	11	78.6
Measurement +Eval.	14	14	100.0	8	5	62.5
Physical Education	29	21	72.4	26	19	73.1
Psychology	6	5	83.3	24	22	91.7
Science	13	12	92.3	8	8	100.0
Special Education	33	26	78.8	34	22	64.7
Sociology	8	8	100.0	8	8	100.0

Table 13: Teacher's College Final Examination Results 1998 - Electives

2.3 The Delivery of the Curriculum.

The Colleges are in session for 37 weeks per year during which all the teaching takes place⁹. The three terms vary in length at Valsayn - 14, 12 and 11 weeks. The division of teaching time is illustrated below (Table 14). This shows that 45% of time is allocated to teaching, 24% to teaching practice and preparation, and 19% to examinations. Trainees are timetabled for 40 periods per week¹⁰. Contact hours for trainees are allocated as shown in Table 15.

Term	Teaching	Teaching Practice	Preparation for TP	Internal Exam	External Exam	Other	Total
1	10	0	0	2	0	2	14
2	5	4	2	0	0	1	12
3	5	0	0	2	2	2	11
4	5	4	2	2	0	1	14
5	8	0	0	2	0	2	12
6	0	4	2	0	4	1	11
Total	33	12	6	8	6	9	74

Table 14: Allocation of Timetable Time – Valsayn (Weeks)

⁹ The school year for all schools (including Teachers Colleges) in the public system is intended to be 39 weeks, not 37. It is not clear why only 37 weeks are accounted in the timetable. ¹⁰ Note that the length of a session (40 to 45 mins) is typical of secondary schools rather than tertiary level

schools.

	Syllabus	Perio	ds	Time	Total	Time/	Total	Total	Difference
	Contact Time(hrs)			/Period	(hrs)	Period	(hrs)	(hrs)	with Syllobus
	Time(ms)								(hrs)
		Year 1	Year 2	Year 1	Year 1	Year 2	Year 2		(1115)
Ag Sci	36	2	0	80	26.7	0	0.0	26.7	9.3
Art/Craft	60	1	0	45	15.0	0	0.0	15.0	45.0
Dance/Drama	38	1	0	40	13.3	0	0.0	13.3	24.7
Music	60	1	0	45	15.0	0	0.0	15.0	45.0
Phys Ed	60	1	0	40	13.3	0	0.0	13.3	46.7
Ed 1	120	2	3	90	30.0	120	26.0	56.0	64.0
Ed 2	120	2	3	80	26.7	130	28.2	54.8	65.2
Ed 3	86	2	2	80	26.7	90	19.5	46.2	39.8
Electives	120	2	4	90	30.0	170	36.8	66.8	53.2
Language	111	4	4	160	53.3	170	36.8	90.2	20.8
Literature	86	4	4	180	60.0	160	34.7	94.7	-8.7
Reading	106	2	3	80	26.7	135	29.3	55.9	50.1
Family Life	90	2	0	90	30.0	0	0.0	30.0	60.0
Maths	140	4	4	180	60.0	170	36.8	96.8	43.2
Science	105	3	3	120	40.0	125	27.1	67.1	37.9
Social Studies	90	2	3	85	28.3	125	27.1	55.4	34.6
Self Study	63	2	4	80	26.7	170	36.8	63.5	-0.5
Relig./Guidance/ Assembly	74	3	3	135	45.0	135	29.3	74.3	-0.3
	1565	40	40	1700	567	1700	368	935	630

Table 15: Timetable Allocations by Subject - Valsayn

It is not currently possible to deliver the full syllabus with this timetable in Valsayn. In total about 935 hours of teaching time are timetabled over two years. This can be compared to the 1,565 hours anticipated in the existing syllabus. Students are taught according to a blocked timetable for core subjects, which sub-divides each year group of 200 into 3 sub-groups of about 60-70. Electives are taught in small groups. As an approximation there are therefore about 300 periods taught each week across the College during teaching time. This suggests that lecturers on average teach 9 or 10 periods.

Corinth organises its timetable in a different way. It mixes whole year group betures and introductory sessions (up to 200 in a group) with smaller group tutorial sessions with about 35 students per class. As in Valsayn trainees are fully timetabled throughout the week. Teaching loads seem similar to those in Valsayn. A consequence of the large group sizes and the heavily loaded trainee timetable is that opportunities for working with small groups of trainees are scarce. Most teaching occurs in large lecture size groups, which are likely to preclude some styles of teaching.

Teaching practice is conducted in three four-week blocks in Valsayn. College lecturers undertake at least four visits per trainee during each block. Each lecturer is responsible for about 6 trainees and thus makes a minimum of about 24 visits. If school visits take

half a day then this represents about 2.5 weeks work per practice. A slightly different arrangement is used in Corinth that involves initial half-day group visits of 5 trainees who have jointly planned a lesson. Subsequently trainees undertake block practice in pairs and then individually. It is thought that this provides a staged induction into teaching practice that builds confidence and competence. A standard assessment instrument for appraising performance on teaching practice is used in Corinth by all tutors and is made available to trainees.

2.4 Costs of Training in the Colleges

The recurrent costs of training are primarily made up of the salaries paid to trainees and those paid to lecturers. These are paid directly by the Ministry of Education. Other costs make up a small proportion of total costs.

The monthly salary ranges for graduate teachers and teacher trainers for the period 1992-1996 were between \$TT 3,731 and \$TT 4,941. In 1997, negotiations for improved salaries and working conditions were marked by sick-outs and protests by teachers. A new collective agreement was signed in 1997, covering salaries and working conditions for the period 1996-1998. In addition to the salaries shown, all untrained teachers were awarded a monthly allowance of \$200, all trained teachers were awarded an allowance of \$300, and all administrators were awarded \$400. A flat cost of living allowance of \$50 was applied to all teachers on a monthly basis. Thus average salaries for lecturers in the training Colleges were between \$TT5,000 and \$TT 5,500 at this time. Table 16 shows the salary scales from 1997.

	Minimum	Α	В	С	D	Ε	F	G	Long	Long	Long
									1	2	3
1996	4053	4208	4344	4455	4565	4676	4787	4910	5022	5137	5263
1997	4134	4292	4431	4544	4656	4770	4883	5008	5123	5240	5368
1998	4258	4421	4564	4680	4796	4913	5029	5158	5277	5397	5529

Table 16: Salary Scales for Graduate Teachers and Training College Lecturers\$TT

The latest salary agreement designates all teacher trainers as "Teacher Educators" and places them at higher grade levels than school teachers. The salary scale for lecturers at the Teachers Training Colleges remains an important issue since many still feel that the differences between them and teachers who do not hold post-graduate qualifications should be greater.

Data on College expenditure are given in Table 17. These payments were for a total of 62 lecturers on the staff of both colleges, two vice principals and two principals. Teachers in training are on scholarship and also receive a monthly salary. Those trainees who possess qualifications at the CXC/GCE O Level only (Assistant Teacher II) received a salary of \$TT 2,411 per month. Those trainees who also possess A-level qualifications (Assistant Teacher III) are paid \$TT 2,711 per month. No other allowances are paid to trainees.

¹¹ Salary range increments A-G including three levels of longevity increments.

Table 17: Expenditure on Salaries, Goods and Services, Equipment and Capital Projects Teacher Education 1994-97

Year	Salaries	Goods And Services	Minor Equipment	Capital
1994	17,418,772	65,456	15,462	1,459,100
1995	18,800,000	210,000	30,000	1,213,000

Since 1995 Teacher Training has not been listed as a separate item in the national accounts. The salary budget will have escalated in line with the number of staff on the establishment and the pay awards that have been made. On this basis by 1998 total salary costs can be estimated as about \$TT 27.5 million.

Expenditure on goods and services is minimal and averages about \$TT 100,000 per College. This amount does not seem to have increased since 1995. Data from Valsayn indicate that about 20% of this is allocated to maintenance of equipment, 10% to building maintenance, and 70% to stationery and other office consumables. Small amounts of money are raised to supplement this budget but these seem to amount to less than \$TT 50,000 per year. Fund-raising is problematic with an adult student body from across the country and no natural community-based groups with allegiance to the College as might be true with a school parent -teacher association. College facilities are sometimes used by community groups for events unconnected with teacher training. It appears that significant charges are not levied for this *ad hoc* use of facilities. Some corporate sponsorship is received in at least one of the Colleges.

College libraries are supported from a separate vote from the Ministry of Education. In a recent year each College has received between \$TT 150,000-250,000 for library books and equipment. This has enabled collections to be updated and the purchase of photocopiers and computers. However these allocations are unpredictable from year. It is perhaps surprising that the allocation can exceed that available for all other recurrent running costs including those directly related to learning and teaching material.

The costs of teaching practice are mainly concerned with travel allowances. \$TT 30-40 cents per km is paid to tutors from Ministry funds against claims. This might amount to \$TT 200 per lecturer per practice or \$TT 600 per year and is therefore marginal to overall costs. Teacher Educators are not "travelling officers" and are only assisted by way of reimbursement for vehicle usage during Practice Teaching. Unlike many other public servants who travel, they are not given government loans to purchase cars minus purchase tax, nor given regular travelling allowances. This can be seen as inequitable.

On the basis of these costs it is possible to arrive at an estimate of the recurrent cost per trainee whilst they are enrolled in the Colleges. Since the staff-student ratios are similar, and non-salary costs are small, there is no significant difference in these costs between the Colleges. Overall it would appear that in 1995 overall unit costs were about \$TT 26,700 (\$TT 19,040 million/712). In 1998 enrolments were 791. There were 52 lecturers in post (including principals) and about 20 ancillary staff. Based on average salary costs (including the new salary scales) this would give a cost per trainee per year in 1999 of

about \$TT 35,000 (\$US 5,550). Thus a trained teacher would cost about \$TT 70,000 to produce over two years¹². This is about three times GNP per capita.

¹² Some of the costs of the Cert. Ed. and B. Ed. (primary) are borne by the student– about 15% of full economic cost. Some B. Ed. students are on scholarships awarded on the basis of their performance in the Teachers' Colleges examinations; hence government pays full costs for these. Their numbers however, have dwindled over the years to about 10 per intake. Government bears the total cost of the Diploma in Ed. for secondary school teachers.

CHAPTER 3

PROJECTING SUPPLY AND DEMAND

3.1 Modelling the System

The Trinidad and Tobago education system has succeeded in providing nearly all its children with access to seven years of primary schooling. The crude transition rate to secondary grades is between 75% and 80%. When repeaters are taken into account the real transition rate is somewhat less than $70\%^{13}$. Currently average pupil-teacher ratios are about 23:1 at primary and 20:1 at secondary. Most importantly for future teacher demand, the cohort of primary school age children is shrinking and attrition rates amongst teachers appear to be low. In the last three years the decline in the size of the school age cohort appears to have been between 3% and 4% per annum. Taken together these factors mean that the demand for new primary teachers is modest and diminishing.

The Government of Trinidad and Tobago is committed to increasing the transition rate into secondary school grades to 100%. This will result in an increasing demand for secondary teachers, moderated by the declining size of the cohort graduating from primary schools¹⁴. Since this policy intention has been firmly stated, the modelling of teacher requirements developed below has included the assumption that this will be achieved over the next five years.

An enrolment driven model was used to simulate the Trinidad and Tobago school systems. The baseline date used to set up the simulations is illustrated below.

Parameter	Values	
Population Growth (Primary Age Cohort)	-3%	
Primary GER	108%	
Secondary GER	75%	
Unit Cost Ratio of Secondary to Primary	1.4:1	
Primary Entry Rate	95%	
Repetition	3-9% depending on grade	
Promotion	93%-97% depending on grade	
Drop-out	Less than 1%	
Pupil-teacher Ratio	23:1	
Teacher Attrition	3%	
Secondary Entry Rate	65% rising to 100%	
Repetition	1% except grade 12 (5%)	
Promotion	97%	
Drop-out	2%	
Pupil-teacher Ratio	21:1	
Teacher Attrition	4%	

 Table 18: Baseline Data for Simulations

¹³ With Secondary Education for All this will increase.

¹⁴ Though it remains the case that secondary teachers do not have to be trained, in practice it is likely that this will become policy over time.

Primary gross enrolment rates (GER) are currently over 100% due to overage enrolment. Repetition and drop-out is low throughout the system except at the common entrance examination level (grade 7), and at CXC level (grade 12).

Teacher attrition has initially been set between 3% and 4%. Between 1993/4 and 1995/6 the number of primary and secondary school teachers remained almost unchanged. The output of trained primary teachers over this period was about 400 per year, representing about 5% of the teaching cadre. Since alternative employment opportunities are scarce (especially for primary teachers) it seems unlikely that attrition rates for teachers are greater than these estimates. More attractive salaries arising from pay awards may reduce attrition.

The simulation was used to project forward over the next 15 years. Enrolment projections generate the number of pupils in the education system at different levels. Using existing costs per pupil for primary and secondary places, it is then possible to chart how much recurrent costs for the education system will increase as a result of increased enrolment. From the numbers enrolled, it is also possible to project the numbers of new teachers that will be needed for any given value of the pupil-teacher ratio.

3.2 The Projections

Figure 5 shows enrolment changes in the baseline model. Primary enrolment declines from its present level of around 170,000 in public schools to about 105,000 in 2013. Secondary enrolments increase as a 100% transition rate into secondary is achieved, and peak at about 120,000 in 2006. Figure 6 indicates how the costs of the school system will change as a result of the expansion of secondary school participation. Overall costs will fall as total enrolment falls. No real increase in budgetary allocation would be needed to sustain the changes incorporated into the baseline model to achieve universal secondary education if pupil-teacher ratios and costs per student remain at existing levels.

Figure 7 indicates how many teachers would be needed to support the school system if existing pupil-teacher ratios were maintained.

Figure 5: Enrolment Projections 1996-2013



Figure 6: Recurrent Expenditure on Primary and Secondary as a Proportion of Current Expenditure 1999-2013



Recurrent Expenditure on Primary and Secondary as a Proportion of Current Expenditure 1999-2013





Demand for New Teachers 1996-2013

The demand for new primary teachers is negative since teacher attrition is less than the rate of contraction in enrolments. The conclusion appears to be that new primary teachers are not needed and that initial training should be on a care and maintenance basis with a small output. Demand for secondary teachers as a result of increased participation peaks at about 400 a year and then falls as the long-term effects of falling school numbers have an impact.

However, these projections of teacher demand ignore the need to train those currently untrained in the system. There are over 1,600 untrained teachers in primary schools who will need to become fully qualified. This could be achieved in successive intakes into the existing Colleges. This demand needs to be added to the projections made below. If these teachers were retrained over 4 years it would create an additional demand of 400 places per year to be added to the figures in the projections. At secondary level half of all teachers do not possess a professional qualification. These number about 2,400. If these untrained secondary teachers were to receive professional training over six years this would create an additional demand of 400 trainees per year.

It is also true that if other quality improvements were made in the school system demand for teachers would change. If repetition rates were reduced through a combination of automatic promotion, elimination of the common entrance examination, and more effective schools, teacher demand would fall as pupils moved through the system faster. If repetition rates were reduced to no more than 2% in each grade the result would be as shown in Figure 8. Here even fewer teachers are needed and demand for new secondary teachers fall to minimal levels after less than 10 years. (This excludes the training needs of untrained teachers currently in the system mentioned above).





Figure 9 shows what the effect would be if the age cohort ceased to shrink at 3% as a result of an increase in the birth rate to replacement levels i.e. a constant size cohort with zero growth.

Figure 9: Demand for New Teachers 1996-2013



Demand for New Teachers 1996-2013

In this case primary teacher demand peaks at nearly 200 a year after 10 years in a system with low repetition. Secondary teacher demand fluctuates as at first teachers are required to meet the demands of expanded enrolment and later the recovery in the birth rate ripples through into secondary enrolments.

Finally, the effect of decreasing the pupil-teacher ratio can be simulated. If secondary pupil-teacher ratios were to fall to 15:1 and primary to 20:1. Figure 10 shows the effect on teacher demand.





Demand for New Teachers 1996-2013

Demand for primary teachers increases in the first period as pupil-teacher ratios are reduced; demand for secondary teachers is much greater initially for the same reason. Primary demand stabilises at about 200 per year and secondary 400 per year.

The cost of the education system with all these developments would be about 15% greater than it is currently. If the size of the age group of school children continued to shrink costs would be at or below currently levels, but the system would be more efficient with lower repetition rates, pupil-teacher ratios would be significantly lower than in 1999, and all children could attend secondary schools.

When the additional demand created by the need to train the 1,600 untrained teachers currently in the system is added to these projections it is clear that over the period from now until about 2004 the back log of untrained primary teachers could be eliminated. From then on there is a recurrent demand for primary teachers sufficient to support one College intake. If both Colleges are to continue to train primary teachers, then there will

be a need to re-profile the contribution they make to primary teacher development to include other kinds of support in addition to initial training. Secondary training needs should include the professional training of those currently untrained (say 400 a year for six years). This places annual demand between 800 and 1,000 in the first years subsequently falling to about 300 per year.

It is unknown what proportion of demand for new secondary teachers may be met by primary teachers migrating to secondary. Previous expansion of the secondary system did result in a significant number of primary teachers retraining to teach in secondary and draw higher salaries. If these numbers are substantial then this will increase the demand for primary teachers.

The costs of supporting the fluctuations in demand the model simulates depend on how the primary Colleges are managed. Existing staffing levels sustain annual enrolments of about 400 and it is clear that the Colleges have the capacity to train these numbers. If new entrants fall below this level and College staff are retained then opportunities exist to increase quality and contact time with smaller groups of trainees. If the number of new entrants recruited falls to 200 or so then more radical options may need consideration.

CHAPTER 4

EMERGING ISSUES

This analysis of primary teacher education in Trinidad and Tobago draws attention to the main features of the system, provides insights into the way in which teacher education is delivered through the Colleges, illustrates what costs are incurred by different elements and identifies their sources, and projects forward likely demand for new primary teachers under different assumptions.

The picture that emerges is one in which future demand will be low even if pupil-teacher ratios are allowed to drop to 20:1 in primary schools. Most new teachers will be needed to meet additional enrolments at secondary level as participation is universalised at this level.

Overall educational expenditure is unlikely to be stressed if current pupil-teacher ratios and costs per student are maintained in real terms. Falling pupil numbers create the opportunity to improve the amounts spent per child in schools. They also allow the possibility of increased investment in teacher education at primary level so that quality can be improved and Colleges become centres of excellence in practice and support for primary teacher development.

As demand for new primary teachers falls structural changes may need to be considered. These include: revisiting the OJT programme to establish what form it should take with reduced numbers of entrants; considering an extension of the role of the Colleges to play a greater part in the support of untrained teachers during their period in schools, and after taking up their first appointments as new teachers; and evaluating the shape and content of the teacher education curriculum.

In the first case it is curious that primary teacher training College staff apparently play no role in OJT selection and support courses. If these courses are to lead into a formal training period then it is clear that they should be closely articulated with College curricula. It is also unusual that the Colleges have no role in the selection of those OJTs who are considered suitable for training. If the purpose of an OJT period is partly to identify those with most potential to become effective teachers then it would seem reasonable to take into account College views on the suitability of applicants for training course. If demand for training places falls and frees up College lecturers' time some of this could be allocated to developing a closer relationship with training for OJTs and devising mentoring strategies to nurture the development of untrained teachers prior to training.

Currently no provision is made for mentoring newly qualified teachers in their first years of employment. The need for support and advice in this critical period is evident. There is therefore scope for the College staff to contribute to systematic support and development programmes during the first years of working as trained teachers. This should enable support of new pedagogic practices and effective teaching to extend beyond the initial training period in a planned manner. The current teacher education curriculum is heavily loaded with teaching periods and contains substantial investments of time in supervised teaching practice. It seems probable that what is currently planned cannot be delivered in the time available with the constraints that apply. This suggests that the curriculum should be revisited and reprioritised to lighten the teaching input and re-profile trainees' learning tasks to focus on those most likely to contribute to the development of competence in key areas of the primary school curriculum e.g. literacy and numeracy. It may be that the approach adopted to teaching practice should be modified in the light of the prior experience of work in schools that all trainees possess. If this prior experience were mentored and supported consistently it might substitute for some of the time currently devoted to teaching practice. It might also be possible to conceive of supported teaching practice as subsequent to a college-based period rather than concurrent, which would simplify timetabling of college-based courses.

At least 20% of timetabled time is allocated to assessment-related activities. This is substantial and may represent an unbalanced profile of work for staff and trainees. It is not clear how much of this assessment has a formative character and how much is summative, though the majority appears to be the latter. There is an opportunity to reconsider whether the balance of time between teaching and assessment is appropriate.

The performance of the Colleges appears compromised by a lack of investment in equipment, furniture and learning materials¹⁵. If the salary costs of trainees are excluded, the operating cost per trainee of Colleges appear to be no more than about twice those for secondary students, largely arising from lower staff-student ratios. If they are to be high quality learning institutions, investment in learning resources per trainee will need to be increased. Necessarily, increased investment would also have to be accompanied by effective management and resources to ensure that what was provided resulted in a cumulative improvement in facilities.

More radical options could be considered. The costs of primary teacher training appear high because trainees are paid salaries whilst in full-time training. Secondary training is organised as an in-service activity and therefore does not bear such costs. Some mixture of in-service and full-time training would be cheaper than the existing arrangements. If numbers are smaller, and it is possible to raise entry qualifications as a result to include one or two A levels the need for some content up-grading may be lessened. This could make it possible to focus training more on pedagogical competence etc. and shorten the time of full-time attendance. It should be noted also that the OJT system saves on overall teacher costs whilst they are paid as untrained teachers, but probably increases overall costs per trained teacher since these payments have to be continued during training. If students entered training directly after qualification at CXC and A level costs might be lower, depending on the level of stipend which is set.

If demand does fall to lower levels the option of alternate year entry into the Colleges could be considered. This would increase cost per trained teacher but would provide opportunities to improve quality and increase the time spent with tutors in small groups. If coupled with more support pre-and post-training this might well be an option worth

¹⁵ The main learning materials used by students are lecturers notes and some text books.

considering if it led to much improved quality of new teachers. The length of training could also be increased from two years to three. However this would increase costs if it were full-time training, and it is not clear what the gains would be in terms of the impact on the skills and competencies of newly qualified teachers. More support for newly qualified teachers working in schools through INSET may be preferable and most cost-effective.

Finally it would seem that current salary scales are anomalous. Most countries do reward College lecturers at levels higher than those of secondary teachers. This reflects expectations that they are more qualified and that College lecturing is linked to career progression. It is important that Colleges are able to attract and hold the best staff available, and turnover is currently an issue as staff move on to better paid posts. Increases in salary scales for the small number of lecturers involved would not have a major impact of the education budget. Its costs should be outweighed by the benefits for future recruitment and motivation.

CHAPTER 5

CONCLUDING COMMENTS

There is a window of opportunity to reconsider primary teacher training in Trinidad and Tobago. The numbers of teachers needing to be trained are diminishing as pupil numbers in school fall, the quality of teachers in the primary system and levels of achievement in schools remain a matter of concern, and the proposed universalisation of access to secondary schooling mean that it is more important than ever that primary teachers are effective.

The primary teacher education Colleges are national institutions which need to be supported as centres of excellence and which could and should support examples of best practice in primary schooling. They could also play a broader role in training and support for new teachers pre- and post-training to enhance and reinforce effective teaching methods.

The system is small and there are indications that more investment would be beneficial if carefully targeted. The costs of this would be a small proportion of the costs of the primary school system and the Ministry of Education's budget. With falling rolls it could even be achieved at no additional cost to current levels of national expenditure. The priority attached to primary education under recent government policy suggests that such a strategy is overdue.

The development of a policy response to the opportunities that exist should take into account the issues identified in this analysis. In particular it should consider:

- Revisiting the OJT programme and its costs and benefits, and the role of the Colleges and pre- and-post training support to release the potential of the programme; alternatively the OJT could be absorbed directly into the initial training process as part of an initial period of mentored teaching experience.
- Rationalising the teacher education curriculum to allow more time for professional development activity focused on teaching competencies. Changes in the organisation of training could reschedule teaching practice components to recognise prior experience, contain the amount of time allocated to summative rather than formative assessment, and moderate costs arising from the training of smaller numbers.
- Alternate year entry as a viable possibility if coupled with an expanded role for the College staff in primary school development activities. This could include an increased element of part-time release rather than full-time study, and professional development activities supported by the College staff pre- and post-training.
- The opportunity of developing first-level training for early childhood teachers in Colleges

- The possibility of raising entrance criteria to include A level if these can be sustained without severely depleting the pool of applicants
- The implications of the abolition of the Common Entrance examination and other planned developments for teacher supply and demand
- A separate budget line for College financing with elements of programmed budgeting linked to levels of activity and throughput, and appropriate mechanisms to devolve some budgetary responsibility in ways which could provide incentives to increase efficiency and effectiveness.
- Placing College non-salary recurrent funding on a more realistic basis to provide a richer learning environment.
- Improving the pay and status of teacher education college lecturers to attract and retain higher calibre staff

REFERENCES

Republic of Trinidad and Tobago, (1993) Educational Policy Paper (1993-2003).

- Republic of Trinidad and Tobago, Ministry of Education (1995) Report of the Task Force on Education.
- Republic of Trinidad and Tobago (1996) Estimates of Recurrent Expenditure Ministry of Finance, Port of Spain.
- Republic of Trinidad and Tobago Central Statistical Office (1998a) Report of Education Statistics 1996/7
- Republic of Trinidad and Tobago Central Statistical Office (1998b) Annual Statistical Digest
- Republic of Trinidad and Tobago (1998c) Population and Vital Statistics, Ministry of Planning and Development Central Statistical Office
- Romain R (1997) Trinidad and Tobago Post Primary Education. Report for the Caribbean Development Bank and the Ministry of Education
- World Bank Staff (1995) Appraisal Report Trinidad and Tobago; Basic Education Project Rept 14865-TR Washington DC.1993

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