EXECUTIVE SUMMARY

The Tracer Study of Secondary School Graduates targeted graduates from the 2002/2003 academic year. One of the main aims of this research was to obtain information about the Post Secondary path of 2003 graduates from the various school types to capture trends and factors that impact upon their study choices.

The total number of secondary schools in Trinidad and Tobago is one hundred and twenty four (124). Ninety seven (97) are applicable to our study, since in 27 schools there were no students beyond form four during the period of this research. These were the Secondary Education Modernisation Programme (SEMP) Schools and "New Denominational" Schools, which were recently built and introduced into the education system. Seventy-one (71) schools were selected from the total school population using variables of school type, gender and geographic location as our selection criteria. Nineteen (19) of these schools were *Junior Secondary Schools*. The other secondary schools were classified into the following categories: *Composite*, *Five Year Secondary*, *Senior Comprehensive*, *Senior Secondary*, and *Government Assisted/ Denominational* and *Seven Year Secondary (Government)*.

Some research questions this study addressed were:

1. What were the different subject pathways (CXC, NEC etc) available to students within the education system?
2. What were the post secondary pathways taken by graduates?
3. How did type of secondary school the graduate attended affect these choices?
4. How did sociological factors contribute to post secondary choices?

There were three areas of study in this research:

A. secondary school graduates for the academic year 2002/2003

B. secondary school profile: performance of graduates for the academic year 2002/2003

C. junior secondary school profile of students exiting the system in the academic year 2002/2003

STUDY (A)

SECONDARY SCHOOL GRADUATES FOR THE ACADEMIC YEAR 2002/2003

There were 729 respondents in study **A** distributed as follows:

SCHOOL TYPE	(1) TERTIARY	(2) TVET	(3) CXC REPEATER	(4) POST SECONDARY	(5) OTHER	(6) EMPLOYED / NO TRAINING	(7) NOT EMPLOYED / NO TRAINING	(8) TOTAL
Composite	9	18	42	25	14	15	33	156
5 Year Secondary	6	2	39	8	13	11	13	92
Secondary Comprehensive	5	6	9	0	11	4	10	45
Senior Comprehensive	12	12	19	9	12	30	26	120
Senior Secondary	7	6	9	0	4	5	15	46
Denominational / Gov't Assisted	72	7	11	14	11	25	35	175
Gov't 7 Year	14	7	16	10	19	12	22	100
Total	**125**	**58**	**145**	**66**	**84**	**102**	**154**	734
%	**17.1**	**8.0**	**19.9**	**9.1**	**11.5**	**14.0**	**21.1**	100

School type was clearly an important variable in the choice for further education of graduates. It is important to note that some of the above training categories intersected with each other for example, some CXC repeaters were also pursuing post secondary education (not tertiary). The table would have double represented these CXC repeaters hence it showed 734 students instead of 729.

Generally, there were trends in the highest educational background of parents and the educational path of graduates subsequent to secondary schooling. The following statistics were highlighted in our findings:

- Graduates with parents beyond a Primary level education have a greater probability of furthering their studies at the Tertiary level. 84% of graduates had at least one parent beyond primary level education.

- Graduates with parents who had a secondary level education as their highest educational attainment mainly went into TVET. 50% out of 77.6% that responded had a mother with secondary level education and 41.4% of the 75.8% that responded to their father's highest educational attainment, had a father with secondary level. The majority of graduates pursuing post secondary studies had parents with secondary level as their highest educational attainment.

- The majority of respondents in the various training categories stated their parents were living in the same household. Generally graduates who pursued Tertiary studies had the highest percentage, within their category, with parents living together. Other statistics are summarised as follows:

	TERTIARY	TVET	CXC REPEATER	POST SECONDARY	OTHER
Parents Living Together	88.8%	68.9%	67.6%	65.1%	67.9%
Parents NOT Living Together	11.2%	31.1%	32.4%	34.9%	32.1%
Total	100%	100%	100%	100%	100%

STUDY (B)

SECONDARY SCHOOL PROFILE: PERFORMANCE OF GRADUATES FOR THE ACADEMIC YEAR 2002/2003

Out of the 71 schools selected, forty-one (41) schools returned completed questionnaires, giving an overall response rate of 58%. The results were as follows:

- Students of *7-year schools* (both Government and Government-Assisted) tend to have the highest rates of full certificate CXC passes

- *Government-assisted / Denominational schools* tend to have the highest pass rates at the Cambridge Advanced level examinations.

- Secondary schools that provide CXC Pre-Technician, NEC (craft level and Pre-Technician level) vocational and technical subjects illustrated that a higher percentage of female students sat the CXC exams than male and female students generally out-performed males in technical and non-technical subjects, regardless of school type.
- At GCE O and A' Levels males outperformed females however not significantly in the latter case.

- Analysis by school type indicated that female students generally outperformed the males in the various school types.

STUDY(C)

JUNIOR SECONDARY SCHOOL PROFILE OF STUDENTS EXITING THE SYSTEM IN THE ACADEMIC YEAR 2002/2003

- Twelve (12) *Junior Secondary* schools responded. A total of 250 students enrolled were reported to have dropped out while 5,423 students passing through their establishments and being placed into secondary schools as a result of the 14+ examinations for the academic year 2002/2003. A 'drop out' rate of approximately 4.41% was estimated for Junior Secondary school leavers for the academic year 2002/2003.

▶ RATIONALE – THE IMPORTANCE OF THE STUDY

The objective of this study is to obtain the Post Secondary path of 2003 graduates from various school types to capture trends and factors that impact upon this path. The target group of this study would therefore be form five and form six graduates from a cross section of subject areas from each school type representative of the population. Details such as the matriculation of secondary school students and social background were attained in order to generate relevant reports to benefit all stakeholders in the labour and training environment. However, long-term occupational or educational paths of the graduates cannot be determined until the second and third studies are conducted on the same panel in the subsequent years.

A part of the National Training Agency's (NTA) mandate is the responsibility for the creation and regular update of the human resource needs within the educational sector. The Ministry of Science, Technology and Tertiary Education identified the need to trace the path of secondary school graduates in order to increase access to the tertiary education and training sector. The NTA was therefore requested to embark upon a Tracer Study to obtain information on secondary school graduates for the academic year 2002/2003. This longitudinal study would essentially provide information on their path subsequent to their last secondary school during this academic period. The type of longitudinal research method used in this case is a panel study. It is important to note that this is our first panel visit for which further visits are to be made in the years 2006 and 2008.

The results of this study will prove to be very useful to decision makers because of the need to be

concerned with the path and success of secondary school graduates in order to ensure that training providers provide educational products that are consistent with both student and employer needs. The following research questions were formulated to achieve a comprehensive analysis of the post secondary path of secondary school graduates:

1. What were the different subject pathways (CXC, NEC etc) available to students within the education system?
2. What were the post-secondary pathways taken by graduates?
3. How did type of secondary school affect these choices?
4. How did sociological factors contribute to post-secondary choices?

▶ DEFINITION OF TERMS

- **Composite Schools**

  The Composite School accepts students after the completion of the Common Entrance Examination and provides them with a course of study, which involves academic, pre-technical and technical/vocational education. The students are examined by the CXC and NEC examinations and some of the Composite Schools carry their students to the Advanced Level.

- **Drop-out**

  A student can be termed a *drop-out* if they stopped attending secondary school during the academic year 2002/2003 and has been absent from school for the whole school term without a reasonable explanation. A student who transferred to another school is **NOT** considered a drop-out.

- **Government Assisted / Denominational Schools**

  These schools are also referred to as Government-assisted schools. They are owned and controlled by Denominational Boards. They are the oldest type of secondary school in existence and are involved in a Grammar-type education. Students write the C.X.C General Proficiency Level Examinations and G.C.E Cambridge Advanced Level Examination and Caribbean Advanced Proficiency Exam (CAPE).

- **Government Secondary Schools**

  These schools were formerly called Modern Secondary Schools and are fully owned and managed by the Government. They are involved in a limited way in pre-technical and technical/vocational education but their major emphasis is Grammar–type education. Their

programmes are similar to that of the assisted schools and their students are certified by similar examining bodies. These schools fell under the **5 and 7-year Secondary Schools** categories specific to this study.

NB. Denominational and Government Secondary schools are described as "*Traditional Sector*" schools. Schools in this sector, which perform better at the GCE and CXC examinations, are described as "*prestige schools*". Students who score within the first 20% in the Secondary Entrance Assessment (SEA) are placed in the Denominational Schools.

- **Junior Secondary Schools**

  Most of these schools operate on a two-shift system and students are expected to be present at those institutions for a course of study lasting three (3) years. Their curriculum includes core subjects such as Mathematics and English Language and some integrated ones such as General Science and Social Studies. Unlike the Grammar–type education provided by the Denominational and Government schools, Junior secondary schools offer a general education with a technical oriented curriculum of industrial arts, agriculture, home economics, music and art as part of the curriculum. The "14+" examinations are administered upon completion of the three years.

- **Post Secondary Education**

  All education and training programmes which are not at tertiary level but which are offered to secondary school leavers to meet their vocational or continuing education needs.

- **Secondary School Graduates**

  Students who exited the secondary school system after completing the full period of study whether they obtained full or incomplete passes.

- **Secondary Comprehensive**

  These are special types of Comprehensive schools that offer Advanced Level as well as Technical/Vocational education. These schools do not offer pre tech courses (CXC) as in the Senior Comprehensives.

- **Senior Comprehensive Schools**

  These schools accept the graduates from the Junior Secondary Schools. It is to be noted that there are some comprehensive schools that accept SEA graduates. Each school has three main streams – academic, pre-technical and technical/vocational. Students are assessed by the Caribbean Examinations Council (CXC) General and Basic Proficiency Examinations and National Examinations Council (NEC) for the latter group. The NEC is the official mechanism for certification in TVET. Advanced level classes also exist at the comprehensive schools and are taken after two years beyond CXC General Proficiency Level.

- **Senior Secondary**

  The Senior Secondary Schools' main focus is academics and craft subjects such as technical drawing and home economics, which are examined by CXC.

- **Technical and Vocational Education and Training**

  Activities that emphasise the application of skills, knowledge and attitudes required for employment in a particular occupation or cluster of related occupations in any field of social and economic activity. Some of these activities may take place in an institution while the facilities of industry are employed for work experience and additional training inputs.

- **Tertiary Studies**

  Studies that occur following successful completion of secondary schooling or its equivalent and leads to the award of sub-baccalaureate awards, baccalaureate and post graduate degrees.

▶ REVIEW OF LITERATURE

A tracer study can be described as a survey of graduates from institutions normally of higher education. Many researchers have used tracer studies worldwide to survey graduates. In 1987 for instance there was a tracer study of graduates from Canadian universities, community colleges and trade/ vocational programmes in order to analyze their labour market experience. As the world of work continuously changes tracer studies can be instrumental in institutional development. They have been commonly used in Malaysia and Africa for this purpose. In the years 1996 to 2000 a total of fifteen tracer studies have been carried out in seven African countries. Research has indicated that most tracer studies have been implemented to track tertiary institution graduates. Dr. Gerald Kimini, University of Nairobi, Kenya, in an abstract from his study on "*How to Conduct tracer studies in Africa*" stated that in developing countries, it has been recognized that education has not been producing the types of skilled personnel or productivity increases that have been expected, resulting in rising unemployment levels among university graduates and a serious mismatch between higher education and the labour market. Tracer studies of graduates in this case would help find out the placement of these graduates in the job market.

Tracer studies have also been used in Trinidad and Tobago to track performance of different target groups. One of the most recent publications from The National Institute of Higher Education, Research, Science and Technology (NIHERST) is the Survey of Engineering Graduates 2001. This study assessed the status of Trinidad and Tobago nationals who graduated from the faculty of engineering (UWI) over the period 1995-1999.

To handle life's challenges: a tracer study of Servol's adolescent development programme in Trinidad attempted to evaluate the effectiveness of their fourteen week programme on adolescents. The study targeted forty young people, many from abusive and disadvantaged backgrounds, who took part in SERVOL's Adolescent Development Programme and measured their quality of life ten years later. A comparison was made between a similar group of people who were not involved in the programme to enable a fair and comprehensive analysis.

Longitudinal studies such as Tracer studies have been employed for both social and educational purposes mainly the latter, and have proven to be very effective in measuring dynamics of change. Patterns of behaviour and cause-effect relationships can be obtained which would not be 'picked up' in a one shot case study. The Tracer study conducted by the NTA essentially captures the post secondary path of secondary school graduates and identifies factors that may have contributed to their choice. This information would inform policy makers on any need for emphasis in certain areas in the educational system requiring reform. Furthermore, this reduces the mismatch between higher education and the labour market. It is the hope of the NTA that this study can serve to further the education reform process that we are able to provide an improved education and training system.

LIMITATIONS TO THE STUDY

This study was dependent on the cooperation of the secondary schools in our sample as well as the graduates of these schools. Many obstacles emerged because of this dependence. They are as follows:

- Some schools were not cooperative in providing student contact information for our enumerators – these schools were replaced where possible.
- School profiles were difficult to obtain in some cases, as the non-teaching staff was not available to provide them.
- The junior secondary schools were especially difficult to provide their profiles, as there was some difficulty in compiling statistics for morning and evening shifts. Under reporting may have also occurred with respect to statistics provided for drop out rates of these students.
- There was a low response rate from the secondary school graduates via the self addressed stamped envelopes.
- Enumerators also experienced difficulty in tracking some of the graduates (wrong numbers etc).

Additionally household income was not used as a factor affecting the post secondary career of the graduates as many of our respondents preferred not to reveal this information. The rise in kidnapping at this time was a concern to our graduates. Most of the respondents stated the occupations of their parents. However, due to the unreliability of household incomes stated, an attempt was made to obtain wages of all the occupations recorded for an accurate analysis on this variable as a factor affecting the post secondary path of graduates. This was not possible before the completion of this

study since no occupational wage survey has been done in the country. Household income in conjunction with parents' occupation could not be used as a reliable variable for analysis. This eliminated the reliability of using household size as a social factor impacting on the post secondary path of graduates. This factor could not stand on its own as a determinant without the support of the household income variable.

▶ METHODOLOGY

Research Design

The longitudinal research method used was a **panel study**. Panel Studies measure the same sample of respondents at different points in time. This type of study was used as it fulfilled our purpose to measure the **same** sample of respondents at different points in time. A two year time interval will be used to track graduates. This time period is deemed to be suitable for this study as it provides sufficient time for significant changes to occur to establish cause and effect relationships. This research was divided into three (3) areas of study (A, B and C) to capture a holistic view of the post secondary path of secondary school leavers:

A. secondary school graduates for the academic year 2002/2003
B. secondary school profile: performance of graduates for the academic year 2002/2003
C. junior secondary school profile of students exiting the system in the academic year 2002/2003

Study A is necessary to establish a profile of the panel of graduates – demographic, educational and social. The present status of these graduates, at the time of study, was also included.

The purpose of Study B is to provide information on the matriculation of secondary school graduates. This information would be useful in the analysis of the path of secondary school leavers. An analysis of the performance of students in various school types would provide a clearer picture on possible trends.

Study C attempts to gather information on the leakages of students. This information would also be useful in evaluating the *dropouts* in the education system. Information on students who do not 'make it' to CXC Level would assist in policy making and planning for bridging the gap to tertiary education.

Research indicates that questionnaires have generally been used as the research tool for studies of this nature. Reference is made to two local tracer studies:

- the Survey of Engineering Graduates 2001 - A tracer study focussed on Trinidad and Tobago nationals who graduated from the Faculty of Engineering, The University of the West Indies (UWI).
- To handle life's challenges: A tracer study of Servol's Adolescent Development Programme in Trinidad

The African Tracer Studies previously mentioned also used questionnaires as the research tool for data collection. Actually all the tracer studies in Africa used almost the same questionnaire encompassing similar survey designs and data.

A questionnaire was used as the research instrument in this study as a set list to acquire detailed information was established. Questionnaires were supplemented with interviews where possible to ensure clarity and capture information relevant to the quality of the study. Focus groups were not possible as individual information was required for the establishment of our panel.

Redundancies were eliminated by the use of close-ended questions which produced more manageable data to establish a database of graduates.

Three questionnaires were designed to obtain information pertaining to the above three studies. They are as follows:

A. The post secondary career of Secondary school graduates for the academic year 2002/2003 (See Appendix I for Questionnaire A 'Tracer Study of Secondary School Graduates')
B. The performance of Secondary school graduates in the academic year 2002/2003 (See Appendix II for Questionnaire B 'Tracer Study of Secondary School Graduates: Secondary Schools')
C. The drop out rate of Junior Secondary school leavers in the academic year 2002/2003 (See Appendix III for Questionnaire C 'Tracer Study of Secondary School Graduates: Junior Secondary Schools')

SAMPLE AND SAMPLING PROCEDURES (A)

A. SECONDARY SCHOOL GRADUATES FOR THE ACADEMIC YEAR 2002/2003

The aim of questionnaire **A** (Appendix I) was to obtain relevant information on the post secondary route of secondary school graduates and to capture any factors that may have affected this path. Form five and six graduates from a cross section of subject areas were the target group of our study.

Additional questions, other than demographics, relating to the social background of graduates and results in CXC/NEC/A 'Level examinations were included in our questionnaire. This additional data was necessary in order to identify any dependent variables that may have affected '*where graduates go*' after secondary school as each group with similar backgrounds may 'share a similar lifestyle which to some degree will distinguish them from members of other social strata'.[1]

A list of all secondary schools in Trinidad was obtained from the Ministry of Education (Appendix IV). This list consisted of one hundred and twenty four (124) secondary schools, categorised under educational districts. These schools were then further classified by type (see table 1), geographical area and gender. The three classifications can be broken down as follows:

Type

- 5 year Secondary Schools
- 7 year Secondary Schools – Denominational / Government Assisted

Other Government 7 Year secondary schools

[1] Haralambos and Holborn: Sociology Themes and Perspectives, Fourth Edition

- Community Schools
- Composite Schools
- Junior Secondary Schools
- Secondary Comprehensive Schools
- Senior Comprehensive Schools
- Senior Secondary Schools

Geographical Area

- Urban
- Non Urban

Gender

- Male
- Female

The sample was a purposive, stratified, proportionate sample using the three (3) variables school type, geographic area and gender. Students had to be categorised/stratified in some way for formulation of trends. Focus is placed on the variable school type as schools under each school type offer similar subject types e.g. academic, technical and craft subject types. Trends could therefore be captured between students from certain types of schools and their path subsequent to graduating. Sixty-three (63)

secondary schools were thus chosen through these classifications for our sample. The population comprising eighteen to twenty thousand students could not be surveyed as this would have been an extremely tedious task that time did not permit. The population of schools are categorised by school types. A sample of graduates within each school type will therefore accurately represent the population of graduates.

5-Year Secondary

It should be noted that twenty-five (25) schools were *Secondary Education Modernisation Programme* (SEMP) Schools and *New Denominational* Schools. Schools under these classifications did not have students beyond form four (4) at the time of this study. All SEMP schools initiated form five classes in September 2004. They were therefore not valid to our study and were subsequently eliminated.

Ten (10) schools comprising our non-SEMP population were chosen as our sample. All ten schools were coeducational. 'Same sex' 5-year secondary schools such as *A.S.J.A Girls' College Barrackpore* and *Shiva Boys' Hindu College* were all classified, as *New Denominational* schools therefore could not be included in our sample. Our sample in this case therefore consisted of only coeducational 5-year secondary schools.

- Arima Government Secondary
- Ste. Madeleine Secondary School
- El Dorado Secondary School

- Palo Seco Government Secondary School
- Success/Laventille Composite School
- Rio Claro High School
- San Juan Government Secondary
- St. James Government Secondary School
- Tunapuna Government Secondary
- Barrackpore Secondary School

7 Year Secondary

Forty-three (43) schools were classified as 7 year schools in our population, twenty-one (21) of which were chosen as our sample, approximately 48.8% of our total population of this school type (See table 1). *Denominational / Government Assisted* secondary schools were separated from O*ther 7 year secondary schools* (*Government)* in this category (See table 1) for analysis.

13 **Denominational / Government Assisted Schools**

6 male-

- Belmont Boys Secondary School
- Hillview College
- Holy Cross College
- Presentation College Chaguanas

- St. Mary's College
- Trinity College

4 female

- Bishops Anstey High School
- St Joseph's Convent St Joseph
- Naparima Girls' High School
- Lakshmi Girls' Hindu College

3 co-educational

- Cowen Hamilton Secondary School
- Fyzabad Anglican Secondary
- St. Stephen's College

8, **7-Year Government Secondary Schools (Government)**

- Queens Royal College
- Diego Martin Government Secondary
- North Eastern College
- Rio Claro College
- St George's College

- South East POS Government Secondary
- San Fernando Government Secondary
- Woodbrook Government Secondary

Composite

Two (2) of the nine schools registered as Composite schools were classified as SEMP. These two (2) schools did not have any students beyond form four (4) at the time of this study therefore were eliminated from our population reducing it to seven (7) schools. All seven were chosen as our sample as the population size was relatively small. Two key noteworthy characteristics of composite schools are their coeducational nature and rural geographical location. The population excluding the two aforementioned SEMP composite schools was selected.

- Cedros Composite
- Fyzabad Composite
- Gasparillo Composite
- Mayaro Composite
- Moruga Composite
- Tabaquite Composite
- Toco Composite

Secondary Comprehensive

Five (5) schools comprised the population of this school type. Owing to this small population size all five were chosen as our sample. All secondary comprehensives are co- educational.

- Barataria Secondary Comprehensive
- Barrackpore Secondary Comprehensive
- El Dorado Secondary Comprehensive
- Malick Secondary Comprehensive
- San Juan Secondary Comprehensive

Senior Comprehensive

Nine (9) schools comprised the senior comprehensive population. Senior comprehensive schools are all coeducational therefore were not selected by gender in our sample but by geographical location.

- Arima Senior Comprehensive
- Union/Claxton Bay Senior Comprehensive
- Carapichaima Senior Comprehensive
- Mucurapo Senior Comprehensive
- Pleasantville Senior Comprehensive
- Siparia Senior Comprehensive

Senior Secondary Schools

Two (2) schools comprised the population of this school type. Both schools were chosen as our sample due to the small population size.

- Point Fortin Senior Secondary School
- St. Augustine Senior Secondary

Table 1 Population and Sample Statistics by School Type

Type of School	Population	Population Applicable to the Study	Sample	% Sample of Population applicable to study
5 Year Secondary Schools: Non SEMP (11) SEMP and New Denominational (25)	36 (11)	11 (11)	10 (10)	90.9%
7 Year Secondary: Denominational Government Assisted (31) Government 7 year (12)	43 (31) (12)	43 (31) (12)	21 (13) (8)	48.8%
Community	1	1	1	100.0%
Composite: Non SEMP (7) SEMP and New Denominational (2)	9 (7) (2)	7 (7) 0	7 (7) 0	100.0%
Junior Secondary	19	19	19	100.0%
Secondary Comprehensive	5	5	4	100.0%
Senior Comprehensive	9	8	6	75.0%
Senior Secondary	2	2	2	100.0%
Total	124	96	70	72.9%

Specific Procedures (A)

- A letter was written to the Director of School Supervision requesting permission to collect data from the secondary schools. Population figures of students writing CXC, NEC, GCE and A'Level examinations was also requested. A letter was written to each principal of each of the schools in our sample requesting their assistance and permission to conduct and administer questionnaires to their 2002/2003 academic year graduates (See Appendix V). Each sample school was asked to select 30 graduates from various subject areas. In the case of co-ed schools an equal number of male and female students was requested. The correspondence also explained that their assistance was needed to contact these graduates and accommodate the team of Research Officers in their exercise. The questionnaire was enclosed.

  A follow up call was made to each principal where the data collection exercise was discussed and dates and times for the visits were arranged.

Pilot Study (A)

A pilot study was conducted in a seven-year secondary school the Victoria Educational District. Thirty (30) graduates were requested to complete our "Tracer Study of secondary school graduates" questionnaire. Twelve attended the session. Some of our observations were as follows:

- Some of the graduates were hesitant about completing question 13 (See Appendix I)
- Graduates were unsure about career choices
- A check of each questionnaire was important to allow for incomplete information
- An incentive should be offered, as was an inconvenience to some to incur these travelling expenses.

SAMPLE AND SAMPLING PROCEDURES (B)

B. SECONDARY SCHOOL PROFILE: PERFORMANCE OF GRADUATES FOR THE ACADEMIC YEAR 2002/2003

Questionnaire B (Appendix II) captured the performance of students in the CXC, GCE, NEC and A' Level examinations for the academic year 2002/2003 as well as a profile of the secondary school.

Please note the following:

- Our sample of secondary schools consisted of the same schools selected in Sample Design A.
- A Pilot study was not necessary for the 'Tracer Study of secondary school graduates: Secondary Schools' questionnaire because it entailed questions that requested statistics of the school and the performance of their 2002/2003 graduates. The nature of these questions left no room for ambiguity.

Specific Procedures (B)

Included in the letter mentioned in Specific Procedures (A) (See Appendix V), the National Training Agency also requested the principals to complete the enclosed questionnaire entitled 'Tracer Study of secondary school graduates: Secondary Schools' accompanied by instructions to mail or fax upon completion.

SAMPLE AND SAMPLING PROCEDURES (C)

C. JUNIOR SECONDARY SCHOOL LEAVERS FOR THE ACADEMIC YEAR 2002/2003

Information about the junior secondary students with respect to placement and dropouts was obtained in questionnaire C (Appendix III). All junior secondary schools were selected for this study in order to capture their movements from Junior Secondary school and the student '*drop out rates'*. They are listed hereunder.

Junior Secondary Schools

- Barataria Junior Secondary School
- Belmont Junior Secondary School
- Chaguanas Junior Secondary School

- Couva Junior Secondary School
- Marabella Junior Secondary School
- Mt. Hope Junior Secondary School
- Mucurapo Junior Secondary School
- Penal Junior Secondary School
- San Fernando East Junior Secondary School
- Sangre Grande Junior Secondary School
- Williamsville Junior Secondary
- Five Rivers Junior Secondary
- Diego Martin Junior Secondary
- Carapichaima Junior Secondary
- Point Fortin Junior Secondary
- Princes Town Junior Secondary
- Aranguez Junior Secondary
- Siparia Junior Secondary
- Curepe Junior Secondary

- Similar to study B, a Pilot study was not necessary for the 'Tracer Study of secondary school graduates: Junior Secondary Schools' questionnaire because it also entailed questions that simply requested statistics of the school and the performance of their 2002/2003 graduates.

Data Collection Procedures

Four (4) methods were employed in the data collection exercise:

1. The school's administration invited the graduates to complete the questionnaires that were administered by our Research Officers. These graduates were paid a stipend to cover travelling expenses.

2. Secondary school profiles were completed by the Principal or Vice Principal and mailed and/or faxed.

3. Self-addressed stamped envelopes together with the graduate questionnaires were dispatched on our behalf by the schools to some of the sample students. This was done only the cases where students did not turn up and schools did not want to divulge the contact information of these students.

4. Additionally, 29 enumerators were employed and trained in the accurate recording of responses from these graduates. Spot checks were conducted for verification of information collected by Research Officers.

PRESENTATION OF RESULTS

Statistics of the Sample

Gender

Our sample of secondary school graduates comprised of 53% male respondents and 47% female respondents. Figure 1, 2 and 3 clearly illustrates these statistics and a breakdown by ethnicity:

Figure 1 Respondents by Gender

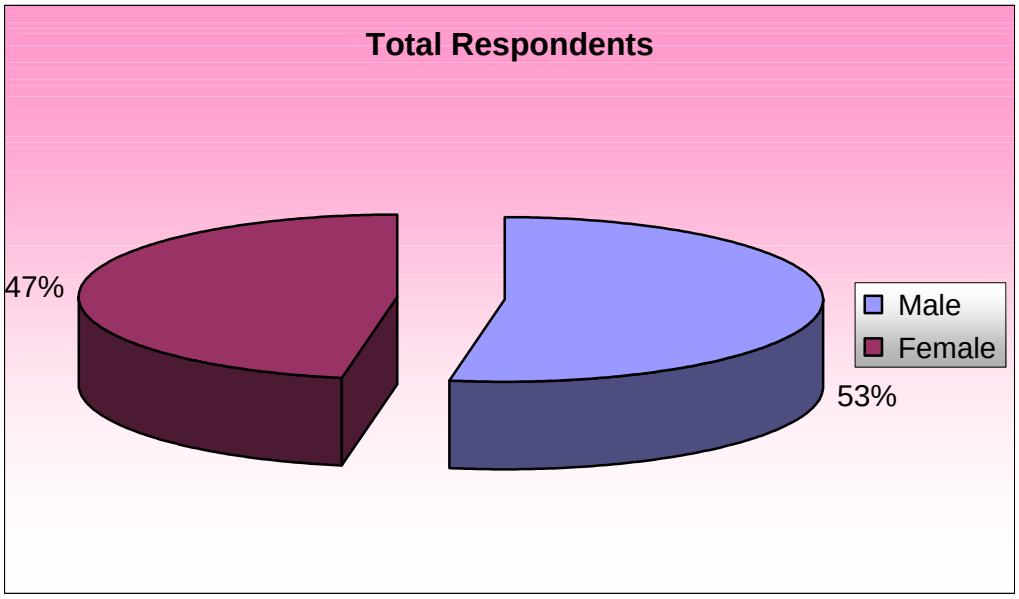


Figure 2 Respondents by Ethnicity

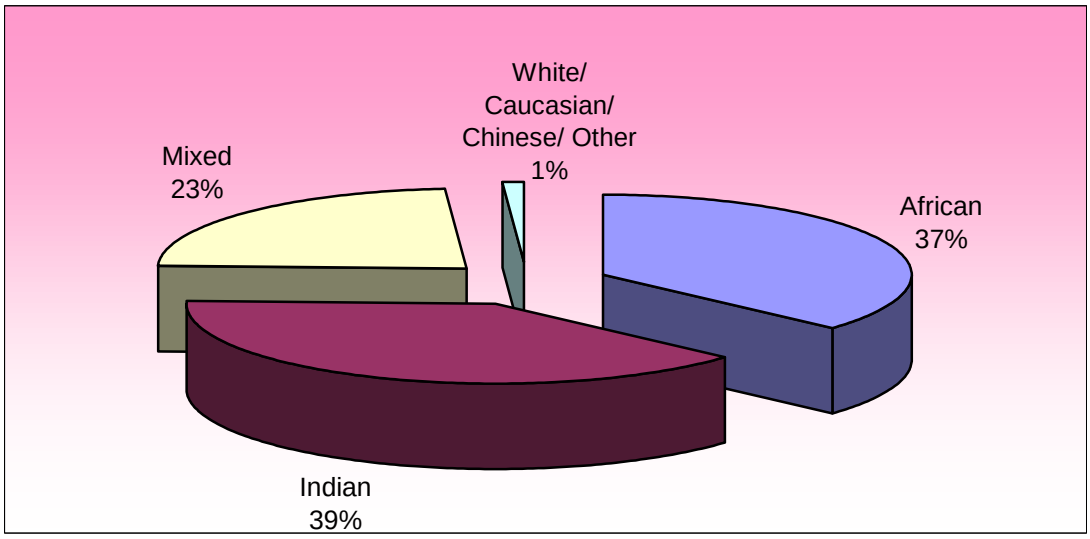


Figure 3 Respondents by Gender and Ethnicity

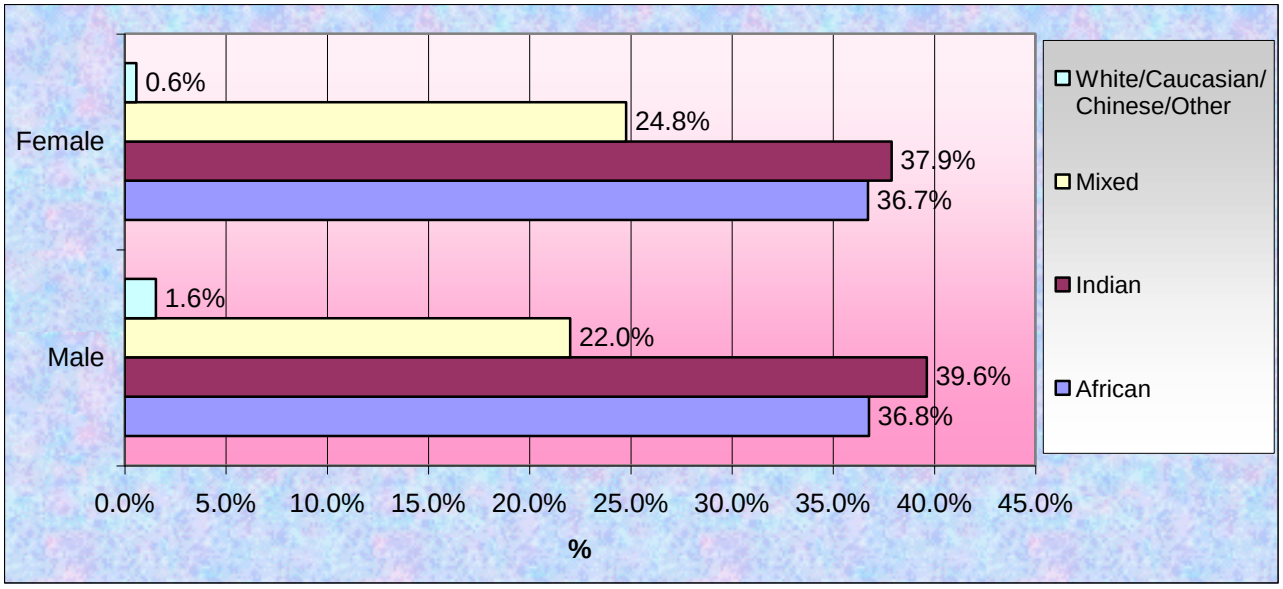
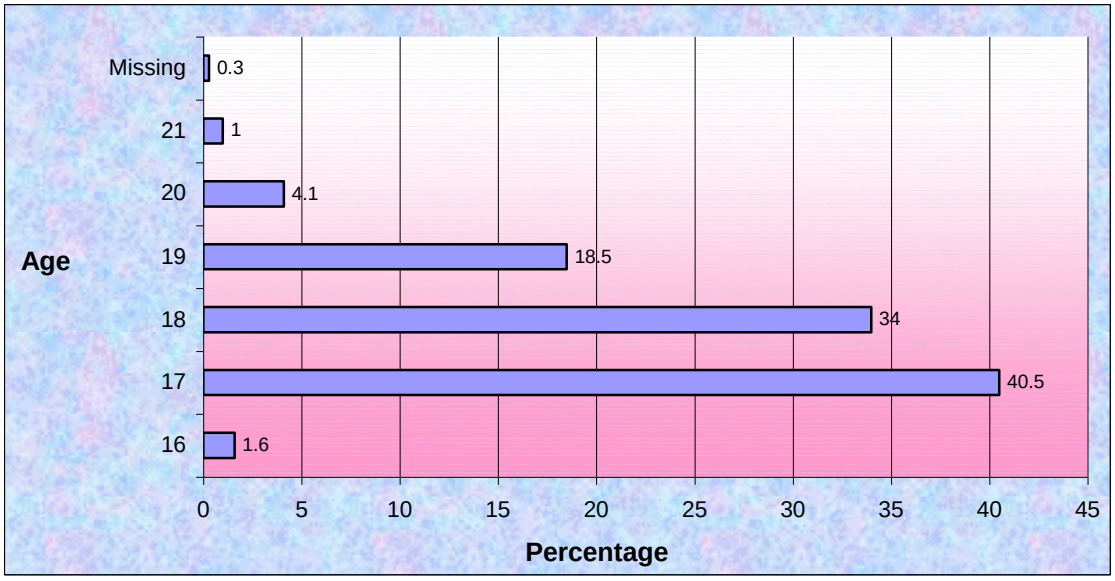


Figure 4 Respondents by Age



DATA ANALYSIS (A)

A. SECONDARY SCHOOL GRADUATES FOR THE ACADEMIC YEAR 2002/2003

There were 729 respondents in our sample from each of the various school types (See table 2). *School type* was an important variable in this study to prove hypotheses H_1 and H_2, which stated this to be an important determinant in the graduates' post secondary path with respect to education.

Table 2. Percentage of Respondents by School Type

Type of School	No. of Students Sampled	Percentage of Students Sampled
Composite	155	20.7%
Five Year Secondary	89	11.9%
Secondary Comprehensive	45	6%
Senior Comprehensive	119	15.9%
Senior Secondary	46	6.1%
Government Assisted/Denominational	175	26.1%
Government Seven Year	100	13.3%
Total	**729**	**100%**

The path of these respondents subsequent to their secondary level education were classified into five (5) categories based on their responses namely ***Tertiary, TVET, Post Secondary, CXC Repeater and Other***. Our findings illustrated the following statistics about the distribution of these respondents. For ease of analysis we refer to each post secondary path as an event defined as follows:

Event (A) – Graduates pursuing tertiary training

Event (B) – Graduates pursuing TVET

Event (C) – Graduates pursuing post secondary training

Event (D) – Graduates repeating the CXC Examination

Event (E) – Graduates pursuing other training

Event (F) – Graduates employed

Event (G) – Graduates not employed

Event (H) – Graduates employed and not pursuing any education or training

Event (I) – Graduates not employed and not pursuing any education or training

It is important to note that the number of respondents for each of the above events does not add up to our total respondents of 729 because the above events are not mutually exclusive. The following cases accounted for this discrepancy:

Event (A) $\cap$ Event (F)

Event (B) $\cap$ Event (F)

Event (B) $\cap$ Event (G)

Event (C) $\cap$ Event (G)

Event (G) $\cap$ Event (G)

Event (D) $\cap$ Event (C)

1. Distribution of Graduates

The following sections generally analyse the path of graduates to the various post secondary options. They specifically illustrate trends of graduates from various types of schools with respect to their post secondary choices. Sociological factors that have contributed to these choices are also included to gain a clear understanding of these trends.

Table 3 below illustrates where all our respondents from each school type proceed subsequent to their Secondary School education. Table 4 was generated using the modal respondents of 175 (See table 3) as a base to represent respondents from all school types in order to compare the proportion of respondents in each category 1 to 7 by school type.

Table 3 Distribution of Respondents by School Type

SCHOOL TYPE	(1) TERTIARY	(2) TVET	(3) CXC REPEATER	(4) POST SECONDARY	(5) OTHER	(6) EMPLOYED / NO TRAINING	(7) NOT EMPLOYED / NO TRAINING	(8) TOTAL
Composite	9	18	42	25	14	15	33	156
5 Year Secondary	6	2	39	8	13	11	13	92
Secondary Comprehensive	5	6	9	0	11	4	10	45
Senior Comprehensive	12	12	19	9	12	30	26	120
Senior Secondary	7	6	9	0	4	5	15	46
Denominational / Gov't Assisted	72	7	11	14	11	25	35	175
Gov't 7 Year	14	7	16	10	19	12	22	100
Total	**125**	**58**	**145**	**66**	**84**	**102**	**154**	734
%	**17.1**	**8.0**	**19.9**	**9.1**	**11.5**	**14.0**	**21.1**	**100**

Table 4. Distribution of Respondents by School Type (Percentage)

SCHOOL TYPE	(1) TERTIARY	(2) TVET	(3) CXC REPEATER	(4) POST SECONDARY	(5) OTHER	(6) EMPLOYED / NO TRAINING	(7) NOT EMPLOYED / NO TRAINING	(8) TOTAL
Composite	10.08	20.16	47.04	28	15.68	16.8	36.96	175
5 Year Secondary	11.4	3.8	74.1	15.2	24.7	20.9	24.7	175
Secondary Comprehensive	19.45	23.34	35.01	0	42.79	15.56	38.9	175
Senior Comprehensive	17.52	17.52	27.74	13.14	17.52	43.8	37.96	175
Senior Secondary	26.6	22.8	34.2	0	15.2	19	57	175
Denominational / Gov't Assisted	72	7	11	14	11	25	35	175
Gov't 7 Year	24.5	12.25	28	17.5	33.25	21	38.5	175
Total	**181.55**	**106.87**	**257.09**	**87.84**	**160.14**	**162.06**	**269.02**	1225

Table 5 Comparison of Respondents by School Type (Percentage)

SCHOOL TYPE	(1) TERTIARY	(2) TVET	(3) CXC REPEATER	(4) POST SECONDARY	(5) OTHER	(6) EMPLOYED / NO TRAINING	(7) NOT EMPLOYED / NO TRAINING	(8) TOTAL
Composite	5.6	18.9	18.3	31.9	9.8	10.4	13.7	14.3
5 Year Secondary	6.3	3.6	28.8	17.3	15.4	12.9	9.2	14.3
Secondary Comprehensive	10.7	21.8	13.6	0.0	26.7	9.6	14.5	14.3
Senior Comprehensive	9.7	16.4	10.8	15.0	10.9	27.0	14.1	14.3
Senior Secondary	14.7	21.3	13.3	0.0	9.5	11.7	21.2	14.3
Denominational / Gov't Assisted	39.7	6.6	4.3	15.9	6.9	15.4	13.0	14.3
Gov't 7 Year	13.5	11.5	10.9	19.9	20.8	13.0	14.3	14.3
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Secondary School Graduates pursuing Tertiary Training

Tables 4 and 5 above illustrates where all our respondents from each school type proceed subsequent to their secondary school education. Government assisted/ Denominational secondary schools had the highest percentage of graduates furthering their studies at the tertiary level. Of all students attending tertiary institutions 39.7% came from this school type (See table 5). Graduates from composite schools had the lowest proportion of students attending Tertiary institutions (5.6%), significantly lower than that of the former school type. The difference in curriculum of these school types can clearly explain this. Government assisted/ Denominational secondary schools focus only on academics only whereas Composite schools offer a pre tech and technical / vocational option of study which is usually the most popular course of study chosen by students in this school type.

Secondary School Graduates pursuing TVET Training

The top three school types with graduates furthering their studies in TVET were clearly seen in Secondary Comprehensives, Senior Secondary and Composite Schools with 21.8%, 21.3% and 18.9% respectively. The Secondary Comprehensives and Composite schools both offer, in addition to academics, pre technical and technical / vocational areas of study. The Senior Secondary schools offer craft subjects as well as academics. This could account for the choice by these graduates to further their studies in TVET.

Secondary School Graduates pursuing Post Secondary but not Tertiary Training

31.9%, a significant proportion of Post Secondary students, came from Composite schools. The Post Secondary category mainly comprised of self-enhancement courses such as a certificate in Computer Literacy, Secretarial Work or any Certificate of Participation in various areas such as Marketing. It is important to note that Post Secondary studies can be a stepping stone to tertiary studies or to enhance the employability of the graduate. Another main observation was that no respondents from Secondary Comprehensive or Senior Secondary schools went on to Post Secondary training. Most of the Secondary Comprehensive graduates either went on to A' Levels in other institutions, were looking for employment and not continuing any studies or repeating CXC examinations for better grades. No other major observations were noted.

Secondary School Graduates repeating CXC

28.8% of CXC repeaters (See table 5), a notable proportion in comparison with the other school types, were accounted for by Government 5-year Secondary Schools graduates followed by the Composite Schools with 18.3%. Denominational / Government Assisted had the least proportion of graduates repeating CXC examinations. The first mentioned school type was almost seven times that of the last. From these statistics one can deduce that students of Denominational / Government Assisted schools generally perform better than other school types (See study B table 18 for further evidence).

Secondary School Graduates pursuing Other Training

The category '*Other Training*' included respondents who pursued A' Levels at other institutions subsequent to their CXC Examinations. 47 of the 84 respondents fell into this category. This accounts for 56% of respondents in other training. Of the remaining 44%, 4% were currently doing Scholastic Aptitude Test (SAT's), 33% did not state the 'other training' presently being pursued and 7% could not be contacted to clarify their responses. Graduates from Senior Comprehensives accounted for the major proportion (27%) of this category, most of whom, upon further investigation, were repeating A'Levels.

Secondary School Graduates Employed

165 respondents (22%) were employed however some of these respondents were also pursuing Tertiary and TVET training. Further investigation illustrated that 102 of these 165 respondents (i.e. 62%) were not pursuing any training simultaneously with employment. Using Table 5 for comparison by school types of these respondents one major observation was noted. A considerable proportion of respondents (27%), in comparison to the other school types, graduated from Senior Comprehensive schools. These graduates went directly to the 'world of work' upon graduation without furthering their studies in any area.

Secondary School Graduates Not Employed

584 respondents were not employed however these respondents were asked to select one of four possible reasons for this status. 366 of these respondents stated that they were students; 150

seeking employment; 6 not intending to seek employment; 30 selected other and 12 did not respond. 154 of these respondents (See Table 3) who were not employed were not pursuing any of the Training specified in this study. Senior Secondary graduates accounted for the majority of this category with 21.2% (See table 5 for comparison), most of whom stated that they were seeking employment.

2. Sociological Factors Affecting the Path of Graduates

The notion was tested that various sociological factors contribute to one's vocation. Social issues that pertained to this study were Parents Highest educational background as this may have influenced the choice of further education of the graduate; Annual household income, number of persons in the household and parents living together for analysis of the household structure.

a. Parents Highest Educational Background

Secondary School Graduates pursuing Tertiary Training

Results indicated that the highest educational attainment of the parents of graduates in our sample affected their post secondary path with respect to training. Upon further analysis of the highest educational attainment of both parents together, findings illustrated that 44.8% (28+16.8) (See table 6) of graduates that pursued a tertiary education had both parents at least obtaining secondary level education and 84% (45.6+38.4) (See table 7) had at least one parent obtaining a secondary level education for the least. Both parents of tertiary students who obtained primary level education only contributed a significantly small percentage of graduates pursuing tertiary studies (3.2%). Our statistics show that the

graduates with parents beyond a Primary level education have a greater probability of furthering their studies at the Tertiary level as seen in tables 6 and 7.

Table 6 Highest Educational Background of **Both** Parents of Graduates Pursuing Tertiary Education

Both Parents Highest Education Attained	No. of Students Pursuing Tertiary Studies	% of Tertiary Respondents
Primary	4	3.2
Secondary	35	28
Tertiary	21	16.8
Other categories e.g either parent with Primary Secondary **OR** Tertiary	65	52
Total	**125**	**100**

Table 7 Highest Educational Background of **Either** Parent of Graduates Pursuing Tertiary Education

Highest Education Attained by Parents of Students Pursuing Tertiary Studies				
	Father	% of Tertiary Respondents	Mother	% Of Tertiary Respondents
Primary	7	5.6	13	10.4
Secondary	57	45.6	67	53.6
Tertiary	48	38.4	37	29.6
Don't Know/No Response	13	10.4	8	6.4
Total	**125**	**100**	**125**	**100**

Secondary School Graduates pursuing TVET Training

25.8% (See table 8) of TVET respondents had both parents with secondary level as their highest educational attainment and 65.5% (See table 9) had at least one parent with Secondary or Tertiary level as their highest educational attainment indicating that the higher the educational attainment of graduates the greater the probability of them furthering their education. An important point to note was the high occurrence of either parent (See table 9) as well as both parents (See table 8) with a secondary level education as their highest educational attainment accounting for the major proportion of graduates pursuing TVET.

Table 8 Highest Educational Background of **Both** Parents of Graduates Pursuing TVET Education

Both Parents Highest Education Attained	**No. of Students Pursuing TVET Studies**	**% of TVET Respondents**
Primary	2	3.4
Secondary	15	25.8
Tertiary	3	5.2
Other categories e.g either parent with Primary Secondary **OR** Tertiary	38	65.6
Total	**58**	**100**

Table 9 Highest Educational Background of **Either** Parent of Graduates Pursuing TVET Education

Highest Education Attained by Parents of Students Pursuing TVET Studies				
	Father	**% of TVET Respondents**	**Mother**	**% Of TVET Respondents**
Primary	10	17.2	7	12.1
Secondary	24	41.4	29	50
Tertiary	10	17.2	9	15.5
Don't Know/No Response	14	24.2	13	22.4
Total	**58**	**100**	**58**	**100**

Secondary School Graduates pursuing Post Secondary Training

It was evident from tables 10 & 11 that the majority of graduates pursuing post-secondary studies had parents with secondary education as their highest educational attainment. Also, this category (*Post Secondary*) was the only avenue of training where Primary, as the highest educational attainment of parents did not vary as significantly from Secondary and Tertiary as that of *Tertiary* and *TVET*.

Table 10 Highest Educational Background of **Both** Parents of Graduates Pursuing Post Secondary Education

Both Parents Highest Education Attained	No. of Students Pursuing Post Secondary Studies	% of Total Post Secondary Respondents
Primary	8	12.1
Secondary	15	22.7
Tertiary	3	4.6
Other categories e.g either parent with Primary Secondary **OR** Tertiary	40	60.6
Total	**66**	**100**

Table 11 Highest Educational Background of **Either** Parent of Graduates Pursuing Post Secondary Education

Highest Education Attained by Either Parent of Students Pursuing Post Secondary Studies				
	Father	**% of Post Secondary Respondents**	**Mother**	**% of Post Secondary Respondents**
Primary	14	21.2	17	25.8
Secondary	27	41	33	50
Tertiary	15	22.7	8	12.1
Don't Know/No Response	10	15.1	8	12.1
Total	**66**	**100**	**66**	**100**

The impact of parents' highest educational attainment on CXC Repeaters and graduates pursuing Other Training was not analysed because no relationship could be made on the former variable and the incidence of graduates furthering their studies since these students were not beyond secondary level. The above analysis generally indicates that the higher the educational attainment of the parents the greater the probability of students pursuing studies at tertiary level. The majority of students pursuing TVET and Post Secondary have parents with highest educational attainment as completion of Secondary schooling.

b. Parents Living Together

An analysis of respondents' living conditions was also examined. This was further disaggregated by gender and whether the respondents pursed tertiary, TVET, post-secondary, other studies or repeated CXC.

Secondary School Graduates pursuing Tertiary Training

For those students who went ahead and pursued tertiary level studies 89% of their parents were living in the same household; of these 40% were male respondents' parents and 48.8% were female respondents' parents. 11% of the respondents' parents were not living in the same household and this accounted for 5.6% for both male respondent's parents and female respondent's parents (Table 12). While the female responses outnumbered the males' by 8.8%, for those parents living in the same household, both had the same number of responses for those parents who were not living in the same household.

Table 12 Percentage of Graduates pursuing Tertiary Education Whose Parents are/ are NOT Living Together

	Frequency		% of Tertiary Respondents	
	LT	**NLT**	**LT**	**NLT**
Male	50	7	40	5.6
Female	61	7	48.8	5.6
Total	**111**	**14**	**88.8**	**11.2**

LT – Living together

NLT – Not living together

Secondary School Graduates pursuing TVET Training

Table 13 shows the responses for those students pursuing TVET studies. 68.9% of the parents of TVET students are still living in the same household; of these 44.8% were male respondents' parents and 24.1% are female respondents' parents. 31% of the respondents' parents were not living in the same household (22.4% male respondents parents and 8.6% female respondents parents).

Table 13 Percentage of Graduates pursuing TVET Education Whose Parents are/ are NOT Living Together

	Frequency		% of TVET Respondents	
	LT	**NLT**	**LT**	**NLT**
Male	26	13	44.8	22.4
Female	14	5	24.1	8.6
Total	**40**	**18**	**68.9**	31

Secondary School Graduates pursuing Post Secondary Training

For those students who were pursuing post-secondary studies, 65.1% of the respondents' parents were still living in the same household while 34.8% of the respondents' parents were not living in the same household. Of those 34.8% of male respondents' parents and 30.3% of the female respondents' parents were living in the same household while 13.6% of the male respondents parents and 21.2% of the female respondents parents were no longer living in the same household (Table 14).

Table 14 Percentage of Graduates pursuing Post Secondary Education Whose Parents are/ are NOT Living Together

	Frequency		% of Post Secondary Respondents	
	LT	NLT	LT	NLT
Male	23	9	34.8	13.6
Female	20	14	30.3	21.2
Total	**43**	**23**	**65.1**	**34.8**

Secondary School Graduates repeating CXC

67.6% of the CXC repeaters respondents' parents were still living in the same household while 32.4% of the respondents' parents were not living in the same household. Of these both male and female respondents' parents were 33.8% still living in the same household and 13.1% and19.3% for male and female respondents' parents respectively were not living in the same household (Table 15).

Table15 Percentage of Respondents Repeating CXC Whose Parents are/ are NOT Living Together

	Frequency		% of CXC Respondents	
	LT	NLT	LT	NLT
Male	49	19	33.8	13.1
Female	49	28	33.8	19.3
Total	**98**	**47**	**67.6**	**32.4**

Secondary School Graduates pursuing 'Other Training'

Other training included those students who went on to pursue A' levels, SAT and persons who did not specifically state their post-secondary path. 67.9% of the respondents' parents were still living in the same household while 32.1% of the respondents' parents were not living in the same household. Of these, 22.6% of the male respondents' parents and 45.2% of the female respondents' parents were still living in the same household and 11.6% of the male respondents' parents and 20.2% of the female respondents' parents were not living in the same household (Table 16).

Table 16 Percentage of Graduates pursuing Other Training Whose Parents are/ are NOT Living Together

	Frequency		% of 'Other Training' Respondents	
	LT	NLT	LT	NLT
Male	19	10	22.6	11.9
Female	38	17	45.2	20.2
Total	**57**	**27**	**67.9**	**32.1**

c. Household Income

Household income which was deemed to be an important variable in the path of graduates subsequent to their secondary education could not be used in this study as many of our respondents preferred not to reveal this information. There were also cases where the annual household income stated was not consistent with other factors that gave an indication of the amount such as the occupation of parents.

DATA ANALYSIS (B)

B. SECONDARY SCHOOL PROFILE: PERFORMANCE OF GRADUATES FOR THE ACADEMIC YEAR 2002/2003

The performance of students from various school types may provide a clearer understanding of the needs of the secondary education system to ultimately increase access to higher levels of training.

This study indicated that students in schools other than 7 year Government and Government-Assisted are under-performing at the various examination types with particular reference to the high failure rates for NEC Craft Level and CXC Pre Tech examinations. These high failure rates would have an impact on access to TVET as can be observed from study A where most of the graduates pursuing TVET emerge from schools offering NEC and CXC Pre Tech certification. Statistics of the performance of the secondary schools in our sample are presented in the following sections.

1. Profile of Sample By School Type

Out of the 71 schools selected, forty-one (41) schools returned completed questionnaires, giving an overall response rate of 58%. The sample was comprised of Seven-Year Secondary Schools; both Government and Government Assisted, Junior Secondary Schools, Composite Schools, Five-Year Secondary Schools and Comprehensive Schools (Senior and Secondary). The individual schools were grouped according to eight (8) categories or types, shown in Table 17 below. Of the forty-one schools that responded, 27% were 3-year Junior Secondary schools, 15% were Composite schools, 12% were 5-

year secondary schools, 5% were Secondary Comprehensive schools, 7% were Senior Comprehensive schools, and 34% were 7-year secondary schools.

The responding schools comprised of 11% male only schools, 7% female only schools and 82% coeducational schools.

Table 17: Sample by School Type

School Type	Population	Sampled	Responded	Response Rate (%)
Community	1	1	0	0
Composite: Non SEMP (7) SEMP and New Denominational (2)	9	7	6	86
Five Year Secondary: Non SEMP (11) SEMP and New Denominational (25)	36	10	5	50
Junior Secondary	19	19	11	58
Secondary Comprehensive	5	4	2	50
Senior Comprehensive	8	6	3	50
Senior Secondary	2	2	0	0
Seven Year Secondary	44	22	14	64
TOTAL	**124**	**71**	**41**	

2. Student Performance by School Type and Exam Type

CXC PERFORMANCE

Tables 18 and 19 show the students' 2003 examination performance, grouped by school type. The percentage of students who sat the exams and earned full certificates in CXC Ordinary level examinations five (5) or more CXC ordinary level passes (General proficiency grades I, II, III and/or basic proficiency grade I) are presented in the second column of the table 18. The results showed that the students of 7-

year schools (both Government and Government-Assisted) tend to have the highest rates of full certificate passes.

A'LEVEL PERFORMANCE

The percentages of students who sat the exams and earned more that two (2) Advanced level passes (grades A-E) are presented in the fourth column of Table 18. The results showed that Government-assisted / Denominational schools tend to have the highest pass rates at the Cambridge Advanced level exams. As the minimum requirement for admission into tertiary education institutions is 2 Advanced level passes, it follows that these students will be the main applicants for entry into the University of the West Indies and other universities and colleges abroad.

Table 18: Average Percentage of Students Sitting Exam and Earning Full Certificates by School Type

School Type	% Of Students Earning 5 Or More CXC Passes	% Of Students Who Passed GCE O-Level Exams	% Of Students Earning 2 Or More A Level Passes
5 Year Secondary Schools	52.3	38.2	n/a
7 Year Secondary Schools - Government	69.3	40.0	88.0
7 Year Secondary Schools - Assisted	78.2	73.0	87.1
Composite Schools	40.1	34.5	22.7
Secondary Comprehensive	37.6	45.4	49.2
Senior Comprehensive Schools	32.9	27.1	29.6

CXC PRE TECH AND NEC PERFORMANCE

The table below (Table 19) shows those schools that provide CXC Pre-Technician, NEC (craft level and Pre-Technician level) vocational and technical subjects and the percentage of students who received a full certificate in these subjects from the total number of students who sat those examinations.

Table 19: Average Percentage of Students Sitting Exam and Earning Full Technical Certificates by School Type

School Type	CXC PreTech Full Certificate (%)	NEC (Craft Level) Full Certificate (%)	NEC PreTech (General Draughting) Passed
Composite Schools	13.1	23.8	n/a
Secondary Comprehensive	n/a	11.0	45.5
Senior Comprehensive Schools	9.7	4.8	74.0

3. Student Performance by Gender and Exam Type

From the schools sampled, there were more female students (3,018) signing up for CXC ordinary level examinations than male students (2,517). More girls also sat the CXC exams than boys and female students generally out-performed males in technical and non-technical subjects, regardless of school type. (See Table 20, 21 and 22 below).

At the GCE Ordinary Level subjects however the males outperformed the female students. 63% of the males passed as compared to 46% of female students who passed (see Table 20).

Our statistics also indicated that males also performed well at GCE A' Level subjects. 384 (80%) earned at least two A' Level passes from a total of 479 who sat the exam while 684 (78%) from a total of 879 female students earned at least two A' Level passes.

Table 20: Total Examination signup numbers and pass rates by Gender

Examination	Male Students	Female Students	Total
CXC			
Signed Up for CXC Exams	2,639	3,018	5,657
Sat CXC exams	2,566	2,969	5,535
Earned full CXC certificate	1,094	1,719	2,813
Earned less than 5 CXCs	1,276	1,143	2,419
CXC Pre-Technician			
Signed Up for CXC Pre Tech Courses	489	435	924
Sat CXC PreTech exams	460	421	881
Received full certificate for CXC Pretech	51	106	157
Did not receive full CXC Pre Tech certificate	408	307	715
GCE Ordinary Level			
Signed up for GCE O-Level exams	685	590	1,275
Sat GCE O-level exams	680	511	1,191
Passed GCE O-Level exams	434	276	710
Failed GCE O-level exams	248	326	574
Signed up for Advanced level exams	481	882	1,363
GCE Advanced Level			
Sat Advanced level exams	479	879	1,358
Earned at least 2 A-level passes	384	684	1068
Earned less than 2 A-level passes	71	106	177
NEC Craft Level			
Signed up for exams	425	247	672
Sat these examinations	385	228	613
Received full certificates	22	37	59
Did not receive full certificates	363	191	554
NEC Pre-Technician Level			
Signed up for exams	33	3	36
Sat these exams	31	3	34
Passed exams	19	3	22
Failed exams	12	0	12
Total	13,735	15,084	28,819

4. Comparison of Performance by Gender and School Type

An average of students was calculated in Table 27 and 28 for comparison in each school type since they each had varying response rates. Based on the sample that was collected from various school types, it appeared that the female students generally outperformed the males in the various school types.

Table 21: Percentage of Male Students Earning Full Certificates, by School Type

	Earned 5 or more CXC passes (%)	**Earned PreTech Passes (%)**	**Earned GCE passes (%)**	**Earned 2 or more A Level passes (%)**	**Earned NEC passes (%)**	**Earned NEC PreTech (%)**
5 Year Secondary Schools	39.9	n/a	41.1	n/a	n/a	n/a
7 Year Secondary Schools:						
Government	59.7	100.0	18.7	83.6	n/a	n/a
Government-Assisted	73.6	n/a	75.9	84.4	n/a	n/a
Composite Schools	25.1	7.7	40.4	20.0	23.1	n/a
Secondary Comprehensive	26.2	n/a	60.0	44.1	7.1	40.0
Senior Comprehensive Schools	17.0	3.4	31.0	34.5	2.1	71.4

Table 22: Percentage of Female Students Earning Full Certificates, by School Type

School Type	**Earned 5 or more CXC passes (%)**	**Earned PreTech Passes (%)**	**Earned GCE passes (%)**	**Earned 2 or more A Level passes (%)**	**Earned NEC passes (%)**	**Earned NEC PreTech (%)**
5 Year Secondary Schools	62.7	n/a	37.9	n/a	n/a	n/a
7 Year Secondary Schools						
Government	75.7	100.0	69.2	90.3	n/a	n/a
Government-Assisted	77.2	n/a	82.2	85.6	n/a	n/a
Composite Schools	50.9	22.2	32.5	24.1	61.7	n/a
Secondary Comprehensive	47.4	n/a	40.9	51.1	24.2	100.0
Senior Comprehensive Schools	43.3	15.1	25.5	27.2	10.1	100.0

DATA ANALYSIS (C)

C. JUNIOR SECONDARY SCHOOL LEAVERS FOR THE ACADEMIC YEAR 2002/2003

1) Profile of Junior Secondary Schools

The study sought to assess the drop out rates among the Junior Secondary schools. Students were deemed to have dropped out if they ceased attending secondary school during the academic year 2002/2003 and had been absent from school for the whole term without a reasonable explanation. This definition does not include students who had transferred to another school during the academic year.

It should be noted that these students, if dropped out of the system now, may not move on to CXC, NEC or A' Level examinations leading to unqualified young men and women in society. Chances are reduced for an opportunity for further education at the Tertiary or TVET level. This may have a negative social and economic impact on our country.

Twelve (12) of nineteen (19) Junior Secondary schools responded. These schools reported a total of 5,423 students (2,650 boys and 2,773 girls) passing through their establishments and being placed into secondary schools as a result of the 14+ examinations for the academic year 2002/2003 (See table 23 below).

Table 23: Enrollment and placement numbers, by Junior Secondary

Junior Secondary	Current Enrollment	Placed into 5-7Yr Schools	Dropped Out
Aranguez Junior Secondary	1,029	519	51
Barataria Junior Secondary	1,568	547	12
Belmont Junior Secondary	1,153	553	0
Curepe Junior Secondary	1,620	459	0
Diego Martin Junior Secondary	1,249	464	15
Five Rivers Junior Secondary	1,321	539	9
Marabella Junior Secondary	800	252	57
Mt. Hope Junior Secondary	550	390	6
San Fernando East Junior Secondary	1,477	548	0
Sangre Grande Junior Secondary	1,250	431	20
Siparia Junior Secondary	616	334	33
Williamsville Junior Secondary	829	387	47
Total	**13,462**	**5,423**	**250**

2) Drop-out Rates

- From the twelve Junior Secondary schools sampled, a total of 250 enrolled students were reported to have dropped out during the academic year 2002/2003 estimating a drop out rate of approximately 4.41%. Of these, 158 were boys and 92 were girls. The modal age of the students who dropped out of school, regardless of gender, is age 16. Of the boys who dropped out, 58% were between the ages of 16-17, 18% were between ages 14-15, 16% were under age 14 and 8% were over age 17. Of the girls who dropped out, 49% were between the ages of 16-17, 24% were between ages 14-15, 23% were under age 14 and 4% were over age 17 (See Table 24).

Table 24: Percentage of 'Drop outs' by Age

Age	Male	Female
Under 14	16	23
14-15	18	24
16-17	58	49
Over 17	8	4
Total	**100**	**100**

CONCLUSION

- There was a significant percentage of respondents who were not employed and not pursuing any formal training (21.1%). Further research to ascertain the reasons for this post secondary status should be done however existing programmes can be promoted to reduce this percentage. This would be discussed further in our recommendations. Graduates pursuing TVET accounted for the least amount of our sample (8%). This may be as a result of the high failure rates in the school types offering NEC and CXC Pre Tech subjects.

  The following table summarises the distribution of respondents in the various post secondary paths identified in this study:

Post secondary path	(1) TERTIARY	(2) TVET	(3) CXC REPEATER	(4) POST SECONDARY	(5) OTHER	(6) EMPLOYED / NO TRAINING	(7) NOT EMPLOYED / NO TRAINING	(8) TOTAL
%	17.1	8.0	19.9	9.1	11.5	14.0	21.1	100

Though these are fair estimates on the total population three categories that may account for **leakages** of these graduates could not be estimated due to the unavailability of data specific to this study. They are as follows:

i. Migration of 2002/2003 graduates
ii. Death of 2002/2003 graduates
iii. Incarceration of 2002/2003 graduates

- School Type has been found as a determinant of the path of graduates with respect to further training subsequent to secondary school education. The different curricula offered in the various

school types can account for this as we clearly see graduates of Government Assisted/ Denominational schools moving on to Tertiary studies that focus mainly on academics and graduates from Secondary Comprehensives, Senior Secondary and Composite schools furthering their studies in TVET. The latter group of schools offer the option of Pre tech, Technical/Vocational and Crafts as alternative areas of study.

- Parents' highest educational attainment was also another factor that affected the fate of secondary school graduates with respect to further training. Our statistics show that graduates with parents beyond Primary level education (i.e. Secondary and Tertiary) have a greater probability of furthering their studies at the Tertiary and TVET level. The majority of graduates doing Post Secondary Courses had parents with Secondary level education as their highest attainment and not Tertiary. This was the only case where Primary attainment did not vary significantly from Secondary and Tertiary and was actually almost equivalent to the number of parents with Tertiary level education.

- The majority of respondents in the various training categories stated their parents were living together. Graduates pursuing Tertiary studies had the highest percentage within their category of parents living together, significantly higher than all other categories. There is clear positive relationship between parents living together and graduates pursuing a tertiary education than CXC or Post Secondary. However, no conclusive statements can be made for the effect of this variable alone on post secondary choices. This would require a more qualitative research.

- Assisted / Denominational secondary schools generally outperformed the other school types in academics with the exception of the A' Level examination where mainly academic 7 year Secondary Schools (Government) outperformed this school type though very insignificantly (approximately1%).

- Females outperformed males at CXC, GCE Advanced and NEC Craft. Males outperformed females at GCE O'Level and NEC Pre Tech. No conclusive statements can be made with respect to gender given our sample.

- From our Junior Secondary School respondents, an alarming number of 250 students were reported to have dropped out during the academic year 2002/2003 estimating the drop out rate for the population of Junior secondary school leavers to be 4.41%. This indicates that a significant number of students who dropped out the system may not have gone beyond this level of education.

RECOMMENDATIONS

The Tracer Study of secondary school graduates attempted to evaluate the post secondary path of secondary school graduates for the academic year 2002/2003. Results have indicated certain trends and observation about the education system and trends in post secondary choices. The following points illustrate ways to reform of the education system, based on the research, to achieve greater access to TVET and tertiary training.

- An observation was made that students generally under performed at various examination types and there were particularly high failure rates for NEC Craft Level and CXC Pre Tech examinations in schools other than 7 year Government and Government Assisted Schools. Students therefore need to be educated in alternative routes to further their TVET studies such as the attainment of the Trinidad and Tobago National Vocational Qualification (TTNVQ) in their respective occupational area.

- 21.1% of our graduates were not employed and not furthering their studies at the moment in any of the categories identified in this study. These graduates were actively seeking employment or dropped out of the labour market. The various programmes implemented by government that promote the 'apprentice type' system where participants get an opportunity to work, learn, obtain a qualification and financial assistance, should be promoted in schools.

- Owing to the high '*drop out rate*' discovered from the sample of twelve respondent schools, a further study could also be done on Junior secondary school leavers. An increase in this response rate to the total population can indeed prove to be an important variable for analysing the path of all junior secondary school leavers and any indicators that may affect the number of graduates furthering studies in any training area. There should be a continuous review of Junior Secondary schools with respect to 'drop outs'. Obtaining possible reasons for students 'dropping out' would also help in implementing measures for reform.

- A further analysis is recommended on this study to accurately capture additional variables that have contributed to the path of secondary school graduates such as the *parents' occupation* in **conjunction** with *household income*. Unfortunately, wages of all the occupations stated by the graduates could not be attained before the completion of this study. These wages would have categorised the occupations of parents and a give better indicator on the reliability of household income for a more comprehensive analysis.

- A follow up tracer study should be pursued in 2006/2007 and 2009/2010 to effectively investigate how they have performed in the labour market, what training they have since received and relate their jobs with their earlier education and other variables.

- Studies could also be done on the leakages of students to capture the percentages that have:

  (a) migrated (b) died (c) incarcerated

There may be factors such as socio-economic or educational factors that may show relationships with graduates that have migrated or have been incarcerated. A comprehensive analysis of 'where' and 'why' students go 'where they go' is essential for reform leading to the development of our human resources and ultimately our country.

- In order to increase the participation rate at tertiary level education more focus should be placed on those schools other than the 7 year Government and Government-Assisted schools. Students of the Composite, 5 year secondary, secondary comprehensive and senior secondary should be prepared in such a way that they can gain access into the Technical/Vocational institutions since their pass rate at examination are low. Bridging and transition courses should be offered and encouraged for these graduates to gain entry to the University of Trinidad and Tobago (UTT), the University of the West Indies (U.W.I) and other tertiary providers.

- Students who perform well at CXC and A' Level courses should also be encouraged to pursue Technical/Vocational courses as studies have shown that these students will also perform well in these areas. Their parents should be a part of this process in order for everyone to gain insight into the benefits of pursuing careers in these areas as well as having a broader understanding that there are other beneficial alternatives available.

BIBLIOGRAPHY

Jean Griffith, Supreme Consulting Services*: To handle life's challenges- A tracer study of Servol's Adolescent Development Programme in Trinidad. Feb 2002.*

National Institute of Higher Education Research Science and Technology. - Port of Spain [Trinidad and Tobago] : NIHERST, August 2002*: Survey of engineering graduates 2001*

http://www.dikti.org/tpsdp/tor/TracerStudy.PDF

http://www.uni-kassel.de/wz1/f_allepro/f_abs003.htm

http://site176.ehosringbiz.net/HEARTNTA/heart4/P2D2%20Intranet/tracer_studies.htm

http://www.srhe.ac.uk/southafrica/abstracts/SYMSchomburgSawyer.htm

http://www.ilocarib.org.tt/infsources/youth_employment/youth4.html