



**Achieving Inclusion:
Transforming the Education System
of Trinidad and Tobago**

Final Report

Inclusive Education Component of the Seamless Education Project

**Prepared for
Trinidad and Tobago
Ministry of Education**

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Abbreviations

COG	Classroom Observation Guide
CXC	Caribbean Examination Council
ECCE	Early Childhood Care and Education
EFA	Education for All
ESL	English for speakers of other languages
HI	Hearing impaired
ICT	Information Communication Technology
IE	Inclusive education
IEP	Individualised Education Programmes
JJS	Junior secondary school
MOE	Ministry of Education
NC Primary	Non-Cluster Primary
NGO	Non-governmental organisation
ODP	Organisation of disabled persons
SCIES	School and Classroom Inclusive Education Survey
SEN	Special education needs
SSC	Senior secondary schools
SSSD	Student Support Services Division
TAT	Teacher Assistance Team
TESOL	Teaching English to Speakers of Other Languages
T&T	Trinidad and Tobago
UNESCO	United Nations Education, Scientific and Cultural Organisation
VI	Visually impaired

Table of Contents

	page
Acknowledgements	2
Abbreviations	3
Executive Summary	5
Introduction	9
Chapter 1. System Transformation: Development of Model Schools	12
Chapter 2. Assessment and Early Intervention	28
Chapter 3. Professional Development and Curriculum Differentiation	34
Chapter 4. Monitoring and Evaluation	48
Chapter 5. Socialisation and Outreach	54
Chapter 6. Cost-Effectiveness Analysis and Facilities Upgrades	63
References	68
Annex A. MW&A Five-Phase Plan for Inclusive Education Study	70
Annex B. Instruments for Data Collection	71
Annex C. Incidences of Disability in Trinidad and Tobago	73
Annex D. Findings: National Survey Data	78
Annex E. Findings: School and Classroom Data	84
Annex F. Information Communication and Technology	100
Annex G. Education of the Deaf, Hard of Hearing, and Hearing Impaired	108
Annex H. Professional Development and Training Plan	123
Annex I. Gifted Programme Standards	126
Annex J. Monitoring and Evaluation	128
Miske Witt and Associates Research Instruments (CD-ROM)	

Executive Summary

The Trinidad and Tobago Ministry of Education (MOE) and the Student Support Services Division (SSSD) of the Ministry seek to develop a Seamless Education System that provides inclusive education for all students of the nation. To assist the MOE and the SSSD in these efforts, Miske Witt and Associates conducted research on inclusive education in Trinidad and Tobago from January 2007 to January 2008. This Final Report provides a summary of the data analysis and offers recommendations for strategies to support activities that will enable the MOE to succeed in its inclusive education efforts.

The recommendations are based on a comprehensive analysis of data collected for this report and are presented according to the six major components of the study:

1. Assessment and early intervention
2. System transformation: Development of model schools
3. Profession development and curriculum differentiation
4. Monitoring and evaluation
5. Socialisation and outreach and
6. Cost effectiveness analysis and facilities upgrades

Outcomes of the study related to these components include: (1) a demographic profile of student needs; (2) recommendations and a plan of action for systemic change; (3) training plans for pre-service and in-service special and general education personnel; (4) recommendations and a plan of action to build capacity and to provide an effective monitoring and evaluation system; (5) development of a social communication and outreach plan; (6) recommended funding strategies and a plan of action for upgrading schools. For each component, phased steps that the executing unit or ministry will need to take to implement the recommendations are provided over a ten-year period.

Throughout this study, strategies for inclusive education (IE) encompass all students with special education needs (SEN). Specifically, these students include “dropouts, students with learning or other disabilities, students who are gifted and talented, students infected or affected with HIV, students with social, emotional, or behavioural difficulties, and ESL students (English for speakers of other languages).” (Ministry of Education Student Support Services Division. *Understanding Inclusive Education in Trinidad and Tobago*. December 27, 2007.)

To carry out this study, Miske Witt and Associates trained and collaborated with several teams of Trinidad and Tobago (T&T) education professionals to achieve the goal of building local capacity, enhancing sustainability, and ensuring collaboration of key stakeholders. Headed by Miske Witt researchers, these teams collected data from 42 school site-visits in primary and secondary schools across all seven districts of Trinidad and also Tobago. In addition, Miske Witt developed, disseminated, collected and analysed data from a national survey disseminated to 460 primary schools, 150 secondary schools, and 29 special schools. Miske Witt researchers also conducted numerous interviews with heads of agencies, community members, and staff of several ministries.

System Transformation: Development of Model Schools

In collaboration with T&T Ministry of Education, Miske Witt selected 42 schools representing diverse T&T demographics for intensive on-site visits. Results of data collected provided a comprehensive profile of current and projected needs, which will inform the MOE's decision to develop an inclusive education Model School in each of the seven districts and Tobago, based on the current Cluster School Pilot programme.

This comprehensive reform of the system, which is grounded in research and best practices for Inclusive Education, encompasses eight areas: (1) decentralisation policies; (2) finance and resource allocations; (3) attention to access and participation; (4) professional development for principals, teachers, and support personnel, as well as curriculum reform; (5) Universal Human Rights and Inclusive Education policy and legislation; (6) school restructuring and whole-school reform; (7) effective identification and placement strategies; and (8) building capacity and sustainability through NGO, Community, and Multi-Sector Participation

Assessment and Early Intervention

Results of the national survey revealed current conditions and needs, indicating relatively high numbers of both diagnosed and suspected disabilities in T&T schools; i.e., the majority of classrooms will have a student with an emotional/behaviour disorder, and one out of every three classrooms will have a student with a cognitive impairment or learning disability, or one who is gifted and talented.

Miske Witt researchers also developed a diagnostic instrument that was easy to use, inexpensive, and could provide teachers and diagnosticians with general information about students' levels of general academic and cognitive functioning. The instrument was piloted, field tested in selected schools, and has been disseminated for future use.

Professional Development and Curriculum Differentiation

Professional development is an important and necessary component of transforming a system to inclusive education. Based on multiple sources of data the Miske Witt teams collected through the national survey, the SCIES, teacher and other stakeholder interviews and focus group discussions, profiles of knowledge and skills needed for inclusive classrooms were developed. Teacher Education programmes from the University of Trinidad and Tobago and the University of Southern Caribbean were reviewed in detail, highlighting the programme features that will build the capacity of the system to address students' special educational needs. To complement and supplement these programmes in in-service training, a professional development and training programme is proposed for teachers, principals, and support personnel (e.g., special education teachers, school psychologists, speech and language therapists).

Monitoring and Evaluation

Miske Witt researchers reviewed the Education Act, National Special Education Policy and other pertinent legislation and documents and interviewed representatives from relevant ministries and organisations. Overall, findings from interviews indicated that monitoring and evaluation activities are nascent and developing, with no substantive reports at this early stage in the initiative to provide inclusive education. In addition, most policy documents related to inclusive education exist as drafts and lack the authority needed for implementation and enforcement. Existing

legislation contains procedures for enforcement, but follow-through is lacking. These conditions will require considerable efforts: the development of a comprehensive management plan, increased MOE staffing, and inter-agency collaboration and training.

Socialisation and Outreach

Miske Witt assessed current agency resources, activities, and supports for inclusive education in T&T. This assessment measured their level of intensity and scope of communication and outreach to the general public as well as to school personnel, parents, and families of SEN students. Assessment data included survey results from two stakeholder focus group forums, analysis of site visits, and interviews with directors of 13 agencies.

A coordinated and systemic social-networking plan is recommended to raise public and agency awareness of students with special education needs and the philosophy and goals of inclusive education. The plan will address the de facto discrimination of children with disabilities and all those with exceptional needs— inclusive of under-achievers, children and youth at-risk for school failure, minority groups, and gifted and talented students. Elements of the plan include (1) creating an independent Inclusive Education Socialisation and Outreach Consortium; (2) expanding staff of the Ministry of Education to include a full-time coordinator and full-time assistant to the coordinator to support the work of the Consortium; (3) hiring a consultant team of international and local consultants to design and implement multi-pronged strategies involving media, community networks, and other communication venues to reach the general public; (4) budgeting necessary funds for printing and disseminating media and printed materials; (5) involving individuals with disabilities and their organisations in all phases of planning and implementation; and (6) implementing supportive policy at the national level.

Cost-Effectiveness Analysis and Facilities Upgrades

The Ministry of Education in Trinidad and Tobago has developed and begun implementation of a plan to upgrade school facilities, detailed in the Ministry of Education's *Education Policy Paper, 1993-2003*. Our teams of researchers, including local T&T educational professionals, were trained specifically to assess the physical facility and environmental factors. Results of our study revealed extensive need for investment in facilities upgrading. These needs are detailed in the Miske Witt budget report dated January 7, 2008. In addition, assistive technology constitutes a critical element of facilities upgrades. Findings indicate a critical need for extensive investment in technology materials, staff training, and facility spaces to accommodate the technology.

While the findings and recommendations in this report may seem daunting, the T&T Ministry of Education Student Support Services Division Discussion Paper on "Inclusive Education" (IE) has already recognised the need for a comprehensive system of inclusive education that is responsive to local conditions. Specifically, the T&T plan for inclusive education subscribes to six basic goals for educating SEN students:

1. to build attitudinal and philosophical awareness of inclusion among all personnel;
2. to build bridges within the MOE and with external stakeholders to facilitate the implementation of inclusive education;
3. to provide training for all personnel in all schools;

4. to upgrade the physical facilities of all schools;
5. to build capacity to implement various aspects of inclusive education; and
6. to procure appropriate materials and equipment for all schools.

This report reinforces the need to implement these goals and provides recommendations for the way forward.

Introduction

Inclusion of students with disabilities would not change anything because students in the general education classroom are already very different and diverse. . . . Everybody is special in their own way; some are fast in one subject but slow in another.

*Inclusive Education Classroom Student
Trinidad and Tobago*

As part of the Trinidad and Tobago Ministry of Education's (MOE) initiative to make inclusive education an integral part of its Seamless Education System, Miske Witt and Associates, together with MOE officials, conducted research from January 2007 to January 2008 (see Annex A for details of the five-phase plan). This Final Report of the Inclusive Education Study provides a comprehensive analysis of data collected and specific recommendations based on these data. The study supports the Student Support Services Division's (SSSD) leadership to transform the system into a system that is responsive to *all* students and to all special educational needs.¹

Throughout this study, strategies for inclusive education (IE) encompass all students with special education needs (SEN). Specifically, these students include "dropouts, students with learning or other disabilities, students who are gifted and talented, students infected or affected with HIV, students with social, emotional, or behavioural difficulties, and ESL students (English for speakers of other languages)." (Ministry of Education Student Support Services Division. *Understanding Inclusive Education in Trinidad and Tobago*. December 27, 2007.)

The research identified six major components as critical to implement inclusive education in the Trinidad and Tobago (T&T) education system from early childhood through tertiary education. The report is organised according to these six major components: (1) assessment and early intervention; (2) system intervention and the development of comprehensive models of inclusive schools; (3) teacher and professional support staff development and training; (4) evaluation and monitoring; (5) socialisation and outreach; and (6) cost effectiveness analysis and facilities upgrades. For each component, the steps that the executing unit or ministry will need to take to implement the recommendations are outlined in chronological order.

Goals of the Study

As requested in the Terms of Reference, the Miske Witt team worked with the MOE to accomplish the following tasks:

1. Identify and assess the current performance of SEN students in primary, secondary, and special schools;
2. Identify and profile the current teachers and support personnel available in these schools;
3. Evaluate and describe the current strategies, supports, physical conditions and resources in schools;
4. Review and evaluate current teacher and support personnel training programmes and activities;

¹ This report complements the Budget and Budget Notes that Miske Witt and Associates submitted on January 7, 2008.

5. Review and evaluate the current legislation, policies, and mechanisms in place for evaluation and monitoring of school programmes related to inclusive education for special education needs students;
6. Provide a cost-effectiveness analysis and provisional budget for establishing an inclusive education system in schools.

Outcomes of the Study

The following outcomes were achieved based on the above goals of the study developed from the Terms of Reference:

1. a demographic profile of student needs;
2. recommendations and a plan of action for systemic change;
3. a training plan for pre-service and in-service special and general education personnel;
4. recommendations and a plan of action to build capacity and provide an effective monitoring and evaluation system;
5. development of a social communication and outreach plan; and
6. recommendations for funding strategies and a plan of action for upgrading schools.

Data Sources and Instruments

For this study, data were collected from May through October 2007 by Miske Witt and Associates, supported by several teams of Trinidad and Tobago education professionals, including: 42 school site-visits in primary and secondary schools across all seven districts of Trinidad and Tobago, and a survey disseminated to 460 primary, 150 secondary schools, and 29 special schools. The team developed the following specific tools and data collection instruments to assess overall level of expectations and support, school facilities, and classroom processes in Trinidad and Tobago (see Annex B for descriptions of the instruments):

1. Comprehensive Demographic Survey distributed to all teachers and principals in Trinidad and Tobago;
2. Classroom Observation Guide;
3. School Data Form;
4. School Overview (to collect information about the physical plant);
5. Focus Group Protocols for use with teachers, parents and community members, and students;
6. Interview Protocols with principals and teachers whose classrooms had been observed; and
7. School and Classroom Inclusive Education Survey (SCIES), a rapid appraisal tool and index used to determine how effectively a school responds to factors essential for an inclusive school.

Secondary data sources for this report include numerous policy documents, Trinidad and Tobago legislation, and materials and information collected through more than 20 interviews with key individuals in the Ministry of Education (including SSSD and Division of Planning and Development); Ministry of Social Development (Division of Disability Affairs); Ministry of Health; Ministry of Science, Technology and Tertiary Education; Secretary of Education and staff in Tobago; as well as key stakeholders in several NGOs and national organisations, such as the National PTA and the Association of Special Schools.

The methodology provided Miske Witt and Associates with robust data used to estimate needs, to provide recommendations based on these needs, and to project costs to meet these needs.

Organisation of the Report

The following chapters present goals, rationale, findings, recommendations, indicators of success, and time lines for implementation relating to each of the six identified goals and outcomes needed to implement inclusive education.

Chapter 1

System Transformation: Development of Model Schools

Goal

To establish an inclusive education school system based on the philosophy espoused by the Ministry of Education.

This goal is derived from the T&T Education Policy Paper 1993-2003. Its elaboration in the recent paper *Understanding Inclusive Education in Trinidad and Tobago*, of the Ministry of Education, Student Support Services Division (December 27, 2007), further states that this inclusive education system

involves changes and modifications in content, approaches, structures and strategies, with a common vision...and conviction that it is the responsibility of the regular system to educate all children.

The goal of these various education initiatives is to meet the vision of the Government of Trinidad and Tobago to be a developed country by 2020. This modernisation of the education system is to strengthen the nation's productivity and competitiveness by ensuring that young citizens from all backgrounds are prepared to participate in and contribute to the development of a modern skill-based economy.

Transforming a school system to one that is inclusive requires systemic change and comprehensive action in eight areas:

1. *Decentralisation Policies* to support school-level management and decision-making responsive to local contexts and conditions.
2. *Finance/Resource Allocations* to encourage a unified system of education service delivery and to focus on social as well as economic benefits.
3. *Access and Participation* to promote universal design that attends to multiple dimensions of access: physical/architectural, social/attitudinal, academic/instructional, technological/communicative, and programmatic.
4. *Pre-Service Teacher Training and In-Service Professional Development* to integrate special and general education teacher training in pedagogy that is child-centred, uses differentiated instruction to meet the diverse needs of students, and promotes active student learning.
5. *Universal Human Rights and Inclusive Education Policy and Legislation* to establish the universal right to education and provide parents, special education needs students, and school personnel with the necessary conditions to challenge exclusion.
6. *School Restructuring and Whole-School Reform* to establish inclusive education (IE) as the guiding philosophy, enacted through inclusive policy and practice. This restructuring is supported by changes in beliefs, methods, and resource allocations at all levels of educational systems and governance.
7. *Effective Identification and Placement Strategies* to address the challenges of low enrolment and lack of access to regular schools for students with special education needs (particularly in rural areas).
8. *Building Capacity and Sustainability through NGO, Community, and Multi-Sector Participation* to implement inclusive education effectively by providing

essential supports for children and youth (e.g., access to quality health care, social services, and early children intervention programmes).

To reach this goal, the MOE has decided to select one school at each level (i.e., Early Childhood centre, primary school, and secondary school – a “seamless” approach) in each of the seven districts and Tobago and develop them into schools that effectively model inclusive education for other school personnel in the system to observe and from which they can learn. This chapter discusses the comprehensive, system-wide change needed for transformation to Inclusive Education.

Rationale

In 2000, the Dakar Framework for Action adopted the World Declaration on Education for All (EFA), which affirmed the notion of education as a fundamental right and led to the new Millennium Development Goal to provide every girl and boy with primary school education by 2015. EFA also clearly identified inclusive education (IE) as one of the key strategies to address issues of marginalisation and exclusion. “Inclusion was seen as the fundamental philosophy throughout UNESCO’s programmes and the guiding principle for the development of EFA” (UNESCO, 2002; p. 17). This principle originates from several key international declarations that specifically address those with special education needs (SEN). Central among them is the Salamanca Statement and Framework for Action. This key document identifies IE as the means by which Education for All may be achieved. The T&T Ministry of Education subscribes to UNESCO’s definition of inclusion, as articulated in the Salamanca Statement (Ministry of Education, Student Support Services Division. *Understanding Inclusive Education in Trinidad and Tobago*. December 27, 2007).

This chapter delineates findings that will enable Trinidad and Tobago to achieve its goal of systemic reform for IE. The findings are reviewed from school principal interviews; school and classroom observations; school-level surveys; parent and community focus groups; student focus groups; and information and communication technology surveys.

Findings²

Demographic Profile of Student Needs

In order to assess adequately the needs and plan for inclusive education in T&T, it was necessary first to strive to estimate the approximate incidence of school-aged children in the country. The budget for this particular study was not sufficient to undertake a household survey with enough magnitude to make exact projections of disability incidence. Therefore, data from T&T health care professionals, major international organisations (UNESCO, UNICEF, and World Health Organization), T&T teachers, and early childhood education data were culled to produce a defensible estimate of school-aged children with children with disabilities (see Annex C).

From the statistics, the estimated disability rate of school-aged children in Trinidad and Tobago lies somewhere between 2% (UNESCO’s estimate) and 23% (an estimate based on birth-weight risk). To further refine estimates, data from the Miske Witt teacher surveys were analysed. These data were instructive because they provided interpretations based on the interaction of impairment (medical conditions)

² The findings presented here should be considered in conjunction with those contained in the Mid-Term Report, pages 35-51.

and environmental requirements (what teachers deemed as important skills to succeed in school).

The Miske Witt 2007 survey data³ indicated that approximately 4% of children in government primary schools had diagnosed disabilities, while only 2% of students in government high schools had diagnosed disabilities. These figures were contrasted with figures from the few special schools in Trinidad and Tobago, in which teachers reported that 100% of their students had disabilities. Denominational primary school teachers reported disability rates as low as 1%. From this data, it is clear that a relatively small number of schoolchildren have *diagnosed* disabilities in Trinidad and Tobago.

It seems likely that the number of children with diagnosed disabilities in primary schools is low because such children are attending schools, but have not been officially diagnosed. When asked about the number of students that teachers suspected had disabilities in their classes, government primary teachers noted that up to 20% of their students may have disabilities (government high school teachers suspected 5-6% and denominational primary teachers suspected 2%). Table 1, which reports these data, also reflects the number of teachers who reported actual and suspected exceptionalities, which includes gifted children.⁴

It is likely that students with diagnosed disabilities are those with physical or sensory disabilities—disabilities that are concrete and easily diagnosed. According to primary teachers, however, there are many more children that are likely to have disabilities in the area of learning, behaviour, or cognition. Still more children may be in early childhood centers or not in school at all. Because learning, behavioural, and cognitive disability categories are less concrete than physical or sensory disabilities, it is understandable how so few students might have diagnosed disabilities but so many might be in school.

The results of this study indicate that a small number of children in primary schools have diagnosed disabilities (approximately 4% when all primary schools are calculated). An even smaller number of high school students have diagnosed disabilities (approximately 2%). *Health and teacher data, however, indicate that there may be a great many more students (as many as 20% in government primary schools) who have learning, behavioural, or cognitive challenges.* Because there are few opportunities for official diagnoses of these particular disabilities (and because measures used to diagnose are not normed on T&T populations), the exact number of students with learning, behavioural, or cognitive challenges in primary and secondary schools is unknown. It is clear that most children in special schools have diagnosed disabilities. It is possible that the small number of students with disabilities in schools is overshadowed by a larger number of students who are *at risk* of school failure because of undiagnosed disabilities or other unknown reasons.

³ The National Survey Data Findings were presented in detail in the Mid-Term Report and are updated and presented here in Annex D.

⁴ Berger (2007) writes, "It is difficult to generalise about students who are gifted because their characteristics and needs are so personal and unique. However, as a group they comprehend complex ideas quickly, learn more rapidly and in greater depth than their age peers, and may exhibit interests that differ from those of their peers. They need time for in-depth exploration, they manipulate ideas and draw generalisations about seemingly unconnected concepts, and they ask provocative questions."

Table 1. Percentage of Teachers Who Reported at Least One Student Diagnosed and Suspected Exceptionalities

Category	1-2 students	3-4 students	4-5 students	6-7 students	8-9 students	10-19 students
Vision diagnosed	19%	4%	1%	1%		
Vision suspected	35%	8%	3%	1%	1%	1%
Hearing diagnosed	7%	1%				
Hearing suspected	19%	6%	2%			1%
Learning diagnosed	16%	8%	4%	3%	2%	1%
Learning suspected	33%	17%	8%	5%	3%	3%
Physical diagnosed	9%	1%				
Physical suspected	11%	1%	1%			
Cognitive diagnosed	18%	7%	5%	2%	1%	1%
Cognitive suspected	33%	15%	5%	3%	3%	2%
Emotional diagnosed	30%	13%	5%	2%	3%	3%
Emotional suspected	33%	13%	3%	3%	2%	1%
Gifted classified	20%	4%	2%	1%		
Gifted suspected	25%	4%	1%			

Among general education schools, children with undiagnosed disabilities are more likely to be found in government primary schools than in secondary schools or denominationally-supported schools. In all schools, teachers suspect there are more children with disabilities than have official diagnoses, but the discrepancy between diagnosed and suspected disabilities is largest in government primary schools. Therefore, it can be estimated that the number of children in primary schools with disabilities is small, but three to four times this number of students are at risk because of undiagnosed disability or other reasons. A total figure of 10-15% of children at risk is reasonable, given the number of children already diagnosed plus an additional group of students who have not been diagnosed but may have a disability. Children with undiagnosed disabilities may be living at home and not attending school, attending a pre-primary school but are of age for primary school, or are attending primary or secondary school and struggling, but are not receiving services for their disability.

In order to transform the system so that *all* children can exercise their right to education, it is necessary to find and enroll children with disabilities who are not attending school. This can be addressed in three ways: (1) by comparing health clinic data with school enrollment data in communities (e.g., are there children with

disabilities who go to health clinics but are not in schools?); (2) by surveying pre-primary schools to find out how many children are being served in pre-primary education centers but are old enough to attend primary school; and (3) by following the completion rate of students who have disabilities in primary school. Once found, schools must become truly “inclusive” and open their doors to students who have learning challenges because of particular disabilities.

By improving practice in primary and secondary schools and attempting to enroll students with disabilities who are not in the education system, educational services may be greatly improved for students with disabilities.

System Transformation

It is estimated that the current educational system in Trinidad and Tobago serves approximately 400,000 students in 460 Primary Schools, 150 Secondary Schools, and 29 public and private special schools across eight school districts (Source: *2004 National Policy on Student Support Services System* and *2004 Inclusive Education Discussion Paper*). In the past, only special schools in the T&T education system served special needs populations. Currently a Cluster School pilot is being implemented, and at least three primary schools in each district have been targeted for teacher training and support services to serve students with special educational needs (Source: Interview with Mr. Steve Williams, September 15, 2006). These schools, called “cluster schools” are arranged in groups of three schools that share a special education teacher, guidance officer, and social worker. For the rest of Trinidad and Tobago’s schools, there is a wide range of attitudes toward and awareness of inclusive education policy and strategies. The nation-wide survey conducted by Miske Witt in 2007 sought to create a large data set from which inferences could be drawn on the current academic and social status of T&T students and the needs of school personnel to better improve inclusive education services for these students.

The study utilised multiple data collection procedures, including a national survey of all the nation’s schools, collecting data from 25% of the nation’s teachers and head teachers. School-level data were collected in all seven districts plus Tobago in school and classroom mapping, classroom observations, focus groups with parents, teachers, and students, and interviews with teachers and school directors. The resulting data provide a comprehensive overview of what takes place in schools and classrooms to determine how inclusion-friendly they are.

The study sought to document ways in which student access to educational opportunities and their participation in and achievement in school might be influenced by the following factors: perceptions of the school principals, teachers and other educational staff, parents and students themselves; interactions in the classroom; teaching and learning activities; curriculum and instructional materials; and overall school physical environment.

A core team of educational professions chosen by the Ministry of Education and selected from each districts of Trinidad and Tobago were trained to use the tools and methodologies. They collaborated with the Miske Witt team to collect data in 42 schools. In this way, local perceptions of teaching and schooling were incorporated into the research design and made the study more culturally responsive.

Table 2. Number and Type of Schools Visited

District	Primary Schools	Secondary Schools	Special Schools
Caroni	2	1	
North East	2	1	
Port of Spain	3	1	5
South East	2	2	1
St. George East	2	1	3
St. Patrick	2	1	1
Tobago	2	1	1
Victoria	4	1	3
TOTALS:	19	9	14

Specific tools and data collection instruments to assess overall level of expectations and support, school facilities, and classroom processes proposed for this study included several instruments. (Copies of all data collection instruments are included on the CD accompanying this report.)

Data collected from the 42 schools revealed patterns of teaching and learning, teacher-student interaction, materials use in the classroom, and other aspects of life in schools that need to be addressed in the transformation of the T&T education system to becoming one that is inclusive (see Annex E on school and classroom data). Interviews with principals and teachers provided information on the attitudes of school personnel toward their work, toward students and parents, and toward inclusive education. Classroom observations revealed insights into what is taking place and what needs to change so that teaching and learning begins to meet the special educational needs of all students.

School and Classroom Data

Teachers

The large majority of teachers who were interviewed said they enjoyed their work and they spoke of its importance. Teachers commonly used positive reinforcement to motivate their students and worked hard to create a warm and inviting environment in their classrooms. They were deeply committed to doing a good job and actively sought ways to support the learning and achievement of their students. In general, the emotional tone of the classrooms observed by data collectors was very positive, with less than 5% of the interactions and feedback classified as negative.

In terms of instruction and preparation, however, fewer than 25% of the teachers in the observed classrooms had prepared a lesson plan, and less than 17% of the teachers had teachers' guides. The teaching methods most frequently observed were lecturing as students copied notes in their exercise books, or writing on the chalkboard while students copied the information in their exercise books. Students appeared quite accustomed to this approach to teaching; their actions indicated that they expected this kind of teaching and acted accordingly. Variations on this method were observed in a few classrooms. Some teachers were more inclined than others to invite students' questions and to elaborate on what students said. Approximately 56% of the time observed in classrooms consisted of teacher lecture and 44% in classroom activities.

Large group instruction predominated in the classroom followed by individual desk work. In some cases the teacher circulated around the classroom to assess the student work but this was more common at the primary level than at the other levels

or in the special schools. In schools other than special schools, when teachers reviewed students' work they tended to review the work of students seated near the front of the classroom more often than they of those seated at the back of the classroom—a distinct disadvantage to the slower students, who often sat in the back. In some cases teachers asked students to break into small groups to complete a learning activity (e.g., fill out a chart, complete an experiment) but they did not appear to use heterogeneous (mixed) grouping patterns that paired weaker students with stronger students to foster improved student performance on any consistent basis. In general, grouping patterns tended to be ad hoc and failed to take into consideration the learning needs of the various students. Restricted classroom space seemed to be a primary constraint in many classrooms, hindering the effective use of group work. Individual and desk work predominated at the special schools. We did not observe small groups of students working cooperatively and individualised instruction at the junior secondary or secondary school level.

All schools struggled to provide support to students, especially those with learning needs. Schools were under-resourced and needed more personnel, especially those with specialised training to meet the needs of students with learning needs. Although JSS/SSC already had students with a range of learning needs (sensory, cognitive, physical, emotional, and physical) they rarely had any kind of professional services from qualified support staff to meet the needs of students. Nor did they have adequate supplies of necessary learning materials.

The principals interviewed averaged slightly over eight years of experience as a principal and 24½ years of teaching experience. They discussed their responsibilities as principals, staff development, parental involvement, and issues around inclusion. Most principals saw their physical presence at the school as a powerful management force to foster positive student behaviour and to enhance teacher and staff performance. Nearly all of the principals regularly conducted daily rounds as a way to monitor what was taking place. They reported that they spent a considerable amount of their time (nearly 30%) on clerical-type tasks. Other major areas of responsibilities were taking care of student issues (disruptive behaviour, etc.) and working with parents.

All the principals identified on-going professional development for themselves and for their staff as an important need, particularly as the MOE moved forward in its efforts to support inclusion. Several principals said they hoped to begin a programme where teachers were given a weekly planning period to come together to discuss instructional issues—particularly to discuss educational research and best practices. In a few situations principals had created ways to find blocks of time for this to take place (for instance, hosting sporting activities monitored by the principal and security guards).

Principals said the following support personnel would be needed to achieve inclusive education (ranked from those named most to least frequently): reading specialists, guidance counsellors, school psychologists and diagnosticians, teachers trained in working with the hearing and visually impaired, and nurses.

Student and Parent Perspectives

Researchers also interviewed parents, community members, and students about the prospect of introducing inclusive education in schools in Trinidad and Tobago. As a whole, parent and community groups (n=18) were more supportive of the prospect of

inclusive education than were students (n=93). Both noted that there could be improvements in schooling if inclusive education were implemented, but both groups also feared that existing services might decline with the introduction of inclusive practices. Hopes and fears of parents and students are synthesised below. Tables outlining specific responses to focus group questions are found in Appendix ____.

Hope for Inclusive Education

Students who were supportive of Inclusive Education gave the following main reasons: (a) students can work together and learn from one another; (b) students can build relationships and friendships; (c) students will be better prepared for the future; (d) it would not change anything. Student support for inclusive education generally focused on relational aspects of student life (i.e., the possibility of students learning and working together as friends and colleagues).

Students believed they were in touch with each others' needs, demonstrating they have numerous ways of noticing when others need help with learning and understanding (e.g., observing body language and facial expressions). There is some peer assistance and tutoring taking place in the classroom informally and formally. One student in an Inclusive Education programme remarked how the regular education students help each other while the teacher provides individualised instruction to the students with disabilities: "If someone is not understanding, we act like the teacher to each other. We have children with special needs in the classroom and the teacher needs to be with them. So, we need to help each other." More generally, students spoke about helping others in and outside of the classroom with, for example, sharing snacks, counting money, or comforting those who are upset.

Parents and community members believed the hope for inclusive education lay in the teachers. Parents expressed a belief that a great teacher could overcome any obstacle, and gave specific examples of teachers for whom they had great respect. Among the participants who expressed approval of the activities happening in their schools, most attributed it to the work of teachers and principals. Parents and community members expressed that teacher punctuality, reliability, and hard work were the most important features of a good teacher. Parents of students with special needs also noted that "patience" was an important characteristic of teachers. Community members and parents who felt their children's school was a positive environment also attributed school success to the motivational and leadership capacities of principals. One parent said "he gets the teachers to work so hard." It is evident that teacher effort and principal initiative are valued by parents and community members, and a great asset for inclusive programming.

Student and Parent Fears for Inclusion

Although students and parents believed that student cooperation and teacher effort were important predictors of success for inclusive education, both groups expressed fears that inclusive education would diminish the existing quality of education in Trinidad and Tobago. Parents of students in special schools also feared their children would not fare well in the more competitive environment of mainstream schools.

These parents were very supportive of the patient and nurturing environment their children experienced in special schools. They expressed concern about including their children in general education schools. "The students will disregard them" feared one parent, afraid that her daughter would be ridiculed in a general education school. Another parent was concerned that "the teachers are not trained" to adequately

support students with special education needs in general education classrooms. It was clear that parents appreciated the safe and insular environment of special schools. Some parents wanted their children to have more academic opportunities, but feared that general education schools did not have the capacity to meet the needs of their children. Students with special education needs echoed parents' fears. One student with special needs currently in a special school remarked, "I would feel alienated. The children didn't mean to tease us and laugh at us but they did. It would be very lonely."

A student with special needs currently in a regular education programme remarked, "... the students like us stay together and are friends. When we're together, the other students don't make fun of us as much."

Both parents and students feared that students with special education needs would slow down learning in mainstream classes. A general education student from an Inclusive Education classroom said, "It is sometimes annoying because we are excited for learning and want to go faster." Another student remarked: "These children keep back the class and distract the teacher. The teacher will pull them out of the class and they will lose out." One of the main fears associated with students with special needs appeared to be the impacts on learning related to end-of-year testing. Examination results weigh heavily on both students' and parents' minds.

When parents and students described students, they invariably used test scores as a barometer. "Results are up" and "results are good" were common responses, indicating that that high-stakes testing plays a dominant role in the ethos of general education schools. Special school parents were not concerned with test scores in their children's current schools, but of the high stakes of general education schools. Concerns over test results and the lifelong implications of high or low marks led some parents to question inclusive education policy. One parent expressed his desire for students to be together under the same roof, but not to compete for attention in the same classrooms. "They should be in the same school, but not in the same classroom," he said.

Parent and student remarks regarding inclusive education appear to follow similar themes. Parents and students see some promise of improved socialisation when students of different abilities mix, but over-arching fears and concerns about the competitive nature of Trinidad and Tobago's schools (including the presence of test scores as a key indicator of school quality) is problematic for both groups. From these data, it is clear that both parents and students see the inclusion of students with special needs as a liability in mainstream schools. Specifically, these groups worried that students with special needs may be alienated or slow the instructional pace down for other students. Only a few students recognised the potential benefits that all students may reap from a more supportive, instructionally sensitive school environment. Although parents recognised that good teaching is the most important factor in effective schooling, none were able to point out the specific resources and approaches that inclusive programmes bring all students.

Integrating SEN students into Model Schools

Miske Witt national survey research findings indicate that there are likely to be students with disabilities in almost every mainstream classroom in Trinidad and Tobago. Of greatest concern to teachers are students with learning challenges and behavioural challenges. Likewise, teachers noted that there are often children who

are gifted and talented in schools who may need a more rigorous curriculum than they are currently receiving.

To this end, a three-tiered strategy for Model Schools is proposed that will be supported through technology-based training and field visits. This proposal rests on research findings and the Ministry's commitment to meeting the needs of all students in general education classrooms. Our recommendations lie in three areas: Instruction, behavioural support, and assessment. These recommendations will address the needs of all students in T&T's mainstream schools.

Tier One – Instruction. Technology-based training supported by field visits on the topic of Universal Design for Instruction is proposed. Universal Design is an architectural term that has been used to describe environments that are accessible for all. In education and pedagogy, universal design assumes that all students can learn if provided the appropriate supports. Teachers will learn ways of presenting information for learners through a variety of modalities and approaches. They will also learn how to adapt mainstream curriculum in a way so that it will appropriately challenge gifted learners and appropriately support learners with disabilities or other difficulties.

Tier Two – Behavioural Support. Survey data indicate that teachers are highly concerned with the behaviour of certain students in their classrooms. To this end, we will use technology-based training and field visits to train teachers in positive behaviour supports methods. Positive Behaviour Supports are a series of activities that engage entire schools in communicating and supporting positive behaviour in all students. This methodology, however, works on the assumption that some students will need more support, and provides teachers with tools for addressing challenging behaviours. Finally, all teachers in a school will be provided with intervention strategies to address the most challenging or dangerous student behaviours and, with the support of consultants, develop school-based strategies for addressing these behaviours.

Tier Three – Assessment. All Diagnosticians and Special Education Teachers will receive training in how to use informal diagnostic instruments as a way of accurately understanding students' current level of functioning and achievement. Likewise, all teachers will participate in technology-based training aimed at improving assessment literacy. As part of this training, teachers will learn how to best use classroom assessment data to improve education for their students. The overall aim of Diagnostician, Special Education, and General Education teacher training is to provide school-based personnel with data from which to make decisions on how to best support student learning.

The rationale of this three-tiered approach is that inclusive schools provide a high quality education for all students. By examining student needs through assessment, meeting those needs through flexible instruction, and supporting (and intervening in when necessary) student behaviour, schools become inclusive learning communities where all students, whether they have specific disabilities or not, are supported and encouraged to succeed.

Recommendations for System Transformation: Development of Model Schools

Inclusive education in T&T is situated within the context of the reform and modernisation of the education system of the entire nation so that all learners can participate in the process of education in a seamless manner from Early Childhood Care and Education to Tertiary Education.

Tobago

The team presents recommendations in this report for T&T as a unified school system. However, our findings indicate that in some areas Tobago has demonstrated unique needs and has also developed unique best-practice programmes to meet needs that require special consideration. For example, Tobago's House of Assembly, Division of Education, Youth Affairs and Sports, has created a Draft Action Plan. (May 2nd 2005, "*Increasing Social well-being and Economic Participation through Education.*"). One of T&T's strengths is its rich diversity of beliefs, religions, culture, languages, and social and economic circumstances. This diversity also represents a challenge, because a unified system must continually take into account local context – "one size does *not* fit all." System transformation requires the timely involvement of educators and stakeholders in the school district of Tobago in all phases of decision-making, design, implementation, and evaluation of an inclusive school system.

It is in this context that we propose the following recommendations for system transformation in Trinidad and Tobago.

Recommendation 1

Miske Witt recommends development of a shared vision by the key education officials and decision-makers. To arrive at this shared vision, we recommend that those whose authority and resources are necessary for the successful development of the Model Inclusive Schools undertake a study tour, which will include (a) observations of schools that have implemented inclusive education and (b) the development of an action plan with concrete steps for introducing Inclusive Education to T&T. It is recommended that subsequent shorter, focused study tour(s) for the Model School implementers (e.g., Model School principals and key teachers and support personnel) follow the first study tour.

Recommendation 2

Miske Witt recommends careful selection of model schools by a team of independent raters. A rating scale (high/medium/low) for this team to use for each of the suggested criteria is proposed in Table 3.

Table 3. Criteria for Selecting Model Schools

Criteria	Priority Level
1. Each model school has a proximity to a special school for the purposes of collaboration, access to resources, and integrating students.	High
2. Each model school has proximity to health care services.	medium
3. Each model school has a history of working successfully with special education needs students.	High
4. Each model school is mid-size (for primary, 150-350 students; for	High

secondary 500-1000 students).	
5. Each model school has a 1: 25 pupil teacher ratio.	High
6. The majority of teachers have a B.Ed. or are working toward a B.Ed.	High
7. School staff and teachers are willing to commit to intensive in-service training.	
8. Teachers have a history of working collaboratively together.	High
9. Each model school has an established, functional, and active school board, and PTA.	medium
10. Each model school has a diverse student population (35-50% eligible for school feeding programme.)	medium
11. Each principal is committed to IE and has a history of collaborating effectively with teachers in the school.	High
12. Each model school is able to make physical accommodations for accessibility and is working toward full accessibility.	High
13. Teachers at secondary level have no more than 5 classes, to allow for planning time.	High
14. Each model school has full staff coverage for all subject areas (offers all subjects).	medium
15. Each model school at the secondary level has an active and functioning Student Council.	medium

Recommendation 3

Miske Witt recommends full staffing and resources at Model Schools (i.e., school support teams). All model schools need a Teacher Assistance Team (TAT) composed of lead teachers, a special education teacher, a guidance officer and/or social worker, and a diagnostic specialist. For primary schools, the support of a speech and language therapist is also recommended, to focus particularly on early intervention of academic skills related to receptive and expressive language. At the secondary school level, support of a remedial teacher is recommended for one-to-one or small group tutoring on basic skills in reading and math. A psychologist will be necessary at the district level to service all model schools in diagnosis and intervention.

The Teacher Assistance Team's role and function carries clear responsibilities for (1) mentoring teachers, (2) managing the referral process and individualised educational plans, (3) developing and supporting classroom interventions including instructional strategies, (4) advocating for a welcoming school environment, and (5) strengthening community/school relationships. The Teacher Assistance Team's efforts should be coordinated by a Special Education Teacher II or equivalent.

The TAT or support team needs to function in collaboration with the School Improvement Team, the school board, and the PTA.

A curriculum facilitator and an IE specialist at the district level should be available with regular visits to schools in support of curriculum development and inclusive education strategies at the school level.

Recommendation 4

Miske Witt recommends adopting policies needed to support Teacher Assistance Teams. The following policies would be necessary to support inclusive education school staff and their increased role and function:

- Salary changes—amend qualifications to reflect increased responsibilities. Establish career ladders and incentives.
- Hiring changes—modify and amend the current protocol to speed up the process. Eliminate temporary hires, and three-year contracts.
- Common planning time—revise school schedules to permit all teachers and support personnel to have at least one common planning hour per day.
- Class size and student-teacher ratios—align with Vision 2020 recommendations at primary and secondary levels.
- Qualifications for new positions—set by Accreditation Board for new positions, particularly Sign Language Interpreters needed for Deaf and Hard of Hearing individuals.

Recommendation 5

Miske Witt recommends taking immediate policy actions to guarantee rights to inclusive education. The Table below outlines the needed policies.

Table 4. Policy Actions Needed to Support Inclusive Education

Policy Action Needed	Priority Level
Elevate the status of the Inclusive Education Discussion Paper to a National Policy on Inclusive Education approved by Cabinet.	High
Enforce the T&T 2005 National Policy on Persons with Disabilities.	High
Enact the Equal Opportunity Bill now before T&T parliament that would guarantee rights of Inclusive Education with the force of law.	Medium
Ratify the 2007 Convention on Rights of Persons with Disabilities.	Medium
Review and adopt the <i>United Nations Standard Rules on Equalisation of Opportunities for People with Disabilities</i> , as it pertains to Inclusive Education.	Medium/Low

Recommendation 6

Miske Witt also recommends taking action in the following areas: Providing assistive technology; educating Deaf students; and redefining the role of special schools.

a. Providing Assistive Technology

As part of a universal design for teaching and learning, Miske Witt and Associates has focused special attention on assistive technology and Information Communication Technology (ICT) needs for inclusive schools. Details on findings and recommendations are included in Annex F of this report.

b. Educating Deaf Students

Miske Witt and Associates has focused special attention on needs of deaf, hard of hearing, and hearing impaired (HI) students in T&T. These children and youth form a unique subpopulation of students with disabilities. Because of the unique language and cultural aspects associated with children with hearing loss, inclusive education must happen with great care. Details of findings and recommendations for this population of students are included in Annex G of this report.

c. Redefining the Role of Special Schools

As reported in Chapter 5 on Socialisation and Outreach of this report, staff at special schools constitute an under-utilised resource in terms of developing IE. T&T has proposed a plan to close special schools and assign existing special education

teachers from these schools to receiving schools.⁵ Such a plan would encourage a unified system with supports. However, careful thought must be taken and a phased approach should be considered, when undertaking any school closures.

Alternatively, some special education schools may serve new functions as centralised resource centres, outreach programmes and cooperatives. Staff from these schools may provide outreach and support to general education teachers, provide training seminars, and demonstrate exemplary practices. For example, the following schools provide services to special populations of students and could be designated as Resource Centres: Princess Elizabeth for support of students with multiple disabilities; Lady Hochoy Penal for supporting students with cognitive and emotional impairments; Cascade for HI students; and Santa Cruz for Visually Impaired (VI) students. For these centres to become viable resources, training and a supportive infrastructure need to be developed and implemented.

In addition, some regular primary and secondary schools in high poverty areas will require a higher level of support than other schools that are better resourced. Adjustments in the kind of support provided should also be considered. For example, emotional support for disadvantaged children, and family training and counselling may be essential value-added supports for schools with high numbers of children and families in poverty.

Finally, teachers and support staff currently serving special schools should be included in all phases of decision-making, design, implementation, and evaluation of an inclusive school system.

Recommendations for other areas of system transformation – assessment, professional development and curriculum differentiation, monitoring and evaluation, social mobilisation, and facilities upgrades – are listed at the end of each chapter.

The School Support Services Division (SSSD) has proposed six indicators of success for IE, which the Miske Witt team supports:

**Box 1. System Transformation for
Inclusive Education System
Indicators of Success**

1. A comprehensive **model of an inclusive school** (ECCE, Primary, and Secondary) at each level, is established and running in every district by 2010.
2. **Professionally trained personnel in inclusive schools** by 2010.
3. Most **schools** (60%) in all districts **have access to support professionals' services** (psychologists, speech therapists, and others) by 2015.
4. Most teachers (**60%**) have received **orientation and training to basic teaching in Special Needs Education** by 2015.
5. The remaining schools (additional **40%**) have access to services of psychologists, speech therapists and other support professionals by 2018.
6. The remaining teachers (**40%**) have received orientation and basic teaching activities in special education by 2018.

Special Support Services Division 2008

⁵ See the Trinidad and Tobago Ministry of Education. May 21, 2004. *Draft National Special Education Policy* for details of this plan.

Overall strategies to reach the goal of system transformation for IE

1. Establish model schools in each district, at each level (ECCE, Primary and Secondary) that are well-resourced and supported by all key elements.
2. Give simultaneous attention to the key elements of reform listed above.
3. Factor in the needs of existing programmes, build on school-level strengths.
4. Provide comprehensive services, including access to health and social services.
5. Provide comprehensive training in content, approaches, structures and strategies for Inclusive Education.

**Time Line for Implementing
System Transformation (Model Schools) Recommendations**

Phase I: Years 1-3

Note: Effective principles of systems change require that a comprehensive set of strategies (e.g., for policy development, assessment, for monitoring and evaluation, socialisation and outreach, teacher training) move forward simultaneously. Specifically, each of the six components in this study depends on successful implementation of the other. Simultaneous implementation of these components is especially critical for successful system transformation. As a result, the steps outlined below for this component should be implemented together with the other components.

Phase I: Years 1-3

1. Undertake initial planning for Model Schools.
 - 1.1. Conduct study tour of exemplary inclusive education programmes.
 - 1.2. Develop model school action plan.
 - 1.3. Select model schools in each school district based on explicit criteria.
2. Allocate resources to Model Schools.
 - 2.1. Provide adequate staffing as recommended in this report.
 - 2.2. Accreditation board sets qualifications for new positions
 - 2.3. Accreditation board amends salary changes in current positions to reflect increased responsibilities.
 - 2.4. Upgrade facilities as recommended in this report.
 - 2.5. Align class size and student-teacher ratios with Vision 2020 recommendations.
3. Provide training for staff in Model Schools.
 - 3.1. Train Teacher Assistance Teams in each model school.
 - 3.2. Train diagnostic specialists and special education teachers in assessments for screening and identification of students with special education needs in model schools.
 - 3.3. Train school personnel and technicians responsible for introducing and maintaining assistive technologies.
 - 3.4. Train general education teachers in the philosophy and practices of IE, including classroom-based assessments.
 - 3.5. Train all school staff in positive behaviour supports for a safe school environment.

- 3.6. Train principals and school boards in leadership and evaluation/monitoring strategies.
4. Provide on-going support and professional development.
 - 4.1. Trainers meet with school-based teams on a monthly basis.
 - 4.2. School-based workshops provided at the district level monthly.
5. Conduct continuous monitoring and evaluation of the Model School pilot.
 - 5.1. School staff meets regularly to document, review and make adjustments to identified challenges.
 - 5.2. Submit monthly reports on the status of the model school development.
6. Allocate resources for scholarships and select individuals for long-term training.
 - 6.1. Provide scholarships for Master's degree programmes in school counselling or psychology and in speech and language therapy to 16 educators with BA degrees (eight from primary, and eight from secondary).
 - 6.2. Provide scholarships for Master's degree programmes in deaf education and ASL fluency to four persons with BA degrees; Master's degree programmes in VI to four persons with BA degrees; four persons for study of Autism.
 - 6.3. Provide 16 scholarships for educators with BA degrees to study for TESOL (teachers of English to speakers of other languages).

Phase II: Years 4-7

1. Expand the number of model schools in each district.
2. Follow steps 1-6 in Phase I for new schools.
3. Conduct annual regional and national workshops to disseminate information and share best-practice.
4. Expand long-term training and scholarship opportunities.

Phase III: Years 8-10

1. Inclusive school system intervention should be in place in all schools in T&T.
2. Monitoring and evaluation in place throughout the system to provide feedback for all areas of IE.

Chapter 2

Assessment and Early Intervention

Goal

To develop a coherent assessment system that supports student learning.

This system will include accessible large-scale assessment and classroom-based assessments.

Rationale

Assessment is part of any inclusive education programme and is used to inform policy makers about student achievement and to support teachers in instructional decision-making. A coherent assessment system is sensitive to the needs of all students and supports their students.

Findings

Diagnostic Instrument

This study focused on development of a diagnostic assessment for use in classrooms by special education teachers and diagnosticians. To better understand the level of academic success that students with disabilities are achieving, the Miske Witt team developed a diagnostic instrument. The diagnostic instrument assessed the following information:

- Indicators of cognitive maturity (students' ability to perform age-appropriate cognitive, self-care, and awareness activities)
- Indicators of physical development
- Language indicators (students' awareness of letters, sounds, and words)
- Grade level achievement in mathematics and language arts.

The assessment is project-specific, rather than an off-the-shelf diagnostic assessment. Miske Witt developed an assessment specific to this project, because standardised assessments developed in the U.S. and Europe may not be culturally or linguistically appropriate for students in Trinidad and Tobago, and because such tests may be culturally inappropriate for mass distribution. This assessment is intended to work seamlessly with early childhood assessments developed as part of this project. The Miske Witt Diagnostic Tool addresses both developmental and academic areas. The developmental constructs found in the instrument align closely with developmental milestones charted in early childhood assessments.

The Miske Witt diagnostic assessment, like all diagnostic assessments, must undergo a series of reviews to ensure that all items are statistically and culturally valid. This assessment has four validity checks built in to its design. The final product will be available in January 2009. Each of the validity checks (curriculum alignment, expert review and piloting, field testing, and operational administration) is described in detail below.

Curriculum Alignment

From January 2007 to April 2007 the Miske Witt team undertook a careful review of curriculum standards on national assessments. From this review, items were selected for the diagnostic assessment that would be likely constructs T&T pupils have had the opportunity to learn. Specific example items were adapted from a variety of sources but aligned carefully with Standards-level expectations for Trinidad and Tobago.

Expert Review/Piloting

Expert diagnosticians from Trinidad and Tobago reviewed the draft assessment on May 22, 2007. During this review, experts were read each item of the diagnostic assessment and asked to make written comments relevant to likelihood that pupils could answer items, clarity of constructs and directions, clarity of scoring, and overall quality. Afterward, the instrument was pilot tested in three schools from May 23-25, 2007. Narrative comments from experts and results from pilot test were reviewed during June and July of 2007 and a revised diagnostic instrument was created for field testing.

Although the sample was small, the diagnostic instrument was able to detect possible learning problems in some students. For example, one student clearly reversed her letters (a sign of possible dyslexia). Another student was challenged significantly by mathematics questions but not reading questions. This could indicate that the student has a learning challenge in the area of mathematics or that he has not had the opportunity to learn grade-level mathematics because of absence, poor teaching, or other factors. In both cases, the diagnostic tool did not create a “diagnosis” but provided the diagnostic specialist data from which to consider interventions for students.

Field Testing

On August 9, 2007, most of Trinidad and Tobago’s diagnosticians were called to meet for training to use the diagnostic instrument. At this time, diagnosticians were provided with multiple copies of the diagnostic instrument to use in their work during the 2007-2008 school years. Because field testing began late in 2007, there are no results to report at this stage. Field testing will continue until June 2008, and results will be used to continue work into future stages of the project.

Operational Administration

Reviews and field testing will culminate with the release of an operational diagnostic instrument in 2008-2009. Diagnosticians will use this instrument in their daily work. The instrument will provide diagnosticians with ideas about particular constructs with which students are struggling or other issues that may require further assessment. The diagnostic instrument will be reviewed and updated every three years after 2009, contingent on funding availability.

Two-Tiered System of Assessment

Based on the Demographic Profile of Student Needs in Chapter 1 above, improved data collection clearly is necessary in order to assist general education teachers in understanding the needs of students with high-incidence disabilities such as learning disabilities, emotional/behavioural disorders, and cognitive impairments. A two-tiered system of assessment is recommended for such data collection. In the first tier, diagnosticians will become familiar with standardised instruments that will help them to make diagnoses of “invisible disabilities” in the area of learning, behaviour, and cognition. In the second tier, informal instruments (such as those created by the Miske Witt team and Professor Frank Worrells) should be used in schools on an informal basis to help teachers better understand the learning, behaviour, and cognitive needs of their students. Labeling children as “disabled” does not improve educational services, but understanding student characteristics may help teachers, health care workers, and parents better serve children who both have disability labels and are at risk of student failure.

Large-Scale Assessment

Although large-scale assessment was not part of the Terms of Reference of this project, it was evident through informal conversations with Ministry of Education personnel, teachers, and community members that Trinidad and Tobago faces many of the same challenges as the rest of the world. National assessments are used by most nations of the world to determine the achievement of students in schools. Challenges inherent to large-scale assessment include the appropriate use of accommodations for students with disabilities, the design of assessments to be accessible to all students, and use of data to make policy and educational decisions. Such challenges need to be addressed in the future in order to create a more inclusive, high quality assessment system for all students.

Summary and Analysis of Activities

Table 5. Assessment Activities and Outcomes

Activity	Outcome
Curriculum alignment	Assessment items are aligned with local curriculum.
Expert review	Assessment items are locally and culturally appropriate for students of Trinidad and Tobago.
Piloting	Administrative procedures of assessment are practiced and revised as necessary.
Field testing	Preliminary statistical information is gathered about assessment items and their ability to discriminate between students
Norming	Large-scale administration of items on national scale is conducted to determine appropriateness of test items.

Recommendations for Assessment and Early Intervention

Recommendations are based on data collected in this study, a universal design approach to large-scale assessment, and a logical approach toward development of a coherent assessment system in Trinidad and Tobago.

Recommendation 1

Miske Witt recommends supporting efforts of national assessment personnel in the Ministry of Education toward creating a system of assessment that focuses on access and achievement.

Large-scale assessment is a way to chart the growth of educational systems. Understanding national and international examinations data will enable the T&T Ministry of Education to make better policy and curriculum decisions. Recommendation 1 of the IE programme seeks to support the Ministry's Examination and other relevant units with contemporary information about assessment for inclusive schooling. Specifically, workshops will be held with Ministry officials about how to interpret data in order to understand the performance of particular school populations, how to develop a comprehensive test accommodations policy, and how to include alternative means for assessing students whose disabilities may preclude them from taking standard assessments. Such information will be supported by a full-time information specialist who can answer immediate questions and concerns between consultant visits.

Recommendation 2

Miske Witt recommends engaging diagnosticians and special education teachers in school-based assessment in order to improve educational decision-making.

As part of a Model School development programme, there will be an increased presence of special education teachers in schools. These teachers, along with Ministry diagnosticians, will become expert in formal and informal individual assessment. Such assessment is designed to support the individualised learning needs of students. Both diagnosticians and special education teachers will both undergo training in two specific assessments designed for Trinidad and Tobago (the Miske Witt and Associates Diagnostic Screening Tool and the Worrells Curriculum Based Measurement tools) and use these to chart student progress and flag concerns. Data collected on the Miske Witt and Associates tool will be used to establish local norms so the instrument is representative of this country.

Recommendation 3

Miske Witt recommends improving assessment literacy of classroom teachers.

Classroom teachers have everyday contact with their students. As part of the Inclusive Education support programme, all teachers in Model Schools will participate in technology-based training on assessment literacy and uses of assessment. Modules directly related to assessment will be part of a larger programme designed to improve instruction, behaviour support, leadership, and assessment for inclusive schooling.

Recommendation 4

Miske Witt recommends implementing immediate policy actions necessary for an inclusive assessment system.

Table 6. Policy Actions Needed to Support Inclusive Assessment System

Policy Action Needed	Priority Level
A coherent accommodations policy for large-scale assessment	High
A commitment to universal design principles in large-scale assessment	High
A policy outlining the roles and procedures of diagnostic assessment in schools	High

Assessment and Early Intervention: Indicators of Success

1. A coherent policy of testing accommodations is established.
2. All large-scale assessments undergo internal or external universal design reviews.
3. All diagnosticians and special education teachers are trained to use diagnostic assessment tools for instructional decision-making.
4. Educational outcomes for all students improve, as evidenced by national examinations and other measures of student learning.
5. Incidences of suspension, expulsion, and truancy decrease.
6. Access to general education schools and curriculum for students with special education needs increase.

7. Teacher knowledge and skill improve, as evidenced by self-report data, classroom observations conducted by principals, and student reports.

Time Line for Implementing Assessment and Early Intervention Recommendations

Phase I: Years 1-3

1. Conduct training with ongoing support for Ministry of Education exams personnel.
 - 1.1. Hold two (2) three-day workshops with Ministry exams personnel that investigate promising practices in inclusive assessment such as accommodations and universal design.
 - 1.2. Support Ministry personnel through an “information specialist” who can field questions and concerns between workshops.
2. “Norm” Miske-Witt and Associates diagnostic assessment tool.
 - 2.1. Conduct statistical analyses on results of field-testing of diagnostic tool.
 - 2.2. Make revisions, as needed, to diagnostic instruments.
3. Train all Diagnosticians and Special Education teachers in use and interpretation of Worrels CBM and Miske Witt diagnostic tools.
 - 3.1. Hold one (1) three-day training with all Diagnosticians and Special Education teachers (training for all new Diagnosticians and Special Education teachers will take place annually).
 - 3.2. Provide two (2) field-based support visits per year.
4. Develop assessment literacy in demonstration school teachers.
 - 4.1. Train all demonstration school teachers about classroom-based assessment and data-based decision making via video training (this will be one module of a larger training programme).

Phase II: Years 4-7

1. Evaluate large-scale assessments for congruity to universal design and review accommodations policy annually.
2. Re-norm Worrels CBM and Miske Witt Diagnostic Tool every three years.
3. Train all new Diagnosticians and Special Education Teachers in use of Worrels CBM and Miske Witt Diagnostic Tool.
 - 3.1 Hold one (1) three-day training with all Diagnosticians and Special Education teachers (training for all new Diagnosticians and Special Education teachers will take place annually).
 - 3.2 Provide two (2) field-based support visits per year to support *all* Diagnosticians and Support Personnel.
4. Develop assessment literacy in all teachers.
 - 4.1 Evaluate effectiveness of video-based training programme and adjust as necessary.

- 4.2 Train all school teachers about classroom-based assessment and data-based decision making via video training (this will be one module of a larger training programme).

Phase III: Years 8-10

1. Evaluate large-scale assessments for congruity with universal design and review accommodations policy annually.
2. Re-norm Worrels CBM and Miske Witt Diagnostic Tool every three years.
3. Train all new diagnosticians and special education teachers in use of Worrels CBM and Miske Witt Diagnostic Tool.
 - 3.1 Hold one (1) three-day training with all Diagnosticians and Special Education teachers (training for all new Diagnosticians and Special Education teachers will take place annually).
 - 3.2 Provide two (2) field-based support visits per year to support *all* Diagnosticians and Support Personnel.
4. Develop assessment literacy in all teachers.
 - 4.1 Evaluate effectiveness of video-based teacher training.
 - 4.2 Train all new school teachers about classroom-based assessment and data-based decision making via video training (this will be one module of a larger training programme).

Chapter 3

Professional Development and Curriculum Differentiation

Goal

To provide professional development for teachers, principals, and school support services personnel in re-visioning and implementing all of education from an inclusive education perspective.

This process begins with pre-service teacher education, continues through mentoring novice teachers, and proceeds throughout one's professional career in education (teacher, special needs teacher, administrator, etc.).

This goal is consistent with the exemplary practises of international initiatives on inclusive education (World Bank 2004), UNESCO's indices of inclusion (2005), and with the plans for Inclusive Education of the Student Support Services Division, Ministry of Education, Trinidad and Tobago (December 2007).

Rationale

Systematic, ongoing, professional pre-service and in-service training is necessary to educate and sensitise school personnel in issues related to inclusive education and to the education of special education needs students. The system requires it; and MOE officials, teachers, parents, and other stakeholders in Trinidad and Tobago have requested this explicitly. For this component, the Miske Witt team: (1) developed a profile of principals, teachers, and support personnel available in the schools; and (2) reviewed and evaluated current teacher and support personnel training programmes and activities relative to the skills, knowledge, and dispositions educators and educational administrators need.

Findings

The findings are based on data from the national survey questionnaire, interviews and focus group discussions with teachers and other stakeholders, classroom observations, document review, and interviews with lecturers at three universities in T&T. The findings answer the following questions: To transform the education system of Trinidad and Tobago into one that provides an inclusive education to all students, beginning with a Model Schools pilot, how many general education teachers with knowledge of Inclusive Education are needed? How many special needs education teachers are needed? How many support personnel staff are needed? What do they need to know? By when do they need to know it (i.e., for model schools, for system scaling up)? How will they learn it?

Principal Leadership

Principals are critical to the process of school reform and system change. Their focus on improved student outcomes, their role as instructional leaders, their support for new systems, management of new processes, and liaisons with parents and communities make them pivotal to the change process.

Skills, Knowledge, and Dispositions for Principals

The skills, knowledge, and dispositions that have been identified as critical to the development of 21st century principals who are leaders in school reform (NASSP, 2007) include:

- instructional leadership (i.e., setting instructional direction, fostering teamwork, and showing sensitivity);
- resolving complex problems (i.e., demonstrating good judgment, results orientation, and organisational ability);
- oral and written communication skills; and,
- the ability to develop oneself and others (i.e., understanding one's own strengths and weaknesses, and developing others).

Instructional leadership in Inclusive Education also requires the foundational knowledge of special needs education expected of teachers. Finally, to transform schools, principals also need to understand the process and develop a research-based theory of change.

T&T Principals Profile

All principals who were interviewed for the study except one expressed support for the MOE initiative to introduce inclusive education. However, they raised concerns about the schools' capacity to provide the necessary support to students in an IE system. In particular, the principals cited space and building requirements, training for teachers, support from resource personnel, and special resources as critical for a successful inclusion programme.

Professional Development for Principals

With regard to their own professional development, few principals have opportunities for professional development; most said they truly need this. In the pilot Cluster Schools, T&T primary school principals often have primary responsibility for referring a student for evaluation or for approving a teacher's referral. This responsibility requires knowledge about SEN children that a principal may or may not have at present, and it points to an important area of future professional development for them and for all principals.

Personnel Capacity

Table 7 indicates the number of principals that will need to be trained for an IE system, and a time line for their training. Some T&T principals are already familiar, at least to some extent, with the concept of IE and with what is needed to develop a school into one that offers effective inclusive education. However, all Model School principals (and eventually all principals) would need to receive leadership training as well as orientation to the Model School concept, so that the principals would understand clearly their roles and responsibilities and so they could support the IE transformation wholeheartedly.

Table 7. Projections for Principals

Position	Phase I (2008-10) 24 model schools	Phase II (2011-14) 60% of total schools	Phase III (2015-17) 40% of total schools	Total # Staff needed 100% of 625 schools
Principal	24	360	241	625

General Education Teachers

Skills, Knowledge, and Dispositions for General Education Teachers

The skills, qualifications, and competencies based on international research on best practises that teachers in an IE system need are described in column 1 of Table 8 below.

T&T Teachers' Profile

The findings from Miske Witt data collected in 2007 are summarised in column 2 of Table 8 below, and they provide a profile of teachers' readiness for IE and their professional development needs.

Table 8. Profile of Teacher Competencies for Inclusive Classrooms

Teacher skills, qualifications, competencies (research-based)	Findings on T&T teachers (Miske Witt, 2007)
1. Philosophy and vision that all children and youth belong and can learn.	Most T&T teachers believe that all children and youth belong and can learn.
2. High standards and expectations for all children and youth appropriate to their needs.	Teachers believe they have high standards and expectations for all children and youth appropriate to their needs.
3. A clear understanding of roles and responsibilities.	Roles and responsibilities of teachers, administrators, and school support personnel not always clear or clearly understood.
4. Ability to collaborate and cooperate with support personnel in support of an inclusive learner-friendly environment.	Teachers see general collaboration with other teachers as a strength; collaboration with support personnel is not always well understood.
5. Ability to form effective partnerships with parents.	25% of teachers have "a lot" of experience communicating curriculum to parents; 56% have "some" experience; parent-teacher partnerships are a strength for private special schools, and a "challenge" at other schools.
6. Expertise in best-practise, research-based strategies for teaching and learning.	Most teachers not grounded in research on best practises or action research on their own teaching.
7. Utilisation of a variety of assessments for accountability and student progress.	Limited number of normed and other (e.g., continuous) assessments used.
8. Knowledge to create a learner-friendly environment that is safe, healthy, and protective for all children—physically, academically, socially, and technologically.	Most teachers and principals willing to develop an inclusive environment; infrastructure and system deficiencies (e.g., lack of support personnel, poor infrastructure) prevent this in most schools. Parents and students in special private, private, and government schools express concern.

Professional Development for General Education Teachers

What do general education teachers know and what do they need to learn to teach effectively in an IE environment? Teachers' responses from the Miske Witt 2007 national survey indicate the following:

- Teacher attitudes toward IE were extremely positive, but 90% of teachers reported that they had no qualifications in special needs education.
- 41% understand well, 45% of the teachers only understand "somewhat" what is necessary to teach in an inclusive classroom.
- Many teachers cited assessment and collaboration as two skills they have already developed to work with diverse learners in their classrooms. Other survey items indicate that teachers lack other skills of inclusive education pedagogy.
- Only 3% of teachers had "a lot" of knowledge about Individualised Education Programmes (IEPs); 21% had "some" knowledge.
- 7% of respondents had "a lot" of experience with curriculum differentiation; 40% had "some" knowledge.

From Table 8 and from the survey data findings it is clear that teachers want and need to be provided with tools to address learning, behavioural, and cognitive needs within the general education classroom. In the national survey, teachers at all levels of formal education suspected more students had disabilities than had actual diagnoses, which indicates that students are struggling to succeed in schools and teachers are struggling to teach them. Teachers' hypotheses about some (or many) of their students may be true, but improved instruction and behavioural support may minimise the effects of disability for some students and improve outcomes to the point where teachers no longer suspect a disability for others. Special education support teachers in schools will provide intensive support for these students as needed and should be found in every school.

Teachers want and need professional development and training in these areas: (1) inclusive pedagogy and curriculum differentiation, which requires a solid understanding of subject matter; (2) the IEP process; and (3) communication with parents. To acquire these skills and knowledge, practising teachers need to participate in in-service training programmes, and teacher education programmes need to provide education in relevant skills and knowledge for prospective teachers.

Pre-service Teacher Education

Two universities in Trinidad, the University of Trinidad and Tobago (UT&T) and the University of Southern Caribbean (USC), offer a bachelor's degree in teacher education with coursework in special education or relating to inclusive education. University of the West Indies (U-WI) does not presently have professors with expertise in special education; but, according to the Department Chair, they are open and willing to offer courses when they have faculty in this area.

Although the Government of Trinidad and Tobago is moving toward four-year bachelor degree pre-service teacher education (i.e., where university students who have never worked fulltime are studying to become teachers), at present the classes are mixed in both institutions. Pre-service teacher education students and practising teachers who are returning to get their B.Ed. degrees study together. Hence, although this chapter discusses "pre-service" and "in-service" teacher education, it must be understood that at present and for at least the next five to eight years, the

B.Ed. programme actually will function as in-service professional development as well as pre-service teacher education for prospective teachers.

The University of Trinidad and Tobago⁶ is in the second year of developing its B.Ed. teacher preparation programme. In October 2007, the SEN area coordinator estimated that 400 TE students were enrolled on the North Campus (Valsayn), and 400 on the South Campus (Corinth). All students enrolled in the new UT&T Bachelor of Education programme for primary school teachers are required to complete an introductory two-credit course on “Students with Exceptionalities.” In this class, students are exposed to teaching children with moderate needs and gifted and talented children. They also take modules in and are exposed to sign language and the teaching and reading of Braille. (The Special Needs Education Area Coordinator noted that since there is not a high incidence of these in this context, the programme includes exposure only rather than an emphasis.) The Exceptionalities course also requires that students observe in classrooms and that they prepare a project on some facet of exceptionalities. In this way, future teachers are being exposed to the philosophy of what it means to teach *all* children, foundational to understanding what it means to be engaged in inclusive education and to teach in an inclusive classroom.

In addition to mandating that all prospective teachers take the Exceptionalities course, all Teacher Education courses need to be taught from an inclusive perspective; that is, special education needs to be seen as a service *within* an inclusive school system rather than a separate programme to be carried out in segregated settings. Likewise, general education teacher preparation programmes need to have an inclusive emphasis. Whether courses are labeled “special (needs) education” or “general education,” this perspective is needed.

The University of Southern Caribbean⁷ has enrolled approximately 80 to 85 students in its first two bachelor degree cohorts (i.e., Freshmen and Sophomores) of the four-year B. Ed. teacher education programme. Some students are full time, some are part time working on the B.S. Ed. as their focus. It appears that an Exceptionalities course is not yet part of the first-year curriculum for teachers of general education.

A practicum is built into the teacher training programme for every year of study at both UT&T and USC. Students can elect to take the practicum in Special (Needs) Education. In-depth information on the curriculum (general education and special needs education) was not available at the time of data collection; in October 2007 university catalogues, course programme descriptions, and syllabi were available in draft form only at both institutions, as they were still under official review. An inclusive education system, and especially the Model Schools, could use the practicum as an opportunity to mentor students into Inclusive Education. This calls for a close partnership between university TE programmes and schools, especially the Model Schools.

System Capacity

In 2010, approximately 270 “pre-service” teachers will receive their bachelor of education degrees if all current students in the first-year cohort graduate. This number includes students who have never taught and already practising teachers.

⁶ Information from interview with Special Needs Education Area Coordinator Dr. Elna Carrington-Blaides, UT&T Valsayn.

⁷ Information from Mr. Clifton Pryce, Interim Director, Teacher Education, University of Southern Caribbean.

An additional 270 will graduate in subsequent years, unless the capacity of UT&T expands, or additional in-service in IE is offered to practising teachers.

In-service for General Education Teachers

Teachers in the study requested professional development opportunities, especially school-based in-service training. Principals requested training for their teachers. Moving toward an IE system calls for teachers to think differently about curriculum, assessment, and lesson planning, as well as to reframe their understanding of how schools serve children (i.e., special *needs* education where all children have needs of some sort at some time for which the system needs to provide support over against special education, where children are sent to different schools).

An example of important training for teachers that has existed since 1990 comes from the Dyslexia Association. Every year for 17 years this association has offered a three-week basic training course in July for 20-22 teachers. Another three weeks of advanced training is offered that some teachers also attend. Teachers come from all over T&T, both primary and secondary – most from the East-west corridor of Trinidad. These teachers are self-identified and recommended, and get training voluntarily. Approximately 400 teachers have been trained throughout T&T. These teachers act as resources in their schools.

Other training offered includes training in phonemic awareness, reading comprehension, and math (32 teachers were trained). Parent training is offered in evening sessions (for helping their children at home, tutoring). The three-week training of teachers uses the Orton-Gillingham multi-sensory approach. The Aston Index from England is used for screening of dyslexia. The LIPS programme (Lindamood Phonemic Sequencing) is used for phonemic awareness. Reading difficulties are the major part of the focus of these trainings.

With regard to in-service teacher training for IE in particular, in Phases 1 through 3 of the rollout of IE in T&T, consultants will work closely with faculty of UT&T and USC to ensure that courses are taught from an inclusive perspective, as described above. Likewise, consultants will work with lecturers at UT&T and USC to ensure that general education teacher preparation programmes have an inclusive emphasis.

In-service training for teachers will take place via technology-based individualised learning. In Phase 1, teachers in all Model Schools will participate in modules designed to improve inclusive education pedagogy, assessment, and behavioural support. In Phase 2, the technology-based programme will be evaluated and made available to all teachers in Trinidad and Tobago. The fundamental difference between pre-service and in-service education is that in pre-service education teachers choose a track (special or general education), while *all* teachers will engage in technology-based in-service training.

Early Childhood Care and Education (ECCE) will also be delivered via pre-service and in-service training. Consultants will work closely with local institutions in Phase 1 to determine the feasibility of an ECCE Special Education programme. The programme's success will depend on the availability of knowledgeable university faculty and student interest.

School Support Personnel

Personnel who are supporting the development of inclusive education through the Cluster Schools at present include Special Education I and II teachers, Guidance Counsellors, Social Workers, and Diagnostic Specialists, positions created for the current system. Two school psychologists are also employed by the system.

International research indicates that IE support personnel (e.g., Special Needs Education teachers, IE resource teachers, T&T's "diagnostic specialists") need these skills, qualifications, and competencies:

- knowledge of concepts of inclusion and service coordination at all levels (policy, programme, and practise);
- knowledge of the roles of the various disciplines that serve students with SEN;
- preparation for functioning as an effective team member (at the service as well as the planning level);
- preparation for coordinating services for families;
- experience from working as a coordinator of special education support services in the areas of team-teaching and developing mutual support between teachers and effective collaboration through a problem-solving approach; and
- experience with the pedagogies of curriculum differentiation and in the development of IEPs and the monitoring of student progress.

Based on the findings of the national assessment, teacher focus group discussions, classroom observations, and the roles and relationships school cluster survey, the following profile characterises T&T Support Personnel:

- Support personnel (especially Special Education II teachers) are familiar with concepts of inclusion and with service coordination at various levels, especially in programme and practise.
- Roles of the various disciplines that serve special needs students are not always clear, so staff knowledge of the roles of the various disciplines that serve students with SEN may be vague.
- Some cluster support team members function well as effective team members (at the service as well as the planning level). However, the lack of space for team members to meet and the current arrangement of serving multiple schools prevents cluster teams from functioning effectively.
- Certain support personnel (e.g., social workers) are particularly well prepared to coordinate services for families.
- Some support personnel have experience from working as coordinators of special education support services in the areas of developing mutual support between teachers and effective collaboration through a problem-solving approach; experience with team-teaching is less common.
- Some support personnel have some experience with the pedagogies of curriculum differentiation; the limited number of IEPs in use at schools observed suggests that experience in the development of IEPs and the monitoring of student progress is limited.

Professional Development for Pre-Service Special Education Teachers

UT&T second-year Teacher Education students can apply to specialise in Special Needs Education; 25 per year have enrolled and are accepted. The area of specialisation offered is Special Needs Education for mild to moderate disabilities (i.e., Learning Disabilities (LD); Mental Retardation (MR); and Emotional/Behavioural

Disorders). Students who elect to take this specialisation are prepared for all three areas, which are the areas of highest need in T&T. The UT&T programme for teachers of Special Education Needs children adheres to the 10 international standards of the International Council for Exceptional Children. It is expected that following these standards will facilitate securing international accreditation for the programme, once the four-year programme has been completed and the university is ready to apply. These 10 standards, which have been elaborated for Teachers (ECCE and other), Administrators, and Diagnosticians are listed in Box 2.

Box 2. Programme Standards - Council for Exceptional Children

- Standard 1. Foundations
- Standard 2. Development and Characteristics of Learners
- Standard 3. Individual Learning Differences
- Standard 4. Instructional Strategies
- Standard 5. Learning environments/Social interactions
- Standard 6. Language
- Standard 7. Instructional Planning
- Standard 8. Assessment
- Standard 9. Professional and Ethical Practise
- Standard 10. Collaboration

<http://www.cec.sped.org/>

At present, about 15 USC pre-service teacher education students are also enrolled in a Special Education elective. Students can select two minors or a major. The following courses have been proposed for the special education major:

Box 3. Courses proposed by USC for the Special Education major (36 credits) and minor (21 credits)

- (major and minor) SPED 185 -- Introduction to Special Education
- (major and minor) SPED 210 -- Issues related to at-risk children
- (major and minor) SPED 205 -- Issues in Special Education
- (major and minor) SPED 255 -- Behavioral Disorders in Children
- (major and minor) SPED 226 -- Assessment in Special Education
- (major and minor) SPED 361 -- Strategies for Teaching Special Needs Children
- (major only) SPED 304 -- Psychology and Education of Hearing Impaired
- (major only) SPED 305 -- Psychology of the Physically Disabled
- (major only) SPED 440 -- Teaching Functional Behavioral Interventions
- (major only) SPED 486 -- Teaching Language and Literacy Skills to Special Needs Children
- (major and minor) SPED 465 Teaching Adaptive Behaviour and Functional Skills for Special Needs Children
- (major only) SPED 485 Practicum: Field Experience

Total credits needed: 136

For Social Workers and for Guidance Counsellors, courses of study are available at the University of West Indies. Other programmes for professional support staff are not available in Trinidad and Tobago; specifically, school psychology, speech and language therapy, and diplomas or advanced degree work in special education.

Currently in T&T, “diagnostic specialists” serve at the district level; however, the SSSD at present does not envision that this position will continue to be filled after the rollout of IE has begun. This position is often confused with “diagnosticians” who have the technical expertise to diagnose the range of individual abilities within the categories of exceptionalities. It is suggested that the T&T terms be changed to conform with actual roles and responsibilities of the position.

System Capacity

Based on these data, additional support personnel are needed, as is training and professional development for support personnel, teachers, and principals. Based on the Model School plan (for primary schools), the following support personnel positions will be needed:

Special Education Teacher I
Special Education Teacher II (Coordinator)
Social Worker
Guidance Counsellor
Diagnostician
School Psychologist
Speech and Language Therapist

Table 9. Staffing Projections for Support Personnel

Position	Phase I (2008-10) 24 model schools	Phase II (2011-14) 60% of total schools	Phase III (2015-17) 40% of total schools	Total # Staff needed 100% of 625 schools
Special Ed Teacher II	24	360	241	625
Speech & Lang. Therapists (ECCE & primary schools)	12	160	100	272
Psychologists	8	10	8	26
Guidance Officers	4	60	40	104
Remedial Teachers (secondary schools)	8	85	57	150
Special Ed Teacher I 30/1 student/teacher ratio (20% of 400,000 students)	96	1868	632	2596
Social Workers	4	60	40	104
Diagnostician (ECCE)	5	105	70	180
Curriculum Specialist	8	16	0	24
Inclusive Ed Specialist	8	16	0	24

Special Needs Education Teachers

The four-year bachelor degree programmes in Education first introduced in 2006-2007, offer Special Needs Education courses in the university teacher education programmes, and they are beginning to address some of the themes mentioned above.

At the current rate of enrolment, the special needs education and special education course of study being offered at UT&T and USC respectively will prepare approximately 35 teachers per year for the system. If a minimum of one special

education teacher is to be available to each school, it will take over a decade for a sufficient number of graduates to be available. It will be important to consider implementing relatively soon alternate route programmes, in particular, web-based in-service training for teachers, which can be introduced throughout the system more quickly and consistently, together with school-based professional development (see Annex H for details of the training plan).

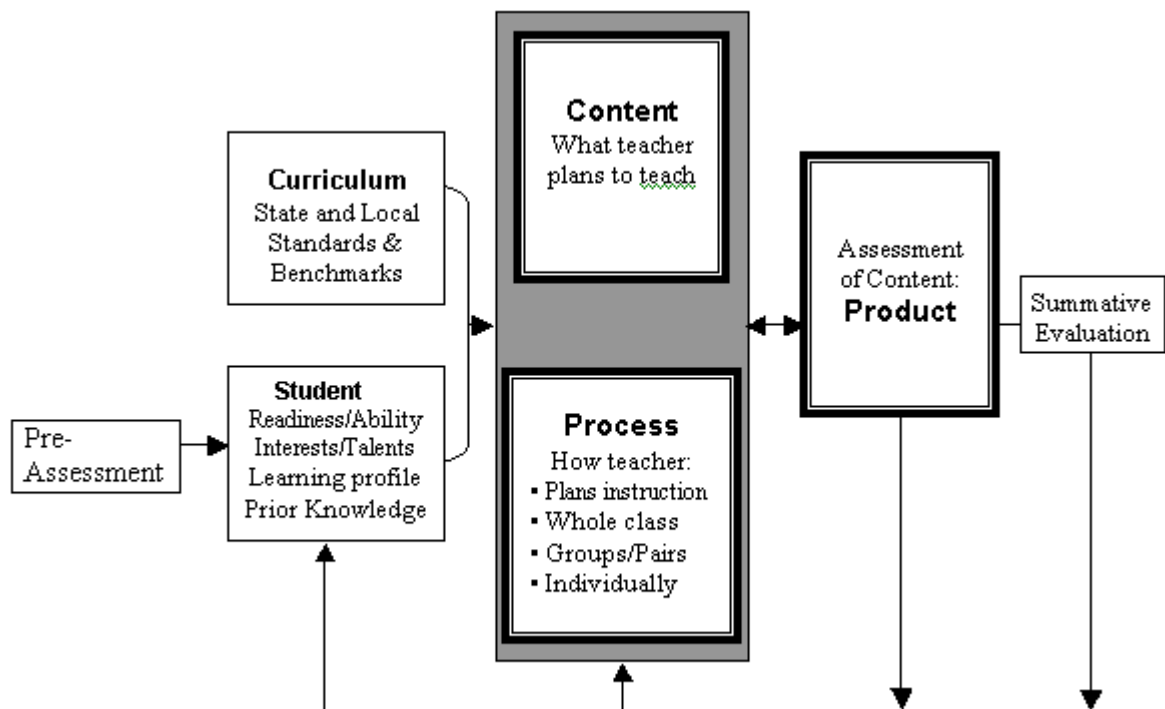
Curriculum Differentiation

Comprehensive curriculum reform is being addressed in another component of the Seamless Education System for Trinidad and Tobago; differentiated curriculum and inclusive education pedagogy are the focus of this section.

Differentiated curriculum and instruction address the needs of SEN children and include gifted children as well. They are based on the premise that curriculum and instructional content and approaches should vary and be adapted in relation to individual and diverse students in classrooms. In differentiated curriculum and instruction, teachers are flexible in their approach to teaching. They adjust the curriculum and the ways in which information is presented to learners. They do not expect students to adapt to a unified “one-size-fits-all” curriculum and methods of teaching.

Differentiated instruction begins with a student pre-assessment; and it is informed by established, appropriate curriculum standards and benchmarks in various curricular areas. It acknowledges students’ different background knowledge, language, readiness, and learning preferences (see Figure 1 below; Hall, 2007).

Figure 1. Learning Cycle and Decision Factors Used in Planning and Implementing Differentiated Instruction



(adapted from Oaksford, L. & Jones, L., 2001)

http://www.cast.org/publications/ncac/ncac_diffinstruc.html

An effective curriculum for students who are gifted or who are challenged in one or more ways essentially is a basic curriculum modified to meet *students'* needs. Students' unique characteristics serve as the basis for decisions on how the curriculum should be modified.

The T&T system seeks to meet the needs of all children; therefore, preparing teachers to consider how to differentiate curriculum and teaching will make a significant contribution to addressing the needs of the diverse learners of T&T. The transformation that is needed to move the system toward differentiation is best understood by examining the data collected in classrooms by the Miske Witt teams.

Instructional Materials and Textbooks in Trinidad and Tobago

Students in about one-third of the classrooms of the 42 schools visited had textbooks. In most classrooms the student:textbook ratio was less than 1:1. The lack of teaching and instructional materials dramatically affected the kind of learning activities the teachers planned. Teachers rarely used audio-visual equipment, and we observed no use of information communication technology (ICT). Very few classrooms had learning centres (science, writing, arts/crafts, math, etc.) where students could engage in self-instructed learning activities. In many schools, the available instructional and teaching aides were in a storage room or in the principal's office.

Regular teaching resources were limited, and specialised learning and teaching materials to accommodate the visually or hearing impaired were even more limited. Student access to computers and the internet was nearly non-existent, as was teacher access to computers and internet to prepare for their lessons. Some schools had access to other educational technologies such as television, record players, overhead projectors, LCD projectors, radio, and audio-videotapes. However, only one Infant 1 teacher was observed using this equipment in the classroom to teach phonics lessons; another teacher tried unsuccessfully to use the audiotape for phonics but was unsuccessful, and skillfully shifted into other activities instead. Because of the way in which technology can aid instruction to present new material, to provide skill practise opportunities, to promote the development of new skills, and to serve as a reward for appropriate behaviour, finding ways to use this resource more effectively is important. Except for one school, no school had instructional resources for the physically impaired populations.

In the classroom observations, teachers made limited accommodations in the scope and sequence of the curriculum. Other than allowing students with difficulties more time to do their work, little was being done in the non-SEN classrooms to accommodate the range of learning needs of students. Access to instructional materials was limited; in about one-third of the classrooms teachers did not have access to teacher's guides and students were not using textbooks. In one classroom the teacher had photocopies of the student textbooks, which the students were using in lieu of regular textbooks. Some teachers used extension materials (e.g., from learning centres) as a means of reinforcing learning. However, these materials were used more to engage students who had finished work early rather than to provide mediated instruction to students with special learning needs. In very few classrooms were teachers observed making notes or keeping records on student performance, which would guide their efforts to develop accommodations in subsequent learning activities. In the interviews, teachers frequently spoke of one-on-one assistance they provide during recess or during the lunch break. This, however, was more of an ad

hoc attempt to assist a struggling student rather than a regular, systematic approach to modify learning activities for students who struggled or who excelled in the regular curriculum.

It is necessary to develop integrated systems for assessment and feedback. Such systems could aid tremendously in determining future accommodations for curriculum differentiation when considering all exceptionalities.

Recommendations for Professional Development and Curriculum Differentiation

Recommendation 1

Miske Witt recommends developing a comprehensive professional development and training plan for all identified staff, along with a budget for implementation. Best practises indicate continuous, supported school-based training models and rolling out the IE training to all teachers using web-based training. Factors to include are hands-on experiential training, coaching (peer and mentored), visitations to model school sites and conferences, and follow-through assignments. The standards of the Council for Exceptional Children (CEC) and the National Association for Gifted Children (NAGC) should be considered in the overall programme planning of teacher training, both pre-service and in-service.

Professional development for all educators and staff is recommended prior to opening Model Schools and during the three years of pilot implementation. To develop a cohesive vision and understanding of inclusive education for T&T, prospective Model School principals, teachers, and support personnel, together with MOE officials who will supervise and interact with Model School personnel, need to receive appropriate professional development.

In school-based in-service training, teachers need to continue to act as resources in their schools (e.g., for understanding and working with dyslexia), with support and recognition for their role.

Recommendation 2

Miske Witt recommends increasing numbers and building capacity of professional support personnel through scholarships and university linkage programmes. While Guidance Counsellors and Social Workers can be trained in T&T, other support personnel cannot. There is precedence for providing both scholarships and university linkage programmes to increase the capacity of school support personnel in the country. For example, USC worked with Andrews University, Michigan, USA to develop its major and minor areas, including those in special education. UT&T is working with Canadian universities to increase its capacity as a university (although, as of October 2007, not in the area of special education). The University of Minnesota is designing MA programmes to support the development of T&T special support personnel (e.g., speech and language therapy; ESL; school psychology). These linkages need to be explored and a total comprehensive support programme designed for (a) the immediate development of Model School personnel; (b) the scaling up of IE; and (c) maintenance of the full complement of personnel necessary to effectively maintain an IE system.

Recommendation 3

Miske Witt recommends taking into account CEC standards and IE principles in teacher certification. There is a move to certify special education teachers, as well as general education teachers. As the MOE develops teacher certification standards, the CEC standards should be considered and decisions made about readiness of teachers to teach Inclusive and Special Needs Education. Both pre-service and in-service will need to keep the teacher certification standards and requirements at the forefront of their considerations in the development of certification standards.

**Professional Development and Curriculum Differentiation:
Indicators of Success**

1. Teachers have received orientation and training to basic teaching in Inclusive Education.
2. A sufficient number of support personnel have been trained and are accessible to all schools; support professionals' (psychologists, speech therapists, and others) services are available to schools in all districts.
3. All teachers have been trained in differentiated curriculum and instruction and demonstrate mastery of both.
4. Schools have functioning school-based professional development programmes, grounded in IE principles.

**Time Line for Implementing
Professional Development and Curriculum Differentiation**

Phase I: Years 1-3

1. Provide training for staff in Model Schools.
 - 1.2 Train Teacher Assistance Teams in each model school.
 - 1.3 Train diagnostic specialists and special education teachers in assessments for screening and identification of students with special education needs in model schools.
 - 1.4 Train school personnel and technicians responsible for introducing and maintaining assistive technologies.
 - 1.5 Train general education teachers in the philosophy and practices of IE, including classroom-based assessments.
 - 1.6 Train all school staff in positive behaviour supports for a safe school environment.
 - 1.7 Train principals and school boards in leadership and evaluation/monitoring strategies.

Phase II: Years 4-7

1. Follow steps in Phase I above for rolling out IE to new schools.
2. Expand long-term training and scholarship opportunities available to support professionals.
3. Conduct annual teacher conferences, regional and national workshops for teachers and professional support personnel to share differentiated and teaching strategies.
4. Expand long-term training and scholarship opportunities.

Phase III: Years 8-10

1. Long-term training and scholarship opportunities continue to be made available to all.
2. Teachers and all professional staff conduct action research on differentiated curriculum and teaching strategies.

Chapter 4 Monitoring and Evaluation

Goal

To establish a coherent system of monitoring and evaluation with the aim of system-wide improvement, supported by cabinet level policy and legislation and by concrete monitoring and evaluation strategies.

Rationale

The T&T National Task Force of Education White Paper calls for a finely honed implementation capability, which would ensure that programme planning (including design, implementation, and evaluation) is responsive to critical needs and emerging priorities and thus will promote sustained improvement in the system as a whole. First and foremost, a monitoring and evaluation system must be upheld by policy and legislation that guarantees rights and stipulates procedures for enforcement Inclusive Education. UNICEF's 2007 "Promoting the Rights of Children with Disabilities" indicates that the *absence of political will is the single most important problem* in gaining rights and access to education for children and youth with disabilities and special education needs. However, political will alone will not improve practice. Therefore, this chapter includes recommendations for both policy and monitoring and evaluation strategies aimed at improving system-wide educational service delivery.

Findings

The findings are based on data collected from two sources. First, project personnel reviewed and analysed the Education Act, National Special Education Policy, and other pertinent legislation and documents to determine how well they address SEN needs. The analysis of the relevant materials included (1) comparison of evaluation indicators in relation to objectives, action plans, structural organisation, and roles and responsibilities; (2) an assessment of the quality of these evaluation indicators; and (3) identification of strengths and gaps across legislation/documents.

Second, Miske Witt project staff qualified conducted a series of interviews. Interviewees from relevant ministries and organisations were asked about the following areas of interest and concern: (1) what ministry officials see as their key roles and responsibilities to carry out IE policy; (2) officials' views of their abilities to carry out these responsibilities; (3) mechanisms for cooperation that exist across ministries and their effectiveness; (4) interviewees' experiences in relation to cooperation with other ministries; (5) current activities that exist in relation to implementation, monitoring, and evaluation; (6) the strengths and gaps in these activities and approaches in terms of resources (i.e., both material and personnel, communication systems, and qualifications); (7) the decision-making process and how well it works; (8) whether a comprehensive management plan exists, and how effective it is; (9) what training is needed for sensitisation of ministry staff, information and skills to carry out their work effectively; (10) how much money is budgeted and spent for monitoring and evaluation; and (11) ways in which they liaise with schools and agencies (see Annex J for details of findings).

Policy Interviews and Document Review

Miske Witt and Associates staff reviewed relevant policy documents and interviewed key stakeholders in an effort to better understand the policy infrastructure for

inclusive education and how such policies translate into practice. Specifically, we reviewed the following documents:

- Equal Opportunity Bill
- 2005 National Policy on Persons with Disabilities
- Trinidad and Tobago Education Policy Paper
- 2005 Green Paper on Quality Standards for Education in Trinidad and Tobago
- Ministry of Education National Policy on Student Support Systems Paper (2004)

In addition, team members interviewed several stakeholders at the national level who were knowledgeable about policy development and translating policy into practice in Trinidad and Tobago. The table below represents the positions and organisations represented in these interviews.

Interviews were conducted with the following:

Ministry	Role/Responsibility
Ministry of Health	Director
Ministry of Education/SSS Division	Director
Ministry of Education/Planning Division	Director
Ministry of Education/Tobago	Secretary of Education for Tobago & Staff
Ministry of Social Development	Director of Disability Affairs Unit
Ministry of Science, Technology & Tertiary Education	Assistant Director & Staff
National Parent Teacher Association	President
Government Special Schools Association	President

Policy reviews and interviews indicate that there is a policy structure from which to build an effective evaluation and monitoring system, although there are clear policy shortcomings that may need to be addressed in order to support a fully inclusive and effective education system. For example, the 2005 National Policy on Persons with Disabilities calls for “the provision of adequate and appropriate support services for all children with disabilities in an inclusive education system beginning at the early childhood care and education level.” Such language supports a system of support that begins early in life and continues throughout the educational career of students.

This policy provides guidance for inclusive education, but lacks the power of law to enforce inclusive services. Relevant educational law stops short of *requiring* that all students with disabilities be educated in inclusive settings. The *Education Bill* and *Equal Opportunity Act* call for inclusive education services for students with disabilities, but allows for “exceptions” and allowances for alternative placements when “unjustifiable hardship” is present. Such provisions have been challenged by disability advocacy groups.

Although MOE policies fail to carry the power of law, they are successful in laying out the operational procedures necessary to create an inclusive education system. The Ministry’s 2005 *Green Paper* and *Student Support System* documents clearly lay out a chronological process for adopting inclusive education policies and recognise institutional, pedagogical and societal barriers that may create challenges for effective inclusive education practices.

Notably present in Ministry documents (especially the Ministry of Science Technology and *Tertiary Education Report on the Establishment of a Seamless Education System* (2005) is a call for a system of monitoring and evaluation that “enable[s] central and regional offices, educational staff, policy makers and parents to assess the quality of a school or campus capacity.” To this end, we provide recommendations below. These recommendations include approaches to strengthen policy and recommendations for development of a monitoring and evaluation plan that honors the spirit of the Ministry of Science and Technology 2005 document.

Recommendations for Monitoring and Evaluation

Recommendation 1

Miske Witt recommends conducting a formal evaluation of the Cluster School Pilot Programme in order to identify what lessons have been learned and what recommendations stakeholders can make to enhance the development of Model Schools. Target areas for evaluation include: student achievement, social cohesion of students with and without special needs, professional development for teachers, and pedagogy.

Recommendation 2

Miske Witt recommends promoting effective coordination among decision-makers and effective communication with schools and agencies.

In order to develop a system for monitoring and evaluation of IE, Miske Witt proposes that a national-level independent *Coordinating Council on Disability and Inclusive Education* be established, with members drawn from relevant ministries and organisations of persons with disabilities to oversee monitoring and evaluation of IE policies and programmes.

The Council would be empowered with the following roles and responsibilities:

- a. To identify critical needs and priorities through systematic involvement of all stakeholders.
- b. To establish goals, benchmarks and outcomes for IE
- c. To advocate, promote, and oversee implementation of IE.
- d. To initiate proposals, suggest policies, and monitor progress.
- e. To undertake a comprehensive review of all legislation to ensure conformity with standards of IE, and to recommend ratification of the Convention on Rights of Persons with Disabilities and other relevant laws.
- f. To provide for effective remedies in case of violations of the rights of children with disabilities and ensure that these remedies are accessible to all children, families, and caregivers.

Recommendation 3

Miske Witt recommends developing a system of monitoring and evaluation for the purposes of improving inclusive education outcomes.

At the national level, this monitoring system will include collection and analysis of the following data:

- Disaggregated national assessment data (by special needs, gender, and socioeconomic categories of students)
- Relevant and ongoing professional development of teacher regarding inclusive education

- Surveys of the social climate of schools relevant to safety, involvement of diverse students in school activities, and parent and community involvement.

The consultants will

- Develop training materials relevant to data collection procedures.
- Provide on-going professional development for Ministry officers, School Boards, and school supervisors on monitoring and evaluations strategies to address the learning needs of students and the competencies school personnel need to carry out effective educational programmes.
- Clarify roles and responsibilities of key staff and governing bodies at all levels of the system.
- Train data collectors in analysis and “meaning making strategies”
- Facilitate processes to establish data-driven decision making at the Ministry level

Recommendation 4

Miske Witt recommends adopting policy actions necessary for effective monitoring and evaluation. Miske Witt has identified the following three policy actions as high priorities:

- Enforce the T&T 2005 National Policy on Persons with Disabilities.
- Establish a Disability Ombudsman in every relevant T&T ministry to ensure that children and families are aware of and fully supported in gaining access to Inclusive Education, according to established law and policy.
- Require formal reporting of established goals and benchmarks to Cabinet.

Monitoring and Evaluation: Indicators of Success

1. Established benchmarks, time lines, and goals for achieving each recommendation.
2. Documented efforts to collaborate and liaise with and among ministries, schools and agencies.
3. Develop and submit quarterly reports of monitoring and evaluation efforts to responsible coordinating entities.
4. Review school-level strategic and improvement plans for evidence that results of evaluation were utilised in developing subsequent plans.

Time Line for Implementing Evaluation and Monitoring Recommendations

Phase I: Years 1-3

1. Establish independent Coordinating Council.
 - 1.1. Establish membership, procedures, responsibilities and powers at Cabinet level.
 - 1.2. Select membership and convene council.
 - 1.3. Hold regular meetings to develop and implement projects based on established roles and responsibilities.
2. Hire international consultant to develop monitoring and evaluation system.
 - 2.1. Meet with MOE Division of Planning and Coordinating Council to establish procedures and comprehensive management plan.
3. Design, develop, and pilot evaluation instruments that will generate data on student achievement, teacher professional development, and school climate.
 - 3.1. Identify personnel to collaborate on design, development, and piloting.
 - 3.2. Train personnel in piloting of instruments and protocols.
 - 3.3. Select schools for piloting.
 - 3.4. Implement pilot.
 - 3.5. Assess and refine instruments and protocols.
4. Conduct a formal evaluation of the Cluster School Pilot Programme.
 - 4.1. Conduct two-day workshops for evaluators.
 - 4.2. Administer evaluation.
 - 4.3. Analyse data collected.
 - 4.4. Report on findings.
 - 4.5. Establish recommendations for model schools.
5. Introduce monitoring and evaluation protocols to model schools.
 - 5.1. Conduct two day workshops to train model schools personnel.
 - 5.2. Administer evaluation.
 - 5.3. Analyse data collected.
 - 5.4. Report on findings.
 - 5.5. Establish recommendations for needed improvement.
6. Implement changes in model schools based on evaluation outcomes.
 - 6.1. Report to local school boards responsible for strategic and school improvement plans.
 - 6.2. Incorporate evaluation findings in strategic plans and school improvement plans (done by local school boards).
 - 6.3. Submit plans to local school board committee.
 - 6.4. Monitors and review plans (done by Coordinating Council).

Phase II: Years 4-7

1. Coordinating Council, Ministry and Cabinet level review Model School school improvement plans and strategic plans.
 - 1.1 Collect and review SIPs
 - 1.2 Establish extent to which evaluation and monitoring has been accomplished.

2. Provide technical support to Local School Boards whose school improvement plans are in need of improvement.
 - 2.1 Conduct on-site visits by trained evaluators to all model schools.
 - 2.2 Provide training as needed to local school boards
 - 2.3 Monitor and provide follow-up guidance as needed by trained evaluators, at least bi-annually.
3. Disseminate information and assess progress across districts
 - 3.1 Conduct national conference to disseminate information
 - 3.2 Assess progress and develop action plans to address school improvement needs.

Phase III: Years 8-10

1. Assess overall effectiveness of management plan
 - 1.1 Hire outside consultant.
 - 1.2 Review comprehensive management plan (done by outside consultant).
 - 1.3 Report findings and makes recommendations (done by outside consultant).
 - 1.4 Establish procedures to implement recommendations.
 - 1.5 Refine and improve management plan.

Chapter 5

Socialisation and Outreach

Goal

To raise public and agency awareness of students with SEN and of the philosophy and goals of inclusive education through a coordinated and systemic social-networking plan.

The plan aims to address the de facto discrimination of children with disabilities and all those with exceptional needs—including under-achievers, children and youth at-risk for school failure, minority groups, and gifted and talented students.

This goal is consistent with the major actions recommended in the United Nations articles of the 2006 Convention on the Rights of Persons with Disabilities. In addition, The Equity and Inclusiveness Logistical Framework (i.e., LOG FRAME) developed at the T&T stakeholder meeting, October, 2007 cites as its goal to sensitise stakeholders at each level of the system. By 2010, a targeted 90% of stakeholders and personnel will be sensitised.

Rationale

Government officials and agency representatives explicitly express the need for a concerted effort to educate and sensitise school personnel and the public in issues related to the education of SEN students. Sensitisation and outreach are essential to building capacity, enhancing sustainability, and ensuring participation in and support of inclusive education policies and practices.

Findings

This chapter reports on findings on current agency resources, activities, and supports. Miske Witt assessed agencies' communication and outreach to the general public as well as to school personnel and parents and families of SEN students both in terms of their level of intensity and their scope. Assessment data includes survey results from two stakeholder focus group forums and analysis of site-visits and interviews with directors of 13 agencies. Stakeholder survey results include

- a survey of 27 key stakeholders attending the Inclusive Education Launch, September 26, 2007 in Tobago. Respondents included special education teachers (5), supervisors and school principals (5), diagnostic specialists and guidance officers (2), general education teachers (8), social workers (3), parents (1), and other (3).
- a survey of 40 key stakeholders attending the Inclusive Education Launch, May 22, 2007 in Trinidad. Respondents to this survey included special education teachers and supervisors (5), diagnostic specialists (3), general education teachers (3), social workers (2), guidance officers (5), school principals (8), parents (2), NGO officials (3), and other (9).

The first survey question asked respondents to provide their view of the main issues regarding inclusive education in rank order. The issue most frequently cited as a top priority was the need to address attitudes and to raise awareness of the issues for both the general public and educators. Related to this top priority was the need to provide pre-service and in-service training for teachers, administrators, support staff, ministry officials, community, and parents. After these issues were addressed, respondents felt the most critical needs were

- providing classroom resources and staff support services;

- providing early intervention and assessment;
- providing parental training and support; and
- upgrading of infrastructure and accessible facilities.

These priorities were nearly identical for both Trinidad and Tobago, with the exception that parental training and support was a high priority for Tobago.

The second survey question asked respondents to suggest specific strategies for addressing these issues. The most frequently identified strategies for both Trinidad and Tobago were:

1. continuous in-service training for teachers with remuneration;
2. a public awareness and sensitisation programme for the nation via media and dedicated web-sites;
3. supported (scholarship) pre-service training for all teachers that has a research-based special education component;
4. workshops for parents and community members;
5. parent support groups and school/parent/community partnerships;
6. creation of schools that are welcoming and safe havens for all children, with a culturally responsive curriculum that meets the needs of diverse learners.
7. schools adequately staffed with support personnel, with a clear picture of roles and responsibilities for staff and a formal accountability system.

The third question asked respondents to identify resources that could be utilised to implement these strategies. Responses to this question for both Trinidad and Tobago included parent and professional support groups; NGO and community group participation; involvement of PTAs and school boards; internet and web-site services; parent/teacher associations; school supervisors' and principals' associations; teacher training at colleges and universities; and collaboration from the Ministry of Planning and Development, Ministry of Health, and the National Institute of Higher Education and Training. Tobago respondents also included Village Councils, and the Child Welfare League.

Interviews and On-Site Visits:

Assessment of Resources and Needs in Public and Private Sector Agencies

Interviews and on-site visits were conducted with the following agencies:

AGENCY	TYPE and FOCUS
Goodwill Industries	NGO—employment
L.I.F.E. Centre	Private special school—Autism
Disabled People International	Disability advocacy organisation
Families in Action	NGO—rehabilitation and counselling
Autistic Society	NGO—parent support and awareness training
Blind Welfare Association	NGO—supported employment
PAVI	NGO—blind advocacy and training
Charis Works Christian Academy	Private integrated school
National Parent Teacher Association	Government-supported agency
Tobago Literacy Institute	Government-supported NGO
Happy Haven Special School, Tobago	Private special school
Government Special Schools Assoc.	Government agency
Project P.R.Y.D.E.	Interagency consortium

For each agency, the following data were requested:

1. The clientele served (characteristics and number of people served annually).
2. The purpose of your organisation, and programmes and activities conducted to carry out purpose.
3. The ways in which clientele and organisation's purpose have (or might have) an impact on IE.
4. The training provided for sensitisation of the issues relevant to organisation's clientele and purpose, and in particular those relevant to IE.
5. The outreach activities to communicate with clients and to sensitise the community.
6. Collaborating organisations for providing sensitisation training and outreach.

Interviews, Agency Documents and On-site Visits: Summary and Analysis

1. The volunteer sector provides is a hidden resource that fills many gaps in government programmes and services.

For example, the Autistic Society provides parent awareness and sensitisation training, PAVI provides remedial student tutoring and supplemental services, the L.I.F.E. Centre and Charis Works provide subsidies to students' tuitions, Disabled People Internation acts as a watchdog and monitor of accessibility and disabled person's rights, Charis Works offers teacher training and parent awareness training, and Families In Action provide counselling and family supports. The Literacy Institute in Tobago is a model programme that has expanded from one small office to programmes in most major villages in Tobago. They provide several programmes that directly support students and teachers in schools, including after-school tutoring for struggling students, parent support groups, an Adult Literacy Programme for anyone 15 years of age and older, and training and curriculum resources for teachers. In addition, since 1990, the Dyslexia Association has provided training throughout Trinidad and Tobago for over 400 teachers.

2. Liaison and coordination are informal and sporadic at the ground level.

Several agency representatives described small-scale projects as well as larger ones that need coordinated support to come to fruition. For example, Families in Action is currently preparing a proposal for a Development Centre at Mt. Hope Hospital in the Eastern region to train nurses in early identification, so that intervention for children with disabilities can begin in early childhood. Relevant ministries for sources of funding would include the Ministry of Education, the Ministry of Health, the Ministry of Social Development, and Ministry of Community Development (Tobago).

School boards have been established in secondary schools and recently inaugurated in primary schools, yet according to the president of the National PTA, many of them are not yet operating effectively. Specifically, school boards responsibilities include developing annual school-based strategic plans that are to be reviewed and monitored. Yet these reports are not routinely reviewed, and data needed for schools to make decisions (e.g., student pass/fail rates, teacher absenteeism rates), are not routinely made available to them.

PTAs conduct several programmes that provide critical supports to schools, yet only 50% of primary school PTAs are currently affiliated.

3. Islands of excellence exist and could be taken to a larger scale with coordinated training and support.

Examples include Bridge of Hope orphanage, the inclusive education programme at Rosehill Roman Catholic School, the cooperative mainstreaming programme between L.I.F.E. Centre (a private special school) and Maple Leaf primary school, and the Literacy Institute programmes.

In 2005, Project PRYDE was conceived and developed by volunteers of the Family Community Capacity Upliftment and Enhancement Project to serve the needs of youth and their parents in southwest Tobago. PRYDE is coordinated by the Community Action Network in collaboration with the Board of Management of the Black Rock Regional Multipurpose Complex, the Division of Health and Social Services and the Division of Education, Youth Affairs and Sports. The programme provides a unique eclectic model of intervention, training, information sharing and support. It grew out of community focus group discussions that identified the need to promote parenting education and support for the development and empowerment of youth. Trained teams of volunteers go door-to-door in communities to identify families needing services and to tailor their services to the families' needs. During home visits, facilitators involve youth in recreational activities that support their developmental, emotional, and cognitive skills. They offer tips to parents about how best to promote positive attitudes to life, reduce risky behaviours, and increase youth health, hygiene, and safety. One of the first families to receive services, the DeGazon family, now has two home care helpers who have been assigned to assist the mother with her son, who needs 24 hour care as a result of brain damage. According to reports, facilitators have visited over 800 homes and have interacted with over 2200 children and youth in the past two years.

4. Available resources are under-utilised.

Schools are poorly resourced and could benefit from taking advantage of community resources —especially internships from university training programmes. Interns, properly supervised, could help fill the current personnel shortages among occupational and physical therapists, psychiatrists and psychologists, social workers, and special education teachers.

Staff at Special Schools also constitutes an under-utilised resource, especially in terms of developing IE. As an example, Happy Haven Special School in Tobago is located next to a primary and secondary school. An initiative between Happy Haven and the primary school to integrate 12 students from Happy Haven is a story of successful collaboration that could serve as a model for other partnerships. In 2005-2006, a committee was formed that submitted a report to the Chief Education Officer, recommending the following schools as designated Resource Centres: Audrey Jefferson Au Pierre for visual impaired (VI) and hearing impaired (HI) supports, Princess Elizabeth for support of students with multiple disabilities, Lady Hochoy Penal for supporting students with cognitive and emotional impairments, Cascade for HI students, and Santa Cruz for VI students. For these centres to become viable resources, training and a supportive infrastructure need to be developed and implemented.

Regional resources are available but not widely utilised. In Tobago, curriculum materials for differentiated instruction are available from the Centre of Excellence for Teacher Training, which is headquartered in Jamaica.

5. Evaluation and monitoring of programme scope, reach, and effectiveness is minimal or non-existent.

Agencies report poor policy planning, such as communication to schools about new initiatives. Others perceive sporadic accountability and performance evaluations of teachers, curriculum and instruction. One agency representative noted poor follow-through on initiatives for vision and hearing screening.

Recommendations for Socialisation and Outreach

A Socialisation and Outreach Plan for IE in T&T is situated within the context of the reform and modernisation of the education system so that all learners can participate in the process of education in a seamless manner from Early Childhood Care and Education to Tertiary Education.

Recommendation 1

Miske Witt recommends building on pockets of excellence (recognised exemplary practice in T&T) to scale up efforts for a broader audience.

To accomplish this effort, creation of an independent IE Socialisation and Outreach Consortium is recommended. A common recommendation in this report is to create an oversight body composed of representative stakeholders. This strategy is recommended to increase capacity and sustainability of IE efforts, as well as effectiveness of the Socialisation and Outreach Plan. In the case of Socialisation and Outreach, this strategy is especially critical. Based on interviews with stakeholders, Miske Witt recommends 40 members in the following categories:

- Parents or PTA reps (2 members)
- Teachers Union (1 member)
- University researchers (2 members)
- Village Councils/Community Centres (8 members)
- Church Denominations (8 members)
- NGOs (8 members)
- School Administrators' Association (1 member)
- School Board Association (1 member)
- Ministries (5 members)
- Disability organisations representing all disabilities (2 members)

Recommended roles and responsibilities of the Consortium:

- To identify needs and priorities and target these to institute a phased approach to sensitisation and outreach.
- To establish goals, benchmarks and outcomes for IE awareness raising and educational campaigns.
- To advocate, promote, and oversee implementation of the campaigns.
- To initiate proposals, suggest policies, and monitor progress of the campaigns.

Recommendation 2

Miske Witt recommends liaisoning by the Ministry of Education with Socialisation and Outreach Consortium to develop and implement sensitisation and outreach programmes. Because a broad-based campaign such as this would need full-time staff support to carry out their functions. Miske Witt recommends expanding staff of the Ministry of Education to include a full-time coordinator and full time assistant to the coordinator to support the work of the Consortium.

Recommendation 3

Miske Witt recommends utilising multi-pronged strategies involving media, community networks, and other communication venues to reach the general

public. To implement these strategies, Miske Witt recommends that a consultant team of international and local consultants be hired. The consultant team's role and function would be to advise the Consortium on effective strategies, to work with the Consortium, and to develop and design dissemination materials under the Consortium's direction. Miske Witt suggests a minimum of 8 consultants, with one assigned to each of the eight school districts.

Recommendation 4

Miske Witt recommends budgeting necessary funds for printing and disseminating media and printed materials. The recommended budget has been calculated based on similar budgets within the Disability Affairs Unit of the Ministry of Social Development. This unit has been conducting campaigns to raise national awareness of the Trinidad and Tobago National Policy on Persons with Disabilities. It is anticipated that the budget needs will be highest in the first year and reduce over the three years of Phase One of the IE Project. A budget item has been included for each Consortium member and is recommended to be calculated based on organisation membership numbers. This budget will allow member organisations to conduct workshops and training sessions targeted to specific groups. Using the data collected by Miske Witt and Associates, the budget is calculated based on an average membership of 1500, for a 40 member Consortium.

A quarterly newsletter, disseminated widely, will provide public accountability and ongoing sustainability of the campaign.

Recommendation 5

Miske Witt recommends involving individuals with disabilities and their organisations in all phases of planning and implementation. In addition to membership on the recommended Socialisation and Outreach Consortium, Miske Witt recommends that a speakers bureau be established. International experience has demonstrated that disabled people's voices are the most powerful means of addressing misconceptions and prejudices. In this respect, a speakers bureau should be organised and run by, for, and of disabled people. An organisation such as Disabled People's International of Trinidad and Tobago would be uniquely positioned to coordinate such a bureau. The recommended budget is based on a bureau of speakers that would allow 3 panellists per district, with speaking engagements at least once a month.

Recommendation 6

Miske Witt recommends adopting policy actions necessary to implement an effective socialisation and outreach plan.

Miske Witt recommends immediate consideration of two high priority policy actions:

- In the proposed national Inclusive Education Policy to be approved by Cabinet, an Inclusive Education Socialisation and Outreach Consortium, along with its functions, should be specified.
- Ratification of the Convention on the Rights of Persons with Disabilities will reinforce this action.

Socialisation and Outreach: Indicators of Success

1. Materials developed and disseminated via media and other communication venues to all identified constituencies.

2. Evidence of disabled persons involvement in all phases of sensitisation and outreach.
3. Parents, community members, government officials and school personnel demonstrate a willingness and commitment to including students with special education needs.
4. Schools perceived by students as a welcoming environment where they can maximise their potentials and be successful.
5. Reports from the Consortium document progress toward the goal and implementation of Action Plans. These reports are recommended at least quarterly in the first year, and at least annually thereafter. Reports should be requested by Cabinet, and disseminated widely (for example, via the recommended quarterly newsletter).

Time Line for Implementing Socialisation and Outreach Recommendations

Phase I: Years 1-3

1. Establish an independent IE Socialisation and Outreach Consortium.
 - 1.1. Designate member representatives solicited through advertising by the MOE.
 - 1.2. Convene the Consortium and establish roles and responsibilities.
 - 1.3. Establish needs and priorities through a broad-based review process.
 - 1.4. Establish goals, benchmarks, and outcomes based on this review.
2. Hire full-time staff member and assistant within the MOE to provide staff support for the Consortium
 - 2.1. Develop job description, advertise and hire needed staff.
 - 2.2. Establish procedures for coordination.
 - 2.3. Provide support to Consortium.
3. Hire a consultant team of international and local consultants.
 - 3.1. Develop a request for proposal based on goals, benchmarks and outcomes identified for Socialisation and Outreach (done by Socialisation and Outreach MOE staff in collaboration with the Consortium).
 - 3.2. Disseminate request for proposals and solicit applications.
 - 3.3. Review applications and select consultants.
 - 3.4. Begin work by consultants.
4. Establish a dedicated web-site and quarterly newsletter.
 - 4.1. Disseminate information via a dedicated web-site developed with the assistance of MOE staff and consultants—from the time the Consortium begins its work.
 - 4.2. Develop a quarterly newsletter disseminated through member representatives of the Consortium (done by MOE Socialisation and Outreach staff).
5. Establish a speaker bureau.
 - 5.1. Identify an organisation of disabled persons (ODP) to coordinate a speakers bureau (done by Consortium).
 - 5.2. Solicit and train speakers in all eight school districts (done by ODP).
 - 5.3. Begin outreach to schools and their communities through speakers bureau.

Phase II: Years 4-7

1. Review, refine, and adjust goals, benchmarks, and outcomes yearly.
 - 1.1. Conduct an annual review (done by Consortium at its regularly scheduled meetings).
 - 1.2. Report to constituents on progress towards goals and outcomes.
 - 1.3. Solicit feedback from member organisations regarding the report.
2. Consultants complete their work of designing and implementing a multi-pronged strategy for socialisation and outreach.
 - 2.1. Submit mid-term and final reports to MOE and Consortium
 - 2.2. Utilise recommendations from the final report to continue work.
3. Speakers Bureau reaches 90% of schools and communities across all eight districts.
 - 3.1. Respond to requests for on-going socialisation and outreach (done by Speakers Bureau members).
 - 3.2. Provide annual reports of accomplishments, challenges, and continuing needs (done by ODP).
4. Maintain dedicated web-site and quarterly newsletter
 - 4.1. Continue to up-date dedicated web-site.
 - 4.2. Continue to disseminate quarterly newsletter to constituent agencies and their members.
 - 4.3. Identify and continue to expand constituencies beyond the Consortium.
5. Review and evaluate the ability of designated MOE staff to meet demands of the Socialisation and Outreach projects.
 - 5.1. Adjust staffing level as needed.
 - 5.2. Adjust roles and responsibilities as needed.
6. Establish Community-based Consortia
 - 6.1. Build on the work of the national-level Consortium to establish community consortia that are sensitive to local needs.
 - 6.2. Obtain funding for community-based consortia.
 - 6.3. Provide training for community-based consortia.
 - 6.4. Convene regional and national meetings of local consortia to communicate and share information on best practice.
 - 6.5. Identify excellent programmes and support these programmes to provide outreach and training to other groups.

Phase III: Years 8-10

1. Institutionalise and build capacity for continued socialisation and outreach.
 - 1.1. Increase the capacity and activities of community-based consortia through continued outreach and training.
2. Maintain web-sites, newsletters, and media outlets for continued dissemination of information.
3. Continue annual reporting from all established groups.
 - 3.1. Review and evaluate reports (done by National Consortium).

- 3.2. Develop Plans of Action annually, based on reports.
4. Continue to convene regional and national consortia at least annually for information sharing and dissemination of best practice.

Chapter 6

Cost-Effectiveness Analysis and Facilities Upgrade

Goal

To provide cost-effective inclusive education in Trinidad and Tobago; to provide barrier-free physical facilities and accessible environmental conditions that support effective and learner-friendly schools.

Rationale

The document *Universal Design in Education* summaries well the rationale for facility upgrades in T&T: “While courses, technology, and student services are typically designed for the average student, universal design in education (UDE) promotes the consideration of people with a broad range of characteristics in the design of all educational products and environments. UDE goes beyond accessible design for people with disabilities to make all aspects of the educational experience more inclusive for students, parents, staff, instructors, administrators, and visitors with a great variety of characteristics. These characteristics include those related to gender, race/ethnicity, age, stature, disability, and learning style.” (Sheryl Burgstahler, *Universal Design in Education: Principles and Applications*. http://www.washington.edu/doit/Brochures/Academics/ud_edu.html.)

Findings

Cost-Effectiveness Analysis

There are three components in specifying a Resource-Based Cost Model (RCM): (1) assessment of student needs and programme assignment; (2) specification of the input configurations corresponding to instructional programmes and programme units; instructional administration and operation of programmes; and general administration and operations; and 3) determining resource prices and total district costs.

(1) Assessment of student needs and programme assignment. These have been specified in the section on large scale assessment (see Chapter 2).

(2) Specification of the input configurations corresponding to instructional programmes and programme units; instructional administration and operation of programmes; and general administration and operations. These have been specified in the section on system transformation (see Chapter 1). Quality measures of the key indicators of success, and others identified through the data collection strategies were identified. This section provides a focus on staffing needs, as personnel costs are typically 80% of an educational budget.

(3) Determining resource prices and total district costs. The budget report and budget determined the cost of training staff in effective inclusive education strategies (see Annex K). Costs for a system for measuring, monitoring, and assessing improvements in outcomes were also included, as well as costs for socialisation and outreach.

Summary of Resource-Based Formulations

The process began with specifying the actual distribution of students in a given district according to specified need characteristics (e.g., students with special education needs). In the next step, needs were determined in relation to various kinds of personnel and material resources required for these categories of students.

These specified requirements were then translated into programmatic costs based on the identified personnel and non-personnel resources.

The remainder of this chapter treats facilities upgrades separately, as the findings indicated that the needed scope of work in this area is extensive.

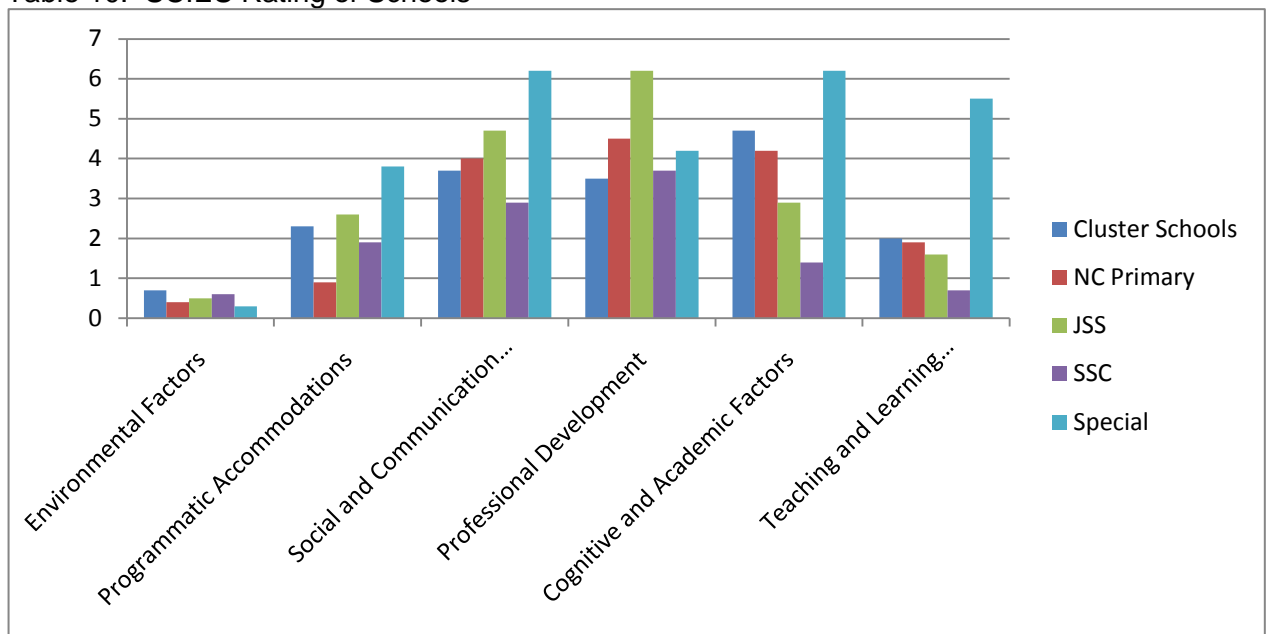
Facilities

The Ministry of Education in Trinidad and Tobago has developed and begun implementation of a plan to upgrade school facilities.⁸ Miske Witt teams of researchers, including local T&T education professionals, were specifically trained to assess the physical facility and environmental factors. Results of the study provide a context for understanding the extent and scope of needed investment in facilities upgrading.

Miske Witt and Associates SCIES Survey Findings

The School and Classroom Inclusive Education Survey was administered in 36 schools in Trinidad and Tobago. The following table provides a comparative overview of the findings of the schools. Findings are classified by category of school. In general special schools provide a more supportive environment for students with learning needs in all key categories. None of the schools, other than the one for physically handicapped students, provide any kind of accessible and barrier-free facilities for even the most basic needs, such as access to classrooms, bathrooms and toilet facilities, or water for personal hygiene or drinking.

Table 10. SCIES Rating of Schools



Overall School Analysis Survey: Physical Plants

In inclusive schools and classrooms, students with physical and sensory disabilities require special precautions and easy access to the different school areas, including entry to the buildings and play areas, classrooms, bathrooms, cafeterias, and

⁸ See specifically the Ministry of Education’s *Education Policy Paper, 1993-2003*.

administrative offices. In addition to architectural barriers (door widths, steps into rooms and buildings, space for easy movement in classrooms, bathroom stalls, etc.), amenities such as water fountains, and sinks need to be accessible.

All schools except for one have a principal's office and telephone. Even though they have libraries, they are too small for the children to use or they are used for storage because schools have limited storage space. There are computer rooms but they are not used frequently because the computers are not maintained, there is no internet, or it is difficult to get all the permission necessary to use the rooms. Also, four schools had no staff rooms because they have been converted to computer rooms.

The environment of most schools and classrooms in the sampling are not barrier free. Five schools were accessible with a ramp and barrier-free bathroom facilities on one level. Two schools had an elevator but were not otherwise accessible. Most schools had more than one level. In general, schools are not barrier-free.

Of the 38 schools visited, 11 had adequate space to accommodate a student in a wheelchair but there was no school with all classrooms accessible to students. Only 5 schools had an accessible staff room sufficient to hold planning sessions for students with IEPs. All but one of the schools had playgrounds although most of them (35) were not accessible: some had gates that restricted access to a student in a wheelchair; others had concrete drains or steps that would restrict access; still others had potholes on sidewalks leading to them or other areas of the school grounds including the main gates into the school. Also, there were many playgrounds that had obstacles like rusty furniture and play equipment on or near the play area or the playgrounds were used as car parks. Although some schools offered playing areas that were cement or tarmac, the hard surfaces can pose a safety hazard to students. Twenty-four of the schools in the sampling had no level walking surface posing a potential hazard to students in wheelchairs or students with physical restrictions in walking. Two schools had septic tanks on the playgrounds that were tightly sealed but were hazardous since the seals were slightly raised above the ground. There were 2 schools that had unsafe structures or were unsanitary (e.g., bird droppings). In general, there were only 5 schools free of environmental factors.

Most classrooms were noisy and hot, overcrowded, and restricted easy movement even in cases where someone did not have physical difficulties moving or was not in a wheelchair. Bathrooms were frequently totally inaccessible. Door widths were too narrow to accommodate entry for someone in a wheelchair or had steps to get into the room; toilet stalls with doors that opened into the stalls did not permit someone to move about inside them; personal hygiene supplies were frequently lacking (particularly worrisome for girls); and bathrooms were dirty and sometimes non-functioning, posing an overall health risk to students. Access to sinks for both hand washing and potable water was restricted or completely unavailable. All schools used natural light and/or fluorescent light with windows and sunlight, and ceiling/standing fans and/or ventilating blocks. In at least one school, there was a safety hazard with a standing fan with no cover. Six schools had no guard houses and security guards posing threats to security. Only seven schools provided a sick room or nurse's room.

There is limited efficiency and multi-purpose use of space. There was only one school that had resources appropriate for all special need populations. Access to learning materials was not possible in nearly all the classrooms. The materials were situated on shelves that were blocked or were too high, which would deny all

students access to the same educational opportunities. In some cases the space could be arranged to be more functional but most of the classrooms in which observations were carried out were too small or the furniture too restrictive to effectively accommodate students with a range of learning needs. There was no room to move about; nor was there room to store the needed learning materials to accommodate special needs. Because of this overcrowding and limited functionality of space, teachers were limited in how effectively they could move about and teach equally to all students. In the future, characteristics of physical structures that need to be considered in terms of the use of space include: sound—quiet areas from noisy ones; convenience—adequate space for storage and ease of access; movement efficiency—direct and uncluttered traffic patterns that are not distracting to students; flexibility—space can meet all learning activities and provide for multi-purpose use; and density—students and teachers have adequate personal space so they are not overcrowded, which can lead to increased disengagement and distraction and even aggressiveness.

School Facilities Evaluation Findings Based on the T&T National Model Grid

Using the Units of Accommodation Grid developed and published in the T&T Ministry of Education's National Model for Education in T&T,⁹ Miske Witt and Associates assessed the schools visited during October 2007. The first Annex to the Miske Witt Budget Report of January 7, 2008 provides an overview of the extent to which the facilities reviewed are in need of upgrading to meet identified T&T standards. The accompanying Annex of School Facilities Evaluation includes expanded information.

Recommendations for Cost-Effectiveness Analysis and Facilities Upgrades

Recommendation 1

Miske Witt recommends hiring an international consultant to work with the MOE's Planning Division to review, appraise, and revise construction plans for upgrading schools to meet standards of Universal Design.

The following sources are suggested:

- The *Center of Universal Design in Education* <http://www.washington.edu/doit/CUDE/>
- ADA Checklist for Readily Achievable Barrier Removal <http://www.usdoj.gov/crt/ada/checkweb.htm>

See also the recommendations for Universal Design contained in the Miske Witt and Associates Mid-term Report of September 14, 2007 (pages 69-77).

As stated earlier in System Reform Recommendation 3 above, Miske Witt recommends hiring an international consultant to work with the MOE's Planning Division to review, appraise, and revise where necessary construction plans for upgrading schools to meet standards of Universal Design.

Because construction plans have already gone forward, the *Center of Universal Design in Education* may be of immediate assistance: <http://www.washington.edu/doit/CUDE/>. See also the recommendations for Universal Design contained in the Miske Witt and Associates Mid-term Report of September 14, 2007 (pages 69-77).

⁹ Revised and disseminated in May, 2007; see section 5.7 Physical Facilities standards for a learner friendly environment, pp. 38 to 45.

Other aspects of universal design include:

- Technology Environment – Hardware. While this requirement may be covered under the government's plans to wire all T&T schools for technology, it is included here as fundamental to bringing assistive technology to model school classrooms.
- Technology Environment – Software. As above, model school will need computer software for assistive technology.
- Ensuring that schools maintain partnerships with communities and organisations. Incentives are included to encourage Model Schools to use the assistive technology that is brought into the classroom through IE.

Recommendation 2

Miske Witt recommends budgeting for accessible facilities.

Note: A comprehensive breakdown of costs for physical facilities upgrade is beyond the scope of the Miske Witt and Associates contracted work plan and budget. Our data do indicate that the Miske Witt estimates are probably conservative.

The MOE has set a construction schedule and cash flow projections for 51 new primary schools, with a total projected cost of TT \$183.35 million. To maintain the current 70% transition rate to secondary schools, 21 new schools are proposed, for a total projected cost of TT \$400 million. Assuming these new schools will be built according to international accessibility standards, approximately 465 existing schools will need to be upgraded to the same accessibility standards. Based on the Miske Witt environmental surveys of 14 selected schools in Phase II of our consultancy, we estimate that virtually 100% of existing schools will need to be upgraded. Conservative estimates would put the total budget at 15% of the cost of a new school, or TT \$790 million for 465 schools (approximately TT \$1.7 million per school).

Using the SSSD cost calculations from the 2004 *Discussion Paper on Inclusive Education*, estimated costs for upgrading facilities are much lower and are broken down by primary schools (475) and secondary schools (150) for a total of TT \$77.5 million to upgrade all schools. The same document estimates provision of appropriate furniture and equipment for all schools at TT \$38.75 million.

Table 11. Summary of Costs for Upgrading Current Facilities

Source of Estimate	Cost per school for upgrading facilities	Total cost
Miske Witt estimates (based on MOE Planning Division)	TT \$1.7 million (465 schools)	TT \$ 790 million
SSSD Estimates	TT \$ 124,000 (625 schools)	TT \$77.5 million

Converted into US dollars, the approximate cost of refurbishing and upgrading existing primary and secondary schools that will be Model Schools is USD\$275,000 per school for 16 (primary and secondary) schools.

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