

**Sub-Regional Seminar On Curriculum Development For
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Country Report - Trinidad and Tobago

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Introduction

Rationale for curriculum reform

Trinidad and Tobago has begun a modernization of secondary education. This thrust is in direct response to criticisms of and problems identified in the education system. The problems extended beyond the curriculum to include infrastructure, organization and staffing in the secondary education programme. Other problems identified include: a low level of literacy and numeracy among students; a lack of creative, analytical and problem-solving skills; low achievement level in examination results, especially at GCE Mathematics and English; and a high level of student misbehaviour. There has also been a high drop out rate at the end of Form III, which may be attributable to the low level of the necessary literacy and numeracy skills.

A lack of adequate infrastructure meant that there was not access to secondary education for all students who completed primary level education. The system was also not producing adequate numbers of persons who could function successfully in the 21st century.

There are insufficient trained and qualified teachers with the appropriate competencies to improve the skills of students. The professional development offerings provided for teachers are limited. Such inadequacies affect the provision of a variety of quality learning experiences.

There is no common curriculum document for the secondary level. The curriculum varies from school to school and is based on a variety of guides or syllabi. There is no organized attempt to relate curriculum goals and objectives to goals and objectives of the education system from Infants to Form 5.

Teaching methods are very teacher-centered with emphasis on content and dissemination of knowledge. The emphasis is on lower-level cognitive skills, while higher order skills such as critical and creative thinking and problem-solving are lacking. Teachers make minimal use of audio-visual aids and a variety of instructional strategies which cater for the diversity in learning styles, abilities and interests.

Resource materials to support the implementation of the curriculum are inadequate, limited and at times non-existent. School libraries are inadequate and unable to enhance the quality of learning in the classroom. The amount of teaching time per subject differs according to school type. For example, in junior secondary schools, English and Mathematics have fewer periods than the same subjects in the five and seven year schools. Ironically, junior secondary schools have students who are in greater need of more time being devoted to literacy and numeracy skills. Teacher absenteeism tends to be high and teachers on leave or who have left the system are not always readily replaced. In many of the schools, the needs of children are not met, particularly the special needs of special children or children who are learning challenged.

Objectives of the reform

The objectives of the reform in relation to curriculum are to:

- provide a modernized curriculum with modern approaches to delivery capable of producing an improved workforce and citizenry that is more productive, competitive and better educated than currently exists.
- have a professionally developed, upgraded and revitalized teaching force that uses sound teaching methods.

Research base for the reform

- The Draft Plan for Education Development in Trinidad and Tobago 1968 - 1983.
- The Education Plan 1985 - 1990 (Draft) Ministry of Education, 1985
- The Education Policy Paper 1993 - 2003, which includes statements that provide a basis for development of a philosophy, goals and objectives that reflect the current thinking of the society.
- The Fourth Basic Education Plan.
- Romain, R. *Trinidad and Tobago Post Primary Education*: [A study conducted for the Caribbean Development Bank and Ministry of Education], Port-of-Spain, 1997.

Recommendations of Committees, Task Forces and Plans

- Achievement of Universal Secondary Education (USE)
- Improved teaching and learning strategies
- Curriculum development and reorientation
- Professional development of teachers and administrators
- Appropriate testing, assessment and evaluation
- Institutional strengthening and reorganization of the Ministry of Education
- Report of the Technical Committee on Local School Boards, 3 August 1998
- Report on the Committee for Technology Education, 1995
- Committees for the establishment of local school boards
- Project 2000 - Universal Secondary Education (1997)
- The Post Primary Programme of Trinidad and Tobago, 1997
- Establishment of Local School Boards for Secondary Schools, 1997
- Education Task Force, 1995
- Technology Studies, 1993.

The Trinidad and Tobago Government is committed to a comprehensive reform and expansion of the secondary system. The Secondary Education Modernization Programme (SEMP) was developed to address the deficiencies identified and to establish a foundation that would enable the system to adapt to future needs.

SEMP has four (4) interrelated components, namely:

- Qualitative improvement
- Equity - universal secondary education
- Institutional strengthening
- Studies and measures for improved sector performance.

The objectives of these four components are to access, improve equity, equality and quality in secondary school programmes.

Each component comprises sub-components and they were all developed on the basis of twelve consultative studies by international and national consultants.

The Qualitative Improvement Component comprises four sub-components, which directly address curriculum development, implementation and evaluation. The four sub-components are:

1. Curriculum Development
2. Teaching and Learning Strategies and Supporting Resources
3. Professional Development
4. Testing Assessment and Evaluation.

They deal with developing a more relevant curriculum, improving teaching and evaluation and the professional development of teachers who would efficiently deliver the curriculum.

Main organisations and mechanisms involved in the process of curriculum development and reform in Trinidad and Tobago:

1. The Curriculum Development Division

Given the relationship between the curriculum and the clients of the Ministry of Education, viz., the students, the curriculum is the *raison d'être* of the existence of

schools. The Curriculum Development Division therefore occupies a central role in the reform process. It is responsible for curriculum development, planning, programming and implementation, teaching and learning strategies and implementing all curriculum activities. It is also responsible for orienting other education divisions to the new needs of the curriculum, encouraging and developing support systems.

2. Division of Schools Supervision

This Division is responsible for the supervision of staff, students and facilities of the schools, through its Supervisors I, II and III, and is supported by a Guidance and Special Education Unit. It is responsible for overseeing the professional development of teachers and school administrators. Their role in the curriculum reform is to:

- implement professional development in selected schools, that is, to conduct and supervise in-service courses for untrained and trained teachers.
- supervise and inspect the programme of education required by the curriculum;
- organize and supervise the programme of work for curriculum facilitators;
- develop a professional development package that would be used in a variety of settings and by different participants;
- launch and carry out a public awareness programme with a built-in monitoring and evaluation system;
- assess the specific needs of groups involved in the reform.

3. Division of Educational Research and Evaluation

This Division has the remit to:

- expand on the existing capacity for the development of evaluation activities for classroom-based continuous assessment
- train curriculum officers and teachers in classroom assessment
- establish marking, certification and standardized setting in harmony with modernized curriculum
- train teachers to use the manual for marking, certifying and setting standards

Philosophy of Education

The philosophy of education, as stated in the Education Policy Paper 1993 – 2003, is as follows:

The future of Trinidad and Tobago demands a philosophy of education which stresses the need to be relevant to each individual in the process of schooling.

We Believe

That every child has an inherent right to an education which will enhance the development of maximum capability regardless of gender, ethnic, economic, social or religious background.

That every child has the ability to learn, and that we must build on this positive assumption.

That every child has an inalienable right to an education which facilitates the achievement of personal goals and the fulfilment of obligations to society.

That education is fundamental to the overall development of Trinidad and Tobago.

That a system of 'heavily subsidised' and universal education up to age 16 is the greatest safeguard of the freedom of our people and is the best guarantee of their social, political, and economic well-being at this stage in our development.

That the educational system of Trinidad and Tobago must endeavour to develop a spiritually, morally, physically, intellectually and emotionally sound individual.

That ethical and moral concerns are central to human development and survival.

Fundamental constructs such as "decency," "justice," "respect," "kindness," "equality," "love," "honesty," and "sensitivity," are major determinants of the survival of our multi-cultural society.

That the parent and the home have a major responsibility for the welfare of the child and that the well-being of the child can best be served by a strong partnership between the community and the school.

That the educational system must provide curricular arrangements and choices that ensure that cultural, ethnic, class and gender needs are appropriately addressed.

That students vary in natural ability, and that schools therefore should provide, for all students, programmes which are adapted to varying abilities, and which provide opportunity to develop differing personal and socially useful talents.

That we must be alert to new research and development in all fields of human learning and to the implications of these developments for more effective teaching and school improvement.

That the educational system must be served by professionals who share and are guided in their operations by a set of systematic and incisive understanding, beliefs and values about education in general and its relationship to the development of the national community of Trinidad and Tobago.

That there is a need to create and sustain a humanised and democratised system of education for the survival of our democracy.

That the democratisation and humanisation of the educational system are largely contingent on the degree to which the system is professionalised. The nature of educational problems are such that the professional core must be engaged in decision-making with respect to the problems that affect their expert delivery of the services to the clientele and ultimately to Trinidad and Tobago.

Professionals must come to experience a real sense of 'control and ownership' of matters educational.

That from a psychological perspective, education is a means of looking out beyond the boundaries of the immediate. It can be the viable means which creates individuals with the intellect and capacity to develop and lead societies, communities, villages, and/or neighbourhoods and families of the future. It should be responsive to and stimulate the searing human spirit and the emphatic quest for human communication, interaction, love and trust.

That learning is cumulative and that every stage in the educational process is as important and critical for the learner's development as what has gone before it and what is to come. As such we must view educational programming and development in the round, recognising the important of every rung on the ladder of delivery by intensifying our efforts throughout the system.

Principal Elements and Basic Approach to Curriculum Development:

The Curriculum reform is geared to move Trinidad and Tobago from a teacher-centered, rote memorization model of instruction to a dynamic student-centered teaching and learning model. In making efforts to transform the secondary education programme, literacy skills, especially reading and numeracy, will be strengthened. Reading readiness programmes were held and a multi-media learning centre was created in each school to facilitate learning, to help teachers to become facilitators of learning and to strengthen

literacy skills. Included in the learning centre are a library, a multi-media classroom, a computer lab and a teachers' workroom for preparation of learning materials.

In the curriculum reform efforts, emphasis is placed on developing cognitive skills in reading, writing, mathematics, communication, logical thinking and creative problem-solving. These skills have been identified as critical for advancement to further education, technical and vocational education and training, and employment.

The Curriculum Design and Development Process

In the Final Report of the Curriculum Development Sub-Component submitted by J. Reece and K. Seepersad, the curriculum is defined according to Tyler and Taba as a "plan for action" or a "written document which included strategies for achieving desired goals or ends." This is the definition that is used here. The written document is to be used by teachers to plan effective learning opportunities for students in secondary schools.

The first stage of the curriculum design process consisted of stakeholder consultations held with a cross section of the community.

Consultations were held with primary and secondary school teachers, principals, members of denominational school boards, members of the business community, the executive of the TTUTA, representatives from the University of the West Indies (UWI), John S. Donaldson Technical Institute, San Fernando Technical Institute, Valsayn Teachers' College and Caribbean Union College, parents, librarians, guidance counsellors, students, curriculum officers and school supervisors. They were based on the philosophy, goals and learning outcomes of education.

The results of these consultations were as follows:

- agreement on the concept of a "core", that is, essential learning outcomes consisting of skills, knowledge attitudes and values that students must acquire at the end of five years of secondary schooling
- agreement on the eight subjects to form the core

- agreement on the desirable outcomes of secondary school education in Trinidad and Tobago

In Stage two of the design process the officers of the Curriculum Development Division studied the reports of the consultations, the Education Policy Paper, the reports of the Curriculum Task Force and of the Task Force for removal of Common Entrance as well as newspaper articles and letters to the editor on education over the past five years. The Schools Libraries Division and the Division of School Supervision assisted the Curriculum Development Division in this task. The result of the study was the identification and statement of a set of desirable outcomes and essential graduation learnings that are to be achieved by all students by the time they leave school. All learning opportunities, all teaching and learning strategies, all instructional plans, are to contribute to the realization of these outcomes and essential graduation learnings.

At Stage three ten existing schools were identified to pilot the new curriculum. Teachers from eight subject areas were drawn from these schools to form Curriculum Writing teams for the subject. Teachers with specific subject or curriculum development skills from other schools also formed part of the teams. These teams met initially for three days then for one day per week, during April to July 2000, to conduct the writing phase of curriculum development. In this phase learning outcomes specific to each subject, which contribute to the fulfilment of the national outcomes, were identified. Subject content, teaching and learning and assessment strategies to support these outcomes were developed.

The result of the work of the curriculum writing teams is the document presented here.

Goals of Education

Formal education in Trinidad and Tobago must aim to:

- provide opportunities for all students to develop spiritually, morally, emotionally, intellectually and physically;

- develop in all students attitudes of honesty, tolerance, integrity and efficiency;
- provide opportunities for self-directed and life-long learning;
- provide opportunities for all students to develop numeracy, literacy, scientific and technological skills;
- promote national development and economic sustainability;
- promote an understanding of the principles and practices of a democratic society;
- equip all students with basic life skills;
- promote the preservation and protection of the environment;
- develop in all students an understanding of the importance of a healthy lifestyle;
- help all students acquire the knowledge, skills and attitudes necessary to be intelligent consumers;
- provide opportunities for all students to develop an understanding and appreciation of the diversity of our culture; and
- provide opportunities for all students to develop an appreciation for beauty and human achievement in the visual and performing arts.

The Essential Learning Outcomes

An analysis of the educational philosophy of the Ministry of Education's Policy Paper (1993 – 2003) and of the goals for education derived from it by the Curriculum Development Division has led to the identification of six areas in which all secondary students must achieve. These are described as essential learning outcomes and help to define standards of attainment for all secondary school students. It is expected that by the end of the third year of secondary school students achievement in all six areas will result

in a solid foundation of knowledge, skills and attitudes which form a foundation of literacy for living in the Trinidad and Tobago society and for making informed choices for further secondary education.

The essential learning outcomes are:

Aesthetic Expression

Students will:

- express themselves through creating, performing and responding to various forms of the arts

Citizenship

Students will:

- assess social, cultural, economic and environmental inter-dependencies in the local and global contexts

Communication

Students will:

- use the listening, viewing, speaking, reading and writing modes of language, as well as mathematical, visual and scientific concepts and symbols, to think, learn and communicate effectively

Personal Development

Students will:

- continue to learn and to pursue an active, healthy lifestyle

Problem-Solving

Students will:

- use the strategies and processes needed to solve a wide variety

of problems

Technological Competence

Students will:

- use a variety of technologies, demonstrate an understanding of technological applications, develop innovative technologies and apply appropriate technologies to solving problems.

The achievement of these essential learning outcomes by all students is the goal that every core curriculum subject must facilitate. The core curriculum subjects, their content, teaching, learning and assessment strategies are the means to fulfil this end.

Core curriculum subjects are English, Mathematics, Integrated Science, Social Studies, Spanish, Physical Education, the Visual and Performing Arts and Technology Education.

The principal new content areas introduced in the reform process are:

- Technology Education
- Visual and Performing Arts, which uses an integrated approach to the curriculum design and teaching of music, art and craft, dance and drama
- Moral and Values Education
- Health and Family Life Education
- A focus on environmental education and entrepreneurship
- Renewed focus on relationship between science, technology and environment.
- Introduction of Educational Technology across the curriculum.

Teaching and Learning Strategies

These teaching and learning strategies were introduced to support the delivery of the core curriculum subjects.

The Teaching and Learning Strategies sub-component addressed two elements that are fundamental to achieving education reform.

- changing the current mode of teaching and learning from a teacher-centered, lecturing, note-taking, rote-learning model to a student-centered process-driven mode.
- enriching the teaching and learning resources available to teachers and students.

The objectives were as follows:

- Significantly increase the learning materials and learning modalities available to students and teachers through appropriately stocked libraries, the provision of multi-media capability with internet connectivity in all schools, mobile information technology (IT) units to permit whole-class use of limited IT facilities, and the circulation of resource library materials among the Regional Education Divisions (REDs);
- Establish computer laboratories in all schools;
- Enable teachers to engage in development and implementation of programmes for computer aided learning and project learning skills.
- Upgrade science and technology laboratories and provide them with computers and multi-media facilities to potentiate new forms of learning and exploration.
- To improve the skills of teachers so that they could provide effective experiences.
- To develop skills of problem-solving, critical and creative thinking, decision making, valuing.

The teaching and learning strategies that have been introduced incorporated the use of various education technologies and provided learning experiences that were focused on the development of skills as against acquisition of content.

The activities were based on learning styles. Teachers were grouped and trained in their respective subject areas.

The focus was on the learner, on learning and on skills, especially activity-driven based learning. Teachers were exposed to the concepts and use of multiple intelligence, constructivism, group work, discussions, projects, brainstorming, lesson plans, interpreting bias, analyzing cartoons, skits, critical thinking, valuing, problem solving, role play, simulations, research, limited internet surfing, reading across the curriculum and new methods of evaluation as against pen and pencil tests.

Education for citizenship, social cohesion and cultural diversity

The Social Studies Curriculum for the Lower Secondary School promotes Citizenship Education, social cohesion, shared values and an appreciation of our cultural diversity. This it does via its general learning outcomes with respect to the teaching of social and interpersonal skills as well as the teaching of attitudes and values.

Through the Lower Secondary Social Studies programme students will develop the ability to:

- listen effectively to the opinions of others;
- respect differences;
- work in teams and foster a climate of shared goals;
- work cooperatively to find and share information, solve problems and develop solutions;
- develop attitudes of honesty and fundamental civic responsibility and act appropriately;
- deal with change and become effective change agents in a positive, cooperative and supportive set of interpersonal relationships;

- act responsibly and accept responsibility.

The attitudes and values component of the general learning outcomes reinforces the lessons learnt through the social and interpersonal skills.

The Curriculum document states that, through the Social Studies programme, students will be able to:

- empathize with the values and perspectives that guide the behaviour of people from different cultures and understand that all cultures contribute to the advancement of the human experience;
- act appropriately in a variety of social settings;
- respect and act to preserve the fundamental principles and ideals of democratic society at all times;
- respect and act to preserve human rights at all times;
- respect and act to preserve human dignity, liberty, justice and equality at all times;
- show respect for and pride in themselves, their community, nation and region;
- demonstrate an attitude of community living in which they recognize their place and role in the advancement of the human experience in real and concrete ways;
- work effectively alone and in groups to meet targets and deadlines, and ensure that outcomes are consistent with the standards and expectations of excellence;
- demonstrate a positive attitude to work and production that pursues solutions in a cooperative attitude and spirit;

- demonstrate a love of learning and a curiosity about the world;
- demonstrate caring, honesty and self-worth;
- demonstrate a positive attitude towards leisure and the utilization of time in productive, community-responsible acts.

The learning of the above skills, attitudes and values will be facilitated not only by the specific learning outcomes that will direct lessons but also by the type of learning environment in which classes are conducted and the ways in which instruction is organised. For instance, the teacher will endorse the concept and practice of democracy by organising learning activities in a democratic manner. Students will be allowed to participate in decision-making with respect to how lessons should proceed and in planning such activities as field trips.

Problems faced by curriculum specialists during the three steps of curriculum development

Design

- Allocation of time for teachers and curriculum officers was inadequate for the writing process.
- The curriculum was supposed to have an interdisciplinary approach. Collaboration and planning across subjects/disciplines was not conducted in a structured fashion. Planning was inadequate to achieve the design that was envisioned.
- There is an absence of a culture of research among practitioners in education.
- Human resources were limited. The number of teachers in the writing process fluctuated, depending on demands in their schools. As work increased, the numbers became fewer.

- Lack of experience in curriculum writing and development resulted in content-oriented product. It was assumed that teachers have the expertise, or that those without knowledge would learn from others. In some groups, teachers were inexperienced, had no knowledge and skills of curriculum development, planning or design, and were not able to contribute effectively in the curriculum writing process.
- Materials and non-human resource allocation were inadequate. There were only three (3) word processors, no laser printers, no scanners and paper was limited.
- Tension existed between the need to give teachers release time for curriculum development writing and the need to have teachers in school teaching.
- Many hold the notion that SEMP is a separate process from the Ministry of Education.
- Micromanagement from above posed problems. Bureaucratic structures caused hindrances.
- There was not enough guidance as to ‘what’ and ‘how’ in organizing the curriculum document.
- In Social studies, where three subjects were integrated (History, Geography, and Sociology/Social Issues), one had to wrestle with competing claims of ‘turfdom’ as to what should be taught, with content overload, with what knowledge is of most worth and with how to create balance.
- In Language Arts it was difficult to integrate, in linear written fashion, the fullness of the weaving of the strands – listening, speaking, reading, writing and viewing in plait-fashion.

Implementation

- In schools that are piloting the reform teachers do not have the competence to effectively create the changes
- Teacher expectations of students were low, as was reflected in their attitude and in their discussions
- Some teachers are unwilling to change their teaching behaviour and still use a predominantly teacher-centered mode.
- Supports related directly to the classroom learning process were limited, intermittent or non-existent
- Support from the professional development component was minimal. Teaching and learning strategies need to precede implementation, but this was not done to the extent needed.
- Training preparation of human resources was limited
- No training for outreach personnel
- No monitoring
- No assessment/evaluation
- Minimal empowering of teachers to take risks
- Student-teacher ratio is unsatisfactory
- Many classes are too large, resulting in classroom management problems. Individualized attention, especially to special needs children, could not be provided
- Many teachers are not competent to teach or to teach well.
- The teacher-centred classroom culture is still pervasive. Teachers employ poor pedagogical practices.
- Principals' administrative workload and lack of appropriate skills limit their ability to provide support and guidance to teachers in the classroom.
- Organisational structures to achieve goals are lacking.
- Principals are not flexible enough in time-tabling arrangements and fail to encourage innovation.
- Traditional approaches will not be successful in achieving the required goals.
- Class Size and Level of Achievement - Even when teachers are trained to implement the curriculum the class sizes make it difficult, especially when the achievement level of the students is varied and lower than expected.

- Monitoring - Effective implementation of the curriculum requires supervision/monitoring by curriculum officers. There are still too few curriculum officers.

Follow up

There has been no follow-up.

Strengths and Successful Aspects of Curriculum Change

- Will/goodwill to do something different
- Excitement about the project
- Trying against odds of lack of resources
- ‘Miracle workers’ continue to perform miracles
- Curriculum now more teacher-friendly and helpful
- The involvement of teachers in the detailed creation has stimulated their enthusiasm
- Some principals and teachers are enthusiastic about the changes.
- Many teachers who had no knowledge-base in curriculum development learnt while they were working on the programme.
- Internal evaluation of Year I curriculum by the Curriculum Division helped in the understanding of the process.
- Teachers who benefited from the teaching and learning strategies programme are attempting to use the new strategies in their teaching.
- There has been a concerted effort to include activities in the curriculum document.
- An Assessment Manual has been developed by the Division of Educational Research and Evaluation to complement the curriculum document.
- Teachers have gained the ability to identify what is required.