The National

Curriculum

Framework:

Secondary

Ministry of Education, Culture & Human Resources

November 2009

THE NATIONAL CURRICULUM FRAMEWORK: SECONDARY

Table of Contents

Foreword

The "National Curriculum Framework-Secondary" has been produced by the Mauritius Institute of Education in close collaboration with the Ministry of Education, Culture and Human Resources. It has taken on board the views of key players in the field of Education and reflects the principles and values embodied in the document "A Strategy for Reforms – Towards a Quality Curriculum (MOE & HR)" and in the Strategic Plan 2008 – 2020 of this Ministry.

This curriculum framework is a major step forward in the reform of our Secondary School Curriculum. It advocates an inclusive, integrated, holistic and comprehensive approach which, through a balanced curriculum, would help to promote the spiritual, moral, mental and physical development of every child of the Republic, irrespective of her/his socio-economic status and would prepare her/him for the opportunities, responsibilities and experiences of adult life.

This framework is, furthermore, designed to enable schools to respond effectively to local, national and international priorities, to meet the individual learning needs of all students, to provide a strong foundation for lifelong learning and to instil in all learners the knowledge, skills and understanding they need to live in an ever changing world.

This document, inspired by our need to create a better future for all our children, should be the concern of one and all. I would request that it be widely circulated and hope that it be read as widely as possible.

Since curriculum reform is a dynamic process and has to be continually updated to adapt to emerging needs, I would urge all stakeholders to engage in a constant professional dialogue for the betterment of the education we seek to offer to our children. I hope that this National Curriculum Framework responds to the expectations and aspirations of the whole Mauritian Nation.

(Dr) the Hon V. K. Bunwaree
Minister of Education, Culture and Human Resources

November 2009

The Mauritius Institute of Education is pleased to associate itself with the development of the Curriculum Framework for Secondary Schools. This document is part of the reform agenda of the Ministry of Education, Culture and Human Resources which seeks to provide a framework for a holistic development of each child, while preserving essential values of freedom, tolerance and democracy that have been the basis of our success as a nation. It is a follow up to the development of the curriculum framework for pre-primary and primary sector, that the Institute has already produced.

The framework has been prepared after a careful analysis of the views of different stakeholders, including students, teachers and heads of schools. We have taken into consideration the recommendations of the national debate on the curriculum and the Curriculum Goals approved by the Cabinet in 2006. We have kept in mind the Millennium Developmental Goals of UNESCO and those of the International Bureau of Education for Sub-Saharan Africa that addresses the needs of the less privileged sections of the population and seeks to promote a culture of peace and democracy.

The framework sets down the Overarching Learning Outcomes for Secondary Education and the Specific Learning Outcomes of each domain of learning. It also provides additional information as level descriptors which are specific guidelines on the content for each domain of learning. While it focuses on Lower Secondary, Forms I to III, it lays down the guidelines for Forms IV and V. We have advocated a model for teaching and learning based on an integrated model that views knowledge as an integrated whole, rather than fragmented subject areas. Thus, we have provided examples of an integrated model that should serve as a guideline and a springboard for further development of that model. The section on Teaching and Learning lays down our key beliefs and orientation that we suggest should be the guiding principles and approaches to teaching and learning.

We would wish to highlight that this is not a prescriptive document but a guideline that offers much leeway and opportunity to adapt the content to the teaching and learning needs of our youth. We wish to contribute towards building in our schools a community of practice that endeavours to provide what is the best for the new generation of learners. We, therefore, urge all stakeholders to go through this document, to send their suggestions to us or to seek clarification, if any. This is the beginning of a new journey that will surely help to better empower teachers and learners in a world where the key words are „Education and Empowerment".

I wish to thank all those who, through their concerted efforts, contributed to the elaboration of this document: the cadres of the Ministry of Education, Culture and Human Resources for their critical comments and support, the Mahatma Gandhi Institute and all the Staff of the Mauritius Institute of Education for their dedication and hard work.

S. Thancanamootoo

Director
Mauritius Institute of Education.
November 2009

1 Introduction

In line with the State"s spelt-out guiding principles for curricular reform in Mauritius, as embodied in the policy document, „Empowering the Nation"s Children – Towards a Quality Curriculum" (MOE&HR:2006), this document, the National Curriculum Framework- Secondary (NCFS), establishes a comprehensive overview of the operationalisation of a new secondary school curriculum package.

The revised lower secondary school curriculum model is founded on the established Goals of the National Curriculum, (see Box below):

The NCFS aims at taking every single lower secondary school student in Mauritius, Rodrigues and the Outer Islands on board and providing the optimal conditions for his/her full-fledged development. To this

> ### Goals (MOE & HR:2006, p4, para 1.3)
>
> (1) *To promote an all-round development of the individual – physical, intellectual, social and emotional – leading to a balanced, active, healthy and productive lifestyle.*
>
> (2) *To foster understanding and appreciation of the biological, physical and technological world to enable the learner to arrive at informed decisions about the environment and the changing needs of individuals and societies.*
>
> (3) *To develop in the learner knowledge and skills to empower him to participate meaningfully in an information-driven economy.*
>
> (4) *To develop creative thinking skills and learning skills required for the future.*
>
> (5) *To promote equity and social justice by providing opportunities for every learner according to his/her needs, interests and potentials.*
>
> (6) *To foster national unity by promoting in the individual understanding of and respect for our multicultural heritage.*
>
> (7) *To promote in the learner an appreciation of his/her place in an interdependent global context.*
>
> (8) *To promote a culture of lifelong learning for greater access to an ever-changing job market.*

effect, a survey has been conducted as a prior exercise in some secondary schools to assess the needs, and to include the expectations and aspirations of the upcoming generation of lower secondary school students.

The NCFS addresses a category of learners, the adolescents, who are undergoing a critical phase of transformation in their development.

The focus is first on the lower secondary curriculum (Forms I- III) which has to smoothly take the primary school leaver through an incremental process of development with regard to knowledge, skills, values and attitudes and achieve a qualitative entitlement to the upper secondary level. There is also an indication of the way forward for upper secondary level, Forms IV and V, in each of the different domains of learning so as to cover the full range of the compulsory school age. This section, covering Forms IV and V, is provided as an indication so as to facilitate a review and further consolidation of the upper secondary curriculum.

1.1 Situational Analysis

Curriculum reform is primarily governed by the imperative of updating the institutional mission of the school with regard
 to the complex nature and accelerated tempo of change which is increasingly affirming itself in the modern society.

The situational analysis proposes, here, a two fold picture:

(i)   The Contextual Realities spell out the current global and local conditions which constitute the background against which the curriculum reform assumes significance. Derived from eclectic sources, the contextual realities described hereafter stand as a token to the type and range of preoccupations which underlie the current curricular review exercise.

(ii)   Ensuring Validity and Currency assumes meaning by way of strategic proposals at the level of curricular reform, which acknowledges the pertinence of the contextual realities, and lay the foundation for a curriculum that meets the demands of our society.

1.2 **Contextual Realities**

The NCFS proposals are grounded on the acknowledgement of such contextual factors as:

- The Mauritian society is highly vulnerable to the thrusts of globalization in so far as its key economic interests are concerned.

- In the absence of all other resources necessary to fuel its development and sustain it, Mauritius is compelled to bank on its human resource.

- In an atmosphere of international cut-throat competition, the imperative to fast develop a knowledge-based economic model has become more than necessary.

- The high level of wastage and drop-out characterizing the local educational system needs to be urgently addressed to ensure a peaceful living to all, irrespective of academic achievement.

- The academic bias of an examination-oriented educational model needs to be calibrated with regard to predispositions for other forms of learning which value the multiple forms of intelligences.

- Secondary school children as well as teachers come from culturally heterogeneous families and social settings and spend a major part of their daily time with each other. As such Mauritius is probably a unique example of social coexistence. Schools have determining roles to play in maintaining mutual respect and understanding, thus promoting a culture of peace and respect.

- The technological era is presently characterized by such a rich assortment of sophisticated gadgets that youngsters feel naturally attracted to them. Schools need to take cognizance of this inescapable fascination and re-invent themselves.

- Young people are divided between exhortations for the preservation of cultural traditions and the call for cultural diversity through exposure as they accede to the information and communications technologies.

- In the face of the rhythm of change which defeats predictability, nurturing an ambition and viewing education as a stepping stone to employability no longer foster emotional security among learners.

- The school is no longer the sole provider of education and means of self-enrichment. If the school menu is not palatable, learning deficiency will be inevitable.

13

- Learning as offered at school is but a part of learning opportunities available to youngsters. The latter are active members of learning societies which offer a variety of mechanisms for formal and informal social interaction as opportunities for self learning.

1.3 Ensuring Validity and Currency

The NCFS proposes a paradigmatic shift that does away with the very causes of current systemic dysfunctions and lays down the basis for innovative practices which will respond to the exigencies of the current local and global contexts.

The NCFS proposes:

(i) That teaching and learning processes be oriented for optimal cross-disciplinarity in the Lower Secondary levels (Forms I to III) in a bid to equip the learner with the broadest perspective of knowledge. Notwithstanding the specifics of subject disciplines, bridges need to be built with other disciplines to equip the learner with the bigger comprehensive pictures of reality to ensure the validity and currency of learning.

(ii) That the curriculum be holistic and provides for the overall, wholesome development of the individual in his/her physical, social, emotional, intellectual, aesthetic and moral dimensions.

(iii) That apprised of the need to impart knowledge as a holism, schools will encourage educators-cum-curriculum developers to galvanize a team approach around a common core of themes to enable learners to envision the bigger reality. This should also allow for the curriculum to be adapted to the specific needs, levels and life experiences of the learner. For instance, educators and schools in Rodrigues and the Outer Islands can use the guidelines provided to contextualise the learning materials to suit their specific clientèle and reality.

(iv) That not only skills development be set at par with the need to acquire knowledge but be instrumental to the construction of knowledge. The knowing-how-to skills, thinking skills and behavioural skills need to be placed at the centre of the curriculum development process.

(v) That process of learning is important; learning how to learn is important. The learner needs to be at the centre of the learning process, constructing meaning, understanding reality and developing greater autonomy in learning.

(vi) That parity between skills development and knowledge acquisition is instrumental to allow free movement from vocational/technical to mainstream and vice versa.

(vii)   That curriculum transactions be increasingly woven around ICT to better prepare the learner for the post-school environment.

(viii)   That Assessment for Learning (AfL) be calibrated with summative assessment. Portfolio and project-based learning are to be encouraged to capitalize on the potentials of formative assessment as a medium to ensure inclusive education so that no learner is left behind or out.

(ix)   That evaluation is conceived as part of the learning process. Formative assessment is to be used for remediation throughout the cycle and summative assessment should state the achievement of competencies rather than what is lacking or deficient.

(x)   That the curriculum should be meaningful to the learner. Knowledge should make sense to her/him, and be related to life experiences.

(xi)   That school curriculum development makes provision for open discussion, group work, thematic conferences and similar forums to allow learners to develop an outlet voice and informed opinions/decisions about issues related to the era and the world they are living in.

(xii)   That a flexi-curriculum be proposed such that schools and teachers be delegated with prerogatives of taking informed decisions with regard to school-based curriculum development. While the content of the core subjects, namely English, French, Science, Mathematics & ICT (MoEHR:2006: 15) has to be fully covered, the range of syllabic content proposed for the electives will be such that schools may work out a selected combination of subjects/topics that best suit their pedagogical ends, though all schools will also be expected to cover 80% of the subject content proposed at Lower Secondary Level, inclusive of the core subject, as a mandatory requirement. This should allow schools the opportunity and freedom to engage in a number of co- and extra-curricular activities depending on their specific needs and context.

(xiii)   That Principals/Rectors of schools will, besides being the administrative heads, also assume the role of supervising school based curriculum development so that all members of staff will be accountable to them through the respective Heads of Subject Departments.

(xiv)   That Regional Directors & Inspectors will ensure that all schools within their respective zones comply with the eventual guidelines set to monitor the implementation of the new curriculum.

(xv)   That an informed stance be developed such that elements of the hidden curriculum are overtly addressed. Issues related to the behavioural aspects of school life need to be constructively discussed to reach informed consensus.

(xvi)   That the affective aspects of curriculum be valued to foster emotional maturity. Parallel to knowledge and skills acquisition, development of pro-social values and attitudes be rehabilitated as core objectives of schooling.

(xvii) That for curriculum change to succeed, there is a need to introduce it in a manner that does not make the main actors insecure or resistant. It needs to build on existing structures, and be introduced gradually and proactively to enlist their full participation.

(xviii) That curriculum development at school opens on real-life pictures and views the other channels of learning as complementary to its academic ends. Rather than outright dismissal, emerging issues at local and international levels and knowledge disseminated by the media need to be taken on board to confirm the education-for-life dimension of a school curriculum.

(xix)   That school curriculum will recognise, respect, and respond to the educational needs, experiences, interests, and values of all students, both female and male; students with different abilities and disabilities, and students of different social and religious backgrounds. All programmes will be non-discriminatory to help ensure that learning opportunities are not restricted.

(xx)   That school curriculum will encourage students to understand and respect the different cultures which make up the Mauritian society. It will ensure that the experiences, cultural traditions, histories, and languages of all Mauritians are recognised and valued. It will provide learning which students can see to be relevant, meaningful, and useful to them.

(xxi)   That one of the basic objectives of the curriculum will be to develop a liking for knowing, an emphasis on a broad based knowledge, while sufficiently focussed so as to allow each child to find a preferred orientation for her/him.

(xxii) That curriculum will place more emphasis on developing a sense of citizenship and belonging while developing awareness of the world and the need to maintain our tradition of peace and coexistence that are essential for an economy increasingly dependent on international markets and tourism.

1.4 **The Overarching Learning Outcomes (OLO)**

The NCFS, inspired by the Goals of the National Curriculum (MoEHR: 2006), acknowledging the local and global conditions of its operationalisation and the need to ensure validity and currency, has to develop the common threads among the different learning areas. To this effect, the Overarching Learning Outcomes for lower secondary have been developed. **Thus each of the statement relates to the specific goals of the National Curriculum _(MoE & HR:2006, p4, para 1.3._** These goals (N.C.Goals) are indicated within brackets.

1.4.1 **OLOs Secondary**

1. Students develop and use language through a diversity of disciplines at secondary schools to understand and communicate information, ideas, feelings and opinions. (N.C Goals:1,2,3).

2. Students recognize when and what information is needed, how to obtain it from a range of sources and how to use and share it (N.C Goals: 2, 3, 8)

3. Students select, integrate and apply numerical and spatial concepts and techniques in a variety of situations (N. C Goals: 3, 4).

4. Students use logical and critical thinking skills to judge, assess and solve a broad range of both theoretical and real life problems. (N. C Goals: 3, 4).

5. Students understand, use and adapt technologies and ICT tools confidently to meet their needs. (N. C Goals 3,8)

6. Students understand, appreciate and preserve the physical and natural world. (N.C Goals: 2, 3, 4,7)

7. Students develop awareness of their cultural, geographic, historical and economic contexts and acquire the knowledge, skills and values for social integration and a culture of peace. (N.C Goals: 2, 4, 5, 6, 7, 8).

8. Students interact with others from diverse cultures, develop pride in our nation and recognize that everyone has to feel valued and safe (N.C Goals: 5, 6).

9. Students demonstrate aesthetic appreciation and develop artistic, expressive and creative skills. (N. C Goals:1, 4).

10. Students develop emotional, social and moral intelligence to achieve a sense of well being (N.C Goals: 1, 6).

11. Students demonstrate self management skills, positive self esteem and confidence for active participation as citizens of the Republic and of the world   (N.C Goals: 1,3,5,8)

12. Students express their respect for people, plants, animals and resources through informed and responsible choices as consumers and producers. (N.C Goals: 2, 7).

13. Students develop awareness and understanding of their body, nurture self respect and make responsible choices in pursuance of a healthy lifestyle.(N. C Goals :1)

1.5 Conceptual Framework

In acknowledgement of the foundational considerations elaborated above, the conceptual framework schematizes the operationalisation of the Lower Secondary School Curriculum- Forms I to III:

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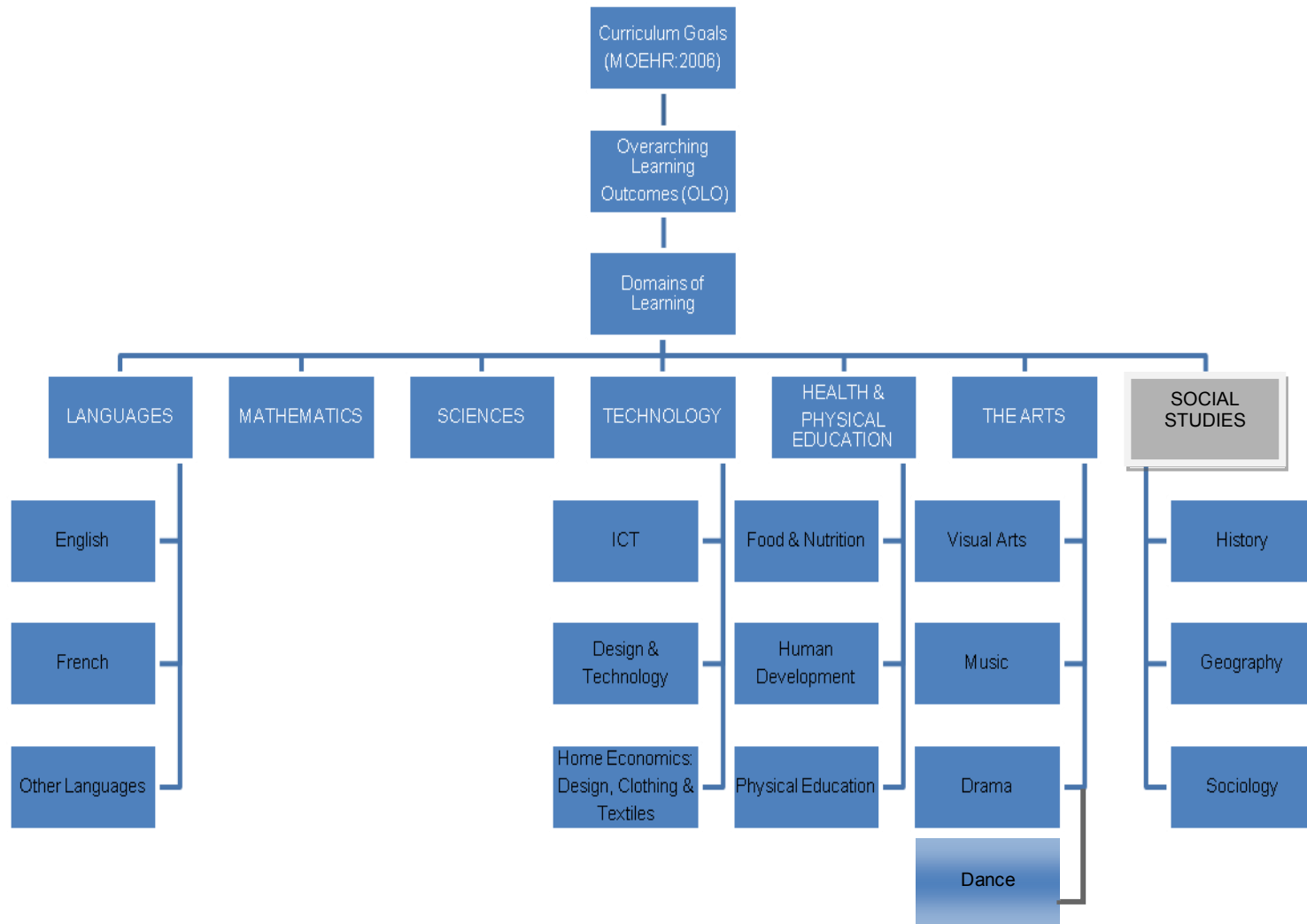
1.6 Stepping into the Domains of Learning

The Curriculum goals, as outlined in the Policy Document "Empowering the Nation"s Children-Towards a Quality Curriculum" (MoEHR: 2006), constitute the government"s vision of the type of general educational outputs of the system, the dimensions of the educated person and future citizen that are being promoted through the education system. These goals drive the model.

The general Overarching Learning Outcomes(OLOs) have been worked out to translate these goals into desirable competencies, knowledge, skills and attitudes that cut across all learning activities and curriculum areas and experiences in schools.

The next stage outlines specific domains of learning that form part of the Lower Secondary School Curriculum. The learning areas are grouped according to their inter-relatedness, and general outcomes are identified for each group, e.g. Languages, Social Sciences, Arts, Science, Technology etc. Each outcome is further elaborated to ensure clear understanding among curriculum developers and subject educators.

Thereupon, specific learning outcomes for each subject area/discipline within each domain are developed, and their relations to the general learning outcomes are specified. They form the basis on which the level descriptors and competencies will eventually be worked out for each level of the Lower Secondary Curriculum (Forms I-III), and on which curricular materials will be designed. An indication of the teaching strategies deemed appropriate for each subject area is also provided.

The model adopted is designed to ensure that the subject educators recognizes that her/his discipline is not to be taught as a separate isolated entity, but as a body of knowledge that is related to a domain of learning and to the Overarching Learning Outcomes that will contribute to the achievement of the national goals of education. The outcomes are shown to be mutually reinforced across different subjects.

The document also includes a general overview of teaching/learning strategies and modes of assessment that should accompany the new vision of the curriculum.

This document also addresses the Pre-Vocational curriculum reform. Government vision is translated into general learning outcomes, then into outcomes for domains, and specific areas of learning, which are further detailed into level descriptors for each year of the Pre-Vocational cycle.

Furthermore, an indication is provided for the direction that the Upper Secondary (Forms IV-V) will be taking, thus covering the whole range of compulsory education, that is, till age 16.

However, the way forward for the Forms IV and V should be considered in view of providing access to alternative examinations/ boards of examiners. This will have considerable implications for the different

domains of learning, especially at the upper secondary level; it will also demand gradual readjustment of teaching and learning at all levels, including the lower secondary.

Learning and Teaching Strategies as well as modes of assessment are suggested for the specific learners. The chapter on Teaching and Learning addresses a wide range of issues that will help us engage in a thorough review of teaching and learning in our schools.

2 Domains of Learning- Forms I to III

2.1 Introduction

As enunciated in other parts of the document, the major innovations brought by the NCFS are in terms of emphasis on process rather than content, on learning outcomes, and on the need to engage students in meaningful and integrated learning experiences. The core domains of learning present in the primary curriculum will be extended, taking into account the requirements to provide adequate scope for learners to make meaning of their world while building incrementally on skills acquired at the primary level. Some of the elements like sustainable development, citizenship, developing and maintaining a culture of peace and coping with stress will cut across all domains.

The domains of learning will be as follows:
- (i)   Languages: (English, French and Other Languages)
- (ii)   Mathematics
- (iii)   Sciences.
- (iv)   Technology
- (v)   Health and Physical Education
- (vi)   Social sciences
- (vii)   The Arts

2.2 Languages (English, French and Other Languages)

Mauritian students have to be prepared to face the literacy demands characteristic of a world driven by new forms of communication. Added to this, the specificity of Mauritius in terms of its multilingualism and the growing importance of tourism make the study and use of modern international languages a cornerstone of the lower secondary curriculum. Notwithstanding their instrumental value in enabling the acquisition of other forms of knowledge, languages are also tools for thinking and a means of contributing to the cultural development of a society.

Apart from English and French which are core languages, other languages such as Oriental Languages, Arabic, and ultimately Modern European Languages, will be offered to foster the multilingual capacities of students and enhance their communication skills, especially in a context where countries such as China and India are becoming key actors in the world economic field.

2.3   **Mathematics:**

Mathematics is and will remain a core subject at the lower secondary level. In a science driven world, the power of mathematics education to facilitate the acquisition of generic thinking skills and to develop the adolescent"s cognitive resources should be given due recognition. However, to intelligently harness the potential of the discipline, the curriculum must offer an added opportunity for students to move progressively from using mathematics to understanding the principles and processes on which mathematics thinking is based. While the learning of Mathematics at the primary level focuses on developing mathematical literacy, the aim at the secondary level is to help them acquire problem solving skills and the ability to reason logically. They will learn the key mathematical concepts and make connections with other domains of learning.

2.4   **Sciences**

As has been proposed in the national document on reform (MOE&HR: 2006), General Science will become compulsory till Form V for students not opting for a pure science subject. This is in recognition of the increasingly important role of science in contributing to our understanding of the natural and man-made world and in sustaining and improving the quality of life. However, apart from promoting scientific literacy, the lower secondary science curriculum seeks to help students develop cognitive and ethical perspectives needed to deal effectively with the mass of scientific knowledge produced by modern societies and concomitant issues raised. It is proposed that the approach be thematic rather than discipline oriented to allow problem solving and practical skills to be explored and acquired by grounding learning in the real life experiences of the learner. Disciplinary boundaries must be temporarily dismantled to make the curriculum meaningful to each and every learner. Science education must enable our students to appreciate and value the processes that support life on our planet and become useful contributors in the building of a more ecologically sustainable environment.

2.5   **Technology: ICT, Design and Technology, Home Economics, Design,**

Clothing and Textiles:

One significant change that is being proposed in the NCFS is the introduction of technology as a compulsory learning domain for both boys and girls. This domain includes Design and Technology, Information and Communications Technology, and the Design, Clothing and Textiles section of Home Economics. All these components will be compulsory for all students, removing thus the gender bias which has worked against both girls and boys. The specificity of this learning area resides in its integrative scope with almost all the other domains of learning across the curriculum. Requiring students to pull together cognitive and manipulative skills as well as values from a diversity of perspectives to solve problems and design solutions in practical situations will no doubt make a

significant contribution towards the attainment of educational aims. ICT will be used both as a tool for learning and teaching as well as a discipline on its own, in view of its increasing importance.

At the lower secondary level, the teaching and learning of these components will not require provision of full fledged specialist rooms but only additional equipment to be used in the existing classroom set up.

2.6   Health (Home Economics- Food and Nutrition and Human Development) and Physical Education

One of the most important aims of education is to enable adolescents to lead healthy and active lives. Given the Mauritian track record in terms of non transmissible diseases and obesity, and the current concern regarding the consequences of sedentary lifestyles, the curriculum must provide explicit opportunities for students to engage in healthy and sustainable physical activity, develop knowledge about issues regarding life choices and quality of life. Similar to the Arts, Health and Physical Education has not, so far, figured as legitimate domains of learning enabling the attainment of specific skills, attitudes, values and dispositions. The current framework proposes that more transparency be given to health and physical education to integrate it where possible with other core domains of learning in contrast with the more conservative approach which focuses on integrating it with co-curricular activities only. The Health and Physical Education domain also incorporates a substantial element of sex education and values education.

In line with the recognition that the curriculum should, in a concrete way, attend to the socio-emotional needs of adolescents and afford them ample „moments" for enjoyment, socialisation and co-operation and effectively prepare them for their role as citizens, Health and Physical Education must be given equal weight as any other core domain.

2.7   The Arts: (Visual Arts, Music and Drama & Dance)

The Arts not only constitute an important part of our cultural heritage but also stimulate creativity and provide a means for communicating feelings and emotions. For too long the educative value of arts in terms of intellectual, sensorial, interpersonal and kinaesthetic development has been discounted. The Arts play an important role in contributing to self knowledge and providing an avenue for developing core values. It is proposed that the Arts be fully re-instated as an equally relevant and necessary pursuit in the curriculum at par with other academic subjects and the interdisciplinary potential of the domain in furthering knowledge and skills in other domains be fully explored. Given the current emphasis on tourism, developing the artistic skills of our adolescents by giving them the opportunity to experiment with the Arts and investigate the domain will prove to be crucial in the near future.

2.8   Social Studies: (History, Geography, Sociology)

Adaptability is a key characteristic of successful individuals in a world that is constantly changing. Given the improvements in transport and communication, the changes brought about by globalisation and the growing interdependence of people, future adults must be prepared to participate effectively in those rapidly evolving contexts. Social Studies is crucially relevant in building the adolescent"s sense of personal, economic, political, cultural and social identity by developing a critical understanding of how human beings, groups and institutions function. As a learning domain, Social Studies is essential to help secure a commitment to active citizenship and collective responsibility towards the betterment of society by ensuring the respect of democratic rights and commitment to sustainable development and infusion of a culture of peace.

The Social Sciences will be an integral part of the philosophy of a broad based education that will continue at the Upper Secondary level (Forms IV & V). Thus, students opting for Sciences will be required to opt for one of the Social Sciences (History, Geography, Sociology as well as Economics) depending on the subject/s on offer at school.

2.9   Cross curricular Domains of Learning

Government policy, embodied in the policy document on curriculum framework, stipulates that, apart from the distinct discipline-based curricular elements, other essential knowledge, skills, values and attitudes are to be integrated across the curriculum. These are as follows: Environmental Education, Values, Anti-drug Education, Humanitarian Law, Cultural Understanding, Human Rights, Occupational Safety & Health, Sex Education, HIV/AIDS .Awareness, Peace Education and Sustainable Development.

The NCFS reiterates the importance of those areas in contributing to life skills, promoting civic awareness and enhancing pro-social behaviour. Thus, each domain of learning must offer adequate learning opportunities to enable students to address them. For example, while environmental education will be predominantly dealt with in science, pertinent issues in environmental education can be equally studied through a writing or comprehension exercise in languages or when discussing factors of production or resources in Social Sciences. Similarly intercultural issues can be addressed in Social Sciences, Languages or even Home Economics classes. Sustainable Development and Peace Education will cut across a number of domains and will be integrated through the content as well as the process of teaching and learning.

Such an approach has important implications for the development of curriculum materials, which have to explore opportunities for creating bridges among the domains and bring forth explicitly these essential knowledge, skills and attitudes.

2.10 The Overarching Learning Outcomes (OLO)

OLO	Languages	Maths	Science	Health & PE	ICT	Home Econ	Design & Tech	The Arts	Social Sciences
Students develop and use language through a diversity of disciplines at secondary schools to understand and communicate information, ideas, feelings and opinions. (N.C Goals: 1,2,3)	Students use English across the curriculum and are engaged in individual/pair/group activities involving the use of listening, speaking, reading and writing.	Students use the language of mathematics for concept development and make explicit the process-product approach to problem solving. Students communicate mathematically and share feelings and opinions through written, oral, symbolic and visual terms of representations.	Students communicate scientific understanding to different audiences for a range of purposes.	Students use technical language in P.E for communication while preparing, participating and officiating in physical education and sports activities and while discussing health related issues	Students use ICT to learn to read, write, and speak effectively; They present information in a number of forms such as charts, diagrams and tables. They share and discuss information with peers.	Students read, interpret, use and write instructional texts, symbols, patterns, reports, case studies, articles, recipes, consumer advertising materials and labels in food preparation, clothing construction and other Home Economics-related practicals/activities to communicate information, ideas, opinions and feelings.	Besides other means of communication such as graphical, mathematical and spatial communication, students demonstrate appropriate use of language to communicate information.	Students use language to communicate views on their own work and the works of others. Students show evidence of visual literacy Students produce various art forms and express and communicate ideas, feelings and emotions. Students communicate ideas through the use of materials and processes, as well as language	Students use language to communicate information, ideas, feelings and opinions in a variety of ways and on issues related to the social and natural world and their physical environment.
Students recognize when and what information is needed, how to obtain it from a range of sources and how to use and share it. (N.C Goals: 2,3,8)	Students carry out research work on different topics individually, in pairs or groups by accessing and selecting relevant information from a range of oral and written sources; they eventually share and discuss their findings .	Students develop an understanding of the sources of data through investigations, projects, explorations, surveys and use these to represent and explain real-world phenomena.	Students access numerous sources to obtain scientific information. They select and use relevant information according to the purpose.	Students use literature and ICT to search for information on health issues and the skills and activities in P.E as well as for participation in outdoor and adventurous activities.	Students use ICT to search for information for subsequent analysis in terms of quality, relevance, currency and usefulness Students use ICT platforms to share collected information and ideas in a responsible manner	Students select, analyse, use and share different sources of information for investigative and research work for projects in Home Economics.	Students carry out research and decide on what course of action to take, what information to look for and how to use it to solve problems.	Students discover the qualities and expressive potentials of materials through extensive experimentation and research **Students use information and apply the knowledge for problem solving.** **Students develop autonomous learning and also learn to work in groups**	Students learn to identify sources of information and share ideas about social, historical and geographical issues while demonstrating an understanding of the dynamic nature of the social and physical world.
Students select, integrate and apply numerical and spatial concepts and techniques in a variety of situations. (N.C Goals: 3,4)	Students use appropriate vocabulary as they apply their knowledge of numerical and spatial concepts to carry out tasks.	Students develop an understanding of numerical, spatial and algebraic concepts and process in the formal learning domain and use these to represent and analyse relationships	Use scientific data, concepts and equations to solve problems, analyze relationships and explain phenomena.	Students apply numerical and spatial concepts in the learning of skills and techniques in Physical Education and Health Education, and for improvement and evaluation of	Students use ICT applications to ask and answer questions related to numerical and spatial reasoning in mathematics and related disciplines	Students apply numeracy practices and analyze mathematical concepts related to nutrition, food choice, design and pattern and garment construction.	Students use numerical and spatial concepts and techniques during the designing, realisation and evaluation stages of the design process.	Students develop technical competency in using various media Students produce works of arts using different concepts and techniques	Students select, integrate and apply numerical and spatial concepts and techniques in understanding historical, geographical, social and natural facts and events.

OLO	Languages	Maths	Science	Health & PE	ICT	Home Econ	Design & Tech	The Arts	Social Sciences
		among variable quantities and to solve problems.		performance and skills.	Students use electronic communication technologies such as the Internet to contact experts and knowledgeable peers in mathematics for consultation and support in solving problems related to numerical and spatial reasoning in Mathematics and related disciplines				
Students use logical and critical thinking skills to judge, assess and solve a broad range of both theoretical and real life problems. (N.C Goals: 3,4)	Students get involved in problem-solving tasks; they discuss, formulate opinions, negotiate, make informed decisions and draw conclusions.	Students make use of mathematics to develop logical and critical thinking to deal with routine and non-routine problems and make informed decisions.	Through engagement in problem solving, students are made to develop their logical and critical thinking in relation to real life problems.,	Students use logical and critical thinking to solve problems in outdoor and adventurous activities.	Students develop confidence in the use of computer packages for personal and educational ends Students analyse simple problems; they design and develop appropriate computerised models as solutions Students use ICT in many forms such as newsgroups, chats, bulletin boards and educational CD-ROMS, to develop awareness about ethical and legal issues with respect to technology use	Students demonstrate the use of logical and critical thinking in a broad range of situations such as in the preparation of food, in the construction and use of textile items and in the wise use of resources (e.g., time, money, energy, water), both theoretical and in real life situations to meet personal and family needs.	Students use logical, inductive and deductive reasoning to analyse problems and to arrive at possible solutions in the process of design.	Students communicate ideas through the use of materials and processes. Students develop confidence in the use of traditional and new media.	Students display the ability to use logical and critical thinking while addressing historical, geographical and social issues.
Students understand, use and adapt technologies and ICT tools confidently to meet their needs. (N.C Goals: 3,8)	Students use a range of technological devices, the media and ICT tools to seek information, communicate with each other, learn to read, write and enhance their presentation..	Students regularly and routinely work with scientific calculators, computers, audio-visual tools and mathematical software packages to enhance mathematical thinking and develop appreciation, enjoyment and skills in problem-formulation and problem-solving.	Students use scientific equipment and innovative technologies to engage in experiments and enhance scientific understanding. .	Students learn to use ICT, media (tv/video) and a range of devices and equipment to analyse, measure, evaluate, record and monitor performance	Students use ICT in various forms such as educational CDs, models and simulations, and electronic communication, to develop an understanding of the physical, biological and technological world	Students use ICT effectively to plan, design and create textile items and in food product development. They use the Internet judiciously and explore the impact and the influence of technology in our personal and family life.	Sustainable, appropriate and intermediate technologies are identified and applied or adapted to solve problems in everyday life.	Students develop confidence in using ICT tools and resources for enhancing their skills in a number of art forms	Students use ICT and the media to explore and share ideas about the historical, geographical and social environment.

OLO	Languages	Maths	Science	Health & PE	ICT	Home Econ	Design & Tech	The Arts	Social Sciences
Students understand, appreciate and preserve the physical and natural world. (N.C. Goals: 2,3,4,7)	Students read, discuss and debate issues related to their environment; they communicate their ideas and opinions as well as make informed decisions	Students are able to make informed judgement of their environment through the acquisition of appropriate and relevant mathematical knowledge.	Understand how science and technology are inextricably linked with cultural, geographic and historical evolution.	Students learn to live in and with the environment through Outdoor and Adventurous activities and also develop a concern for the conservation of the environmental and cultural heritage.	Students use ICT to obtain information on issues related to culture, geography and history either synchronously, asynchronously or diachronously	Students demonstrate an understanding of the relationship between human activities and consumerism and their impact on the environment, making informed decisions and taking action that will contribute to their own well-being, that of the society and the natural and physical world surrounding them.	In order to provide solutions to problems, students consider the conservation of natural resources and optimum use of materials.	Students use experiences in Arts to understand their historical, cultural and social environment. Students respond thoughtfully and critically to ideas and construct personal meanings.	Students understand the complexity of living in a changing society and seek to find ways in which they can contribute to preserve the physical and natural world.
Students develop awareness of their cultural, geographic, historical and economic contexts and acquire the knowledge, skills and values for social integration and a culture of peace. (N.C. Goals: 2,4,5,6,7,8)	Wide reading, discussions and project work allow students to develop a better understanding and appreciation of others, thus leading to stronger social cohesion.	Students use mathematics to develop knowledge, skills, attitudes and values in culture, history, geography and economics for active participation in society.	Students demonstrate an understanding of their role in implementing sustainable development policies to ensure the welfare of the global community.	Students learn about the history and origin of games and sports. Through participation in a range of physical activities they learn to respect others and develop cooperation and team spirit.	Students use technological platforms to develop an awareness and appreciation of the diversity of world cultures Students use ICT to learn about the effect of people"s individual or collective actions on others Students use ICT to learn about environmental issues and the effect of people"s actions on the world"s environment	Students explore and analyse the cultural aspects of their immediate environment and understand the cultural values, traditions and customs in relation to food and clothing within the family and in different geographical, historical and economic context.	Students identify problems in social and economic contexts and use the design process to improve their living environment by taking into consideration cultural values, traditions and customs.	Students appreciate their multi-cultural context through artifacts	Students develop the ability to understand the ways in which people of different cultures, times, and places make decisions and work together to meet their physical, social and emotional needs.
Students interact with others from diverse cultures, develop pride in our nation and recognize that everyone has to feel valued and safe. (N.C. Goals: 5,6)	Through involvement in collaborative tasks and by reading and writing about issues related to culture, students learn to value and appreciate cultural diversity and develop a sense of belonging to their nation.	Students develop their skills while participating and contributing to each other"s development in a culturally diverse environment.	Students use scientific knowledge, skills and develop attitudes that help them make the right decisions for the welfare of society and the environment in a safe manner.	Students participate in team games, group activities (multicultural) and competitions at regional, national and international levels. They develop a sense of belonging to their team, school, and country.	Students use ICT to retrieve and post information in responsible ways while respecting the plurality of the Mauritian society and world communities	Students identify common elements of cultures and factors that promote cohesion (core values of groups on societies), explore cultural diversity in food choices and dressing style of people and evaluate behaviours that influence personal safety and that of others.	In solving problems in Design and Technology, students interact with others through teamwork and develop an awareness of the sensitivity and interplay of diverse cultures and values.	Students interact with each other and learn about diversity of ideas/practices and their evolution, inspire from this diversity while expressing themselves via art forms.	Students learn how to interact with each other and to appreciate, value and respect various cultures while developing a sense of respect for self and others.

OLO	Languages	Maths	Science	Health & PE	ICT	Home Econ	Design & Tech	The Arts	Social Sciences
Students demonstrate aesthetic appreciation and develop artistic, expressive and creative skills. (N.C. Goals: 1,4)	Students are involved in creative oral and written tasks, thereby developing aesthetic appreciation.	Students recognize mathematics in the arts through artistic, expressive and creative activities.	Students develop creativity through involvement in scientific activities.	Students learn and participate in creative activities through Dance, Calisthenics and Gymnastics	Students use ICT to design a work of art of their own creation and imagination Students use ICT to access and visualise works of art, thereby developing an appreciation of artistic works	Students design, create, evaluate and make informed decisions related to food, textiles and interior decoration for self and others, and use artistic and creative skills as an integral part of everyday life.	Students learn about art in all its dimensions. Students develop creativity through a wide range of activities using various materials and processes Students design and make aesthetically appealing objects/artifacts and use various techniques to express ideas and feelings.	Students develop critical and logical thinking through individual and group work in any art form. Students develop confidence in interpreting and evaluating artistic expressions and thus unleash their creative potentials with enthusiasm.	Students demonstrate the ability to better appreciate and make decisions with reference to their social and physical world.
Students develop emotional, social and moral intelligence to achieve a sense of well being. (N.C. Goals: 1,6)	Active participation in linguistic activities and in collaborative tasks leads students to a better understanding of themselves and others.	Students use mathematics in real life to develop emotional, social and moral intelligence to integrate and participate fully in the community.	Through engagement in scientific disciplines, students pay attention to developing their emotional, social and moral well being.	Students develop team spirit, fair play and a sense of achievement that enhances their self-esteem.	Students use ICT to gain access to information that deals with practices for a healthy, social, emotional, mental and physically balanced lifestyle Students use ICT to learn throughout their lives	Students interact confidently with others to explore issues affecting the health and well-being of families, community and the wider society and develop appropriate skills for enhancing personal relationships at home and in school.	Appropriate interpersonal/intrapersonal skills are enhanced when students interact with others when solving design problems and evaluating possible solutions.	Students develop empathy and express feelings, moods and emotions through art.	Students learn about themselves and others and demonstrate a sense of emotional, social and moral responsibility and well being.
Students demonstrate self management skills, positive self esteem and confidence for active participation as citizens of the Republic and of the world. (N.C Goals: 1,3,5,8)	Through involvement in projects, research work and group activities, students develop confidence and the ability to manage themselves and through their use of appropriate language they contribute to society as active responsible citizens.	Students are able to use the mathematical knowledge and skills acquires proudly and confidently in the global context.	Students actively participate in group discussions and scientific investigations and respect the views of others.	Students learn and practice team work, fair play and other sports values through participation in P.E. activities and competitions. They learn to manage and adapt to changes they undergo during their growth.	Students use ICT to exchange ideas and information and thus develop confidence for active participation in the local and global world in a responsible manner..	Students recognise and value different points of view in discussion and debate on issues related to personal, family and community health and well-being and demonstrate actions that support the rights and feelings of others.	Students use planning, organisation, management and entrepreneurial skills to provide realistic solutions when involved in project work.	Students develop self esteem and feel valued and value others by appreciating their own work and that of others.	Through active participation in learning about themselves and others, students develop their self esteem, confidence, and citizenship skills.
Students express their respect for people, plants, animals and resources through informed and responsible choices as consumers and producers. (N.C. Goals: 2,7)	Students inform themselves about goods and commodities available, discuss their appropriateness and make informed choices thereby showing respect for the environment.	Students use mathematical knowledge to enhance the understanding of their surrounding and to make rational use of resources.	Students develop a sense of respect for resources and use their scientific knowledge and skills to promote responsible decision making.	Students develop skills to make appropriate choices as consumers so as to lead a healthy lifestyle.	Students use ICT to develop their knowledge and skills so as to make informed choices as consumers and producers.	Students develop mutual respect, tolerance and cooperation in a safe learning environment and make informed and responsible decisions as consumers and producers during food preparation,	Students value the importance of harmonizing human activity to preserve and conserve the balance between the technological and natural world through informed decisions.	Students develop an understanding and appreciation of the physical, biological and technological worlds by carrying out projects and producing works of art using different materials and processes.	Students develop awareness of making responsible choices with respect to the natural and physical resources, and actively contribute to the preservation of the same as responsible citizens.

OLO	Languages	Maths	Science	Health & PE	ICT	Home Econ	Design & Tech	The Arts	Social Sciences
						clothing construction and other related practical classes and activities.		.	
Students develop awareness and understanding of their body, nurture self-respect and make responsible choices in pursuance of a healthy lifestyle. (N.C. Goals: 1)	Students develop awareness of choices available to them, discuss them and make informed decisions that will lead to a healthy lifestyle.	Students use mathematical skills and knowledge to improve their standard of living by being mathematically literate.	Students develop awareness and understanding of their body and of ways in which they could lead a healthy lifestyle.	Students demonstrate an understanding of the physiological effects of regular physical activity and exercise on their growth, maturation and fitness and for a healthy life style.	Students use ICT to enhance understanding of their body, nurture self respect and pursue a healthy lifestyle.	Students identify the physical and emotional changes, practice personal hygiene, discuss sexual health issues in an atmosphere of mutual respect, make informed judgement and adopt behaviours associated with avoiding STI"s, HIV/AIDS and teenage pregnancy for a healthy lifestyle.	Students adopt safe work practices.	Students interact with each other through a variety of art forms which help them obtain means to lead a healthy lifestyle.	Students make rational choices that help them pursue a healthy lifestyle.

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Curriculum Framework Secondary –

[LANGUAGES]:
ENGLISH
FRENCH
&
OTHER LANGUAGES

3 LANGUAGES: English, French and Other Languages

3.1 The English Curriculum

3.1.1 Introduction

The secondary English curriculum aims at further developing fluency in and an appreciation of the language as well as an understanding of its use for personal, social, academic and professional functions. Emphasis is laid on the use of English as a tool for communication. The aim is to teach students to communicate effectively, both orally and in writing, and to use language purposefully in a variety of contexts. Students are equipped with adequate understanding, knowledge and skills of English to meet different needs through a holistic and comprehensive approach.

The lower secondary curriculum spreads over a period of three years, with increasing levels of difficulty at each stage. The students" experiences acquired at primary level are built upon and extended. The four language skills, namely listening, speaking, reading and writing, form the core of the curriculum and proficiency in the language can be measured in terms of the extent to which these skills are developed:

- The students" ability to listen for effective communication is further developed. They are exposed to the use of the English language in a range of contexts and listen for different purposes.
- Students learn to speak fluently, using appropriate pronunciation, intonation, vocabulary and grammatically correct utterances. They also gradually develop increasing confidence while expressing themselves in a range of formal and informal situations. They participate in and sustain conversations and discussions on a variety of topics.
- Students read different genres for information and pleasure. They are encouraged to articulate their personal response to texts of increasing difficulty. They are also taught to identify, retrieve and synthesize information from a number of sources.
- Students also produce a range of written texts, using conventions, forms and styles correctly. Their writing reveals originality and a variety of structures. Due attention is given to accuracy, purpose and audience.

The secondary curriculum also aims at developing functional literacy in students. Students know about, understand and use appropriate conventions of oral and written language. They become familiar with those used for the presentation of information, ideas and entertainment in the mass media and new information technologies.

In the lower secondary curriculum, Literature in English forms an integral part of the language lesson but at Forms IV and V levels, it is studied as a subject. Literature, being a rich source of language used in varied ways, has tremendous potential as a resource for language teaching and for the development of analytical skills and critical thinking. Literary texts are used as ready made contexts to make the teaching of English more meaningful. Different activities are devised to develop the four skills. Knowledge of grammar and vocabulary is simultaneously enhanced. Students learn the language in a pleasurable manner- through stories, poems, plays, etc. At the same time, they become aware of the diversity of cultures in the world and develop appreciation and tolerance. In the upper forms, more emphasis is laid on the development of skills for analysis and appreciation.

3.1.2 Understanding the Functions of Language

Students understand that English is a means of communication and that its use varies according to the context and purpose.

Students understand that language, whether in oral or written form, serves a communicative purpose and that the message emanates from a sociocultural and situational context. They are aware that language use is bound to vary according to external and internal factors. Similarly they are conscious that messages can be interpreted in a number of ways. Students are also aware that language serves to clarify thoughts, reflect on, explore and record experiences. Its use permeates everyday life, and the functions it serves are varied.

Students thus understand that a range of conventions exist and have to be used according to the situation, purpose and audience. Students can use oral and written language flexibly according to their function. They adapt their own language and interpretative strategies to specific text types, purposes and situations.

3.1.3 The Scope of the Language

Students understand the importance of the English language in their everyday lives and in the global context.

Students are increasingly aware of the fact that English plays a predominant role in their everyday life. In addition to being the language of legislation, administration and academia, it is the language of information and entertainment. The media, entertainment industry and the internet daily inundate us with the English language. Students realize that English is a living entity and is constantly evolving to suit new social realities; what was once the language of classical literature is now the language of text messages and chat rooms.

English is also the means out of our insularity as a small island state. It can save us from economic claustrophobia by creating pathways for communication with other countries. Our main economic pillars, namely tourism and the textile industry, require a labour force that is proficient in the English language. Moreover, with the increasing number of opportunities in the area of business outsourcing (call centres) and the impending setting up of a Language Institute, more fluent users of English language are needed.

3.1.4 Values and Attitudes

Students are open to languages and understand the power of languages in binding people.

Students understand that language is a mode of self-expression and conveys personal and cultural constructs. They are aware that the way language is used is determined by its purpose. They understand that words have an effect on the receiver and that written or spoken messages can reinforce, challenge or change held beliefs. They can discriminate between the use of language for unification and for marginalization. They can also make out biases and assumptions.

Given the fact that they live in a multilingual country, students appreciate the diversity of languages and are tolerant towards different languages. They become conscious that relevant knowledge of L1 can be transferred for increased fluency in English language. They realize that certain basic conventions remain the same whatever the language.

Students become aware of the fact that a variety of „Englishes" have evolved and that language has a historical baggage. They view languages as bridges between people and nations.

3.1.5 Strategies

Students become proficient users of the language. They develop and successfully apply a number of strategies based on their understanding of the way in which language works.

Students use language and apply different communicative strategies depending on their purpose, context and audience. They use language to clarify concepts and thoughts through brainstorming and discussion. They use language to explore ideas further and challenge mindsets through debates. They also use language to share information through presentations.

Students use language in an elaborate manner or through graphic representations according to the situation and purpose. They apply appropriate strategies and knowledge of conventions to deal with a variety of oral and written texts. They select relevant information and can represent this in alternative

ways, such as notes, graphic representations, summaries and reports. They can compare or synthesize information from different sources, according to their needs and purposes.

3.1.6 Learning Outcomes for Language Skills

3.1.6.1 The Listening Skill

Students listen with literal and critical comprehension to a variety of speakers, in a variety of contexts and for different purposes.

Listening is an active process and an essential part of communication. The listener is engaged in a number of processes to deal with the verbal message effectively, such as receiving the message, assigning meaning to words, grasping the gist of the message as well as interpreting paralinguistic and non-verbal features to understand unspoken thoughts, before responding to the message in an appropriate manner.

Students listen to a variety of oral materials for different purposes: for pleasure, for information or for reflection. They process messages according to the purpose of listening. They can understand literally and critically. To ensure that understanding takes place, they apply a number of strategies such as seeking clarifications, using feedback, seeking further information and paying attention to non-verbal signals/cues.

Students collect and synthesize information from different oral sources. Their strategies vary according to their aim for listening. They listen critically and consider the speaker"s intention when interpreting a message. They are sensitive to tone of voice and persuasive techniques. Students are engaged in listening tasks with oral or written follow-up.

3.1.6.2 The Speaking Skill

Students speak fluently on a number of topics, in a wide range of contexts and to different audiences.

Speaking is a powerful tool of communication used for personal, social, academic and professional purposes. Speaking entails pronouncing words correctly, using appropriate vocabulary, conveying meaning clearly through grammatically correct sentences. It also involves adopting the appropriate pace and tone according to the purpose and context of communication.

Students can construct and convey messages. They are engaged in oral communication for a range of purposes and with a variety of speakers for personal or social purposes such as greeting, sharing

news, expressing likes and dislikes; and for academic purposes in classroom interaction, such as brainstorming, discussion, role play, debates and presentations. They can reformulate their thoughts, clarify them and engage in a meaningful conversation when necessary. They express and support their views convincingly. They use conventions of formal and informal conversation as required.

3.1.6.3   The Reading Skill

Students read a wide range of texts with purpose, understanding, critical awareness and appreciation.

Reading is the process of constructing meaning from a written text. It is a complex skill that involves the use of a number of strategies to understand words, sentences and texts.

Students successfully decode a variety of texts: they attribute meaning to words, follow development of ideas, differentiate between main and secondary ideas, identify supporting details, make up for unknown words and unfamiliarity with topic through the use of contextual clues and background information; they are also aware of the voice of the author and possible biases.

Students know that texts exist in a variety of genres and are produced for a number of purposes. They are exposed to and read a wide range of materials, including posters, notes, memos, forms, reports, newspapers, magazines, web pages, essays, novels, short stories, poems and plays. They read for different purposes: for information, for knowledge and experience, for pleasure and appreciation.

Students acquire an increasing sight vocabulary and word bank. They are aware of the range and variety of written texts in their immediate environment and their respective uses. They know that reading involves an interaction between the reader, writer and the text. They read actively and critically, and formulate personal response to the texts. They understand how texts are structured and what conventions have been used. They identify values and assumptions as well as cultural connotations. Students are tolerant of others" opinions as they are aware that texts may convey and arouse different views and beliefs. They relate material from a text to their personal life and experience and also to other texts.

Students use information from various written sources for oral and written work such as projects, presentations and debates.

3.1.6.4 The Writing Skill

Students can produce a range of written texts for different purposes and in different contexts.

Writing is the process of communicating meaning; ideas and information are thereby conveyed to others through the use of appropriate conventions- tone, layout and rhetoric.

Students produce written texts for different purposes, such as to share ideas, to convey facts, to tell stories, to keep records, to make lists, to explore ideas, and to narrate events. They use strategies such as note making, planning, drafting, conferencing and editing because they are aware that writing is a process. They engage in formal, informal and creative writing. They use precise vocabulary and appropriate structures.

Students are given the opportunity to engage in a variety of written tasks. They are involved in creative writing, designing a web page, publishing a newsletter alongside producing traditional texts, namely essays, reports, summaries and letters. Their functional literacy skills are also developed; they write fax messages, telegrams and emails, and they fill different types of forms. They bear audience in mind and suit text to function.

3.1.7 Language Competence

Language competence results from effective use of the language skills, which themselves constitute a number of sub-skills. In any communicative situation, the use of specific skills and sub-skills ascertains that the message is correctly processed.

3.1.7.1 Listening Competencies

The student:
- understands words and sentences
- follows the organization of ideas in the discourse
- identifies main points and supporting details
- recognizes explicit relationships among ideas
- recalls basic ideas and details
- identifies the speaker's purpose, personal perspectives as well as ideological and emotional biases
- demonstrates awareness that one's knowledge, experience and emotions affect the way one listens to a message and interprets it
- discriminates between statements of fact and statements of opinion
- makes links between prior knowledge and the information provided by the speaker
- draws valid inferences from the information
- interprets the speaker's nonverbal message

- demonstrates comprehension by paraphrasing the speaker's message
- makes up for gaps in the information

3.1.7.2 Speaking Competencies

The student:

- articulates clearly and pronounces correctly
- expresses ideas fluently, using appropriate vocabulary
- uses grammatically correct sentences with both simple and complex structures
- uses appropriate language and social conventions based on the topic, audience, setting, and purpose
- organizes discourse coherently and in a way that is appropriate to the topic, audience, context, and purpose
- shows an awareness of audience by varying tone and pace to create and maintain interest
- uses conventions that are suitable for the message, occasion, and receiver
- demonstrates nonverbal behavior that supports the verbal message
- engages in conversations/discussions/exchange of views or ideas with conviction, providing arguments to support claims when required

3.1.7.3 Reading Competencies

The student:

- identifies different genres and their function
- reads and understands a range of texts for different purposes
- follows the development of ideas
- shows understanding of themes, characters and plot
- predicts and makes relevant inferences
- differentiates between main and secondary ideas
- uses prior knowledge, contextual clues, word attack skills and text attack skills to understand unknown words or concepts
- responds personally, imaginatively and critically to the text
- makes intra-textual and inter-textual comparisons
- relates ideas in the text to personal experience
- recognizes the writer"s point of view
- evaluates the text and draws conclusions
- reads aloud fluently, with the correct pronunciation and clear articulation
- reads aloud with appropriate pace, variation of tone, expressiveness

3.1.7.4 Writing Competencies

The student:

- engages in process writing to develop main ideas, select appropriate supporting details, organize those details, write drafts, edit, and complete a final product
- produces a variety of written texts, using appropriate conventions
- writes grammatically correct sentences with varied structures
- produces unified, coherent, and well-developed texts
- includes relevant details to support ideas
- demonstrates critical thinking and problem solving skills
- uses appropriate vocabulary according to purpose, topic and audience
- uses conventions of grammar, punctuation, mechanics, spelling, etc correctly.
- uses appropriate diction, tone, voice, point of view, and figurative language, according to audience and purpose
- uses a research process that includes selecting a topic and gathering relevant information from a variety of sources, such as oral, written and electronic
- summarizes, paraphrases, interprets, and synthesizes information from different sources
- reproduces information in a different lay out, e.g., graphic representations.

3.1.7.5 Level Descriptors

SKILL	FORM I	FORM II	FORM III	FORM IV-V
LISTENING	Students listen to short and simple texts on familiar topics or topics of interest with literal understanding. They grasp and recall the main ideas and important details. They use a few strategies to make up for gaps in comprehension, e.g., use of prior knowledge and contextual clues. They can recognize the mood of the speaker through his/her tone, e.g., angry, happy.	Students listen with comprehension and recall the gist as well as important details with more confidence. They can process longer messages containing more unfamiliar words. They relate information from the text to prior knowledge or personal experience. They demonstrate awareness of speaker bias, emotions and tones such as surprise, sarcasm.	Students can listen more extensively to a wider range of speakers and different topics. They are able to grasp and recall a greater amount of information. They draw valid inferences from the message and their critical response is more obvious. They can differentiate between facts and personal opinion. They are able to relate and compare information from different sources on the same issue.	Students can listen confidently and with understanding to a variety of speakers and topics for different purposes. They can link information from different sources. They also understand that listening is an interactive process and respond aptly in communicative situations.
SPEAKING	Students express themselves on topics of interest in simple terms and structures. They engage in brief conversations on familiar topics with relative fluency, with at least one participant. The use of vocabulary is, most of the times, appropriate. Their articulation and pronunciation is generally correct.	Students speak with more ease and on a wider range of topics. They engage in and sustain conversations/discussions with more than one participant, with appropriate responses and turn taking. There is an attempt to use sentences with varied structures and more precise vocabulary.	Students converse or discuss with more ease and confidence with one or more participants. They can elaborate and express their views on a variety of topics. They can also justify their stand with relevant arguments. Their vocabulary has expanded and sentence structures are varied.	Students demonstrate confidence while engaging in speech. They can communicate accurately, appropriately and effectively in a number of situations. They can recount personal experience, discuss issues and talk fluently on a variety of topics. They show an awareness of how spoken

	There is an attempt to vary tone and pitch according to purpose and audience	Their variation of pitch, pace and tone according to audience and purpose is more prominent. Their nonverbal behaviour supports the spoken message.	They use conventions according to the audience, context and purpose. They can talk with effect, e.g., arouse interest or curiosity.	communication varies according to situation, purpose and audience.
READING	Students read and understand narrative texts and texts they are familiar with, such as greeting cards, recipes, letters, posters, simple poems and advertisements. They develop growing familiarity with other genres, e.g., newspaper articles and diary entries, and grasp the gist of these texts. They vary the pace according to text and content. There is an attempt to express their views on and relate to the text using simple language. They can draw simple inferences and link ideas in the text with their personal experience. Students read aloud simple texts, which may include some dialogue, with appropriate pronunciation, intonation, pitch and pace.	Students read a wider range of genres with relative fluency. They adopt different strategies with more confidence to derive meaning from the text and to read with understanding. They use word attack skills to guess the meaning of unknown words They make predictions and draw inferences with more ease. They link ideas in the text with prior knowledge and personal experience more extensively. They also make intra-textual links and attempt inter-textual comparisons between two texts. Their critical outlook is sharper. They recognize the writer"s perspective and express their agreement or disagreement thereof in simple language. They provide support for their views. Students read aloud longer texts	Students demonstrate increased literal and critical understanding. They read a wide range of texts on different topics and with different organizational patterns. They relate information from different parts of the same text or different texts and analyse these. They understand that writings reflect certain ideologies and cultural constructs. They thus recognize the writer"s purpose and understand the reason behind the use of certain stylistic devices, e.g., irony and metaphorical language. They provide personal response to the text, demonstrate empathic skills, and justify/discuss their views. Students read aloud texts of varying lengths and those including dialogue fluently and	Students enjoy and appreciate reading texts in the English language. They read and respond to a variety of texts accurately and with confidence. They can select retrieve, evaluate and combine information from different written texts. They can also appreciate the ways language is used for effect.

		which include dialogue with correct pronunciation and increasing fluency. They vary pace, tone, pitch and stress as required.	with conviction. They display confidence and vary pace, tone, pitch and stress as required.	
WRITING	Students produce short narrative and other texts they are familiar with, e.g., greeting cards and informal letters. They adopt the process approach when engaged in a written task. They write grammatically correct sentences, and attempt to use a variety of structures. They can take down notes from oral or written sources, and reproduce information in simple graphic form, e.g., a mind map. They write for different purposes and audiences in situations directly related to personal experience, e.g., letter writing, using appropriate conventions and correct grammar, spelling and punctuation. Their writing is generally coherent and includes adequate and relevant information obtained from different sources, e.g., internet, encyclopedia. They write legibly and present their work neatly.	Students‟ ability to write narrative and non-narrative texts is reinforced and extended. The genres they produce vary from diary entries to simple summaries, brief reports, etc. A variety of structures are used and discourse is suited to the purpose and reader(s). The students‟ writing is relevant and generally coherent, with adequate development of ideas where required. Relevant information is selected from different sources e.g., magazines, the internet and the news. It is paraphrased, summarized or synthesized as required. Students write using correct grammar, spelling and punctuation. They use ICT as a tool for spell checks and formatting. They write legibly and present their work neatly.	Students reinforce their ability to produce different genres. They select and include ideas or information in a coherent manner and they use some stylistic devices to write for effect, e.g., create suspense. Their work displays originality and relevance. The lay-out varies, according to the genre and conventions used are appropriate. Students display critical thinking skills by presenting arguments with adequate support or justification when required. Students write using correct grammar, spelling and punctuation. They use ICT as a tool for spell checks and formatting. They write legibly and present their work neatly.	Students can communicate accurately, appropriately and effe ctively in writing. They show an awareness of how written communication varies according to situation, purpose and audience. They plan, organize and express ideas, using appropriate conventions as well as correct grammar, spelling and punctuation. They use ICT as a tool for spell checks and formatting. They write legibly and present their work neatly.

Level Descriptors for Literature in English Forms IV-V

Students:
- Identify and analyse characters with respect to their importance in the plot
- Follow the sequence of the action and recognize important elements in the plot
- Identify and analyse main and sub themes
- Recognize and understand the use of stylistic features and literary devices, and the purpose for which they are used
- Interact with the text and respond empathetically to different aspects
- Voice out and discuss their views in relation to different elements of the text
- Understand that the text can be read from different perspectives and value the views of their peers
- Relate the text to real life situations
- Carry out simple intertextual comparisons for a deeper understanding of the text
- Understand contextual elements that influenced the author and the writing of the text

3.1.8 The Teaching and Learning Process

Language skills cannot be taught in isolation. As such, any language activity in the classroom will lead to the development of all four skills. The teacher can, however, focus more closely on one or two skills at a time for teaching purposes. The four skills are further broken down into specific learning competencies and the teacher can devise appropriate tasks to develop these.

We are advocating a Whole Language Approach and Communicative Language Teaching. A range of teaching strategies and resources must be used in view of making learning an effective and enjoyable experience. The teacher is encouraged to use a gamut of materials to expose the students to the variety of texts in the language. Group work, debates and oral presentations should also be integrated in learning activities to develop oral skills along with social skills.

While the use of the target language is encouraged and promoted, the L1 is not ignored. The teacher builds on the students" knowledge of the language system and its use. Those who depend heavily on their L1 must be gradually drawn out of it and made confident users of the English language. For this purpose, the teacher should employ the relevant teaching strategies with adequate scaffolding, and also create a classroom atmosphere that is conducive to student participation.

3.1.9 Assessment

No learning process is complete without assessment. Assessment is an on-going process, whether it is carried out formally, such as through written tests, or informally during class discussions. It is an important means of obtaining feedback on the learner"s progress in language learning. Formative assessment enables the identification of the strengths and weaknesses of students and assists the teacher in the planning of subsequent lessons and remedial action. Instruction is thereby geared towards the needs of learners. Assessment criteria are made clear to the students so that they are aware of the expectations and requirements. After the work has been corrected, students are given constructive feedback with reference to each criterion, and appropriate follow-up measures are taken. Summative assessment provides record of marks and reports achievement. This is essential for promotion purposes.

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Lower Secondary French Curriculum

Le français au collège obligatoire: une langue pour grandir dans la vie, s'ouvrir sur le monde et réussir sa formation

3.2.1 Introduction

Après l'expérience du cycle primaire qui constitue, pour tous les enfants, une entrée à la fois dans le multilinguisme et dans les premiers apprentissages formels, le cycle secondaire doit d'un côté consolider les acquis du primaire et d'un autre côté cibler des savoirs, des savoir faire et des savoir-être déterminés par la fonction que ce cycle d'études occupe dans le système éducatif mauricien. Il est important de ne pas considérer que toutes les compétences visées par l'enseignement primaire aient été acquises par tous les enfants. En fait, le maintien à l'école de l'ensemble de la population enfantine rend nécessaire la prise en compte de l'hétérogénéité des profils à l'entrée au collège en termes à la fois d'acquis et de rapport à l'apprendre dans des structures formelles. Cette prise en compte est nécessaire pour éviter une logique de fuite en avant et d'abandon des enfants qu'il faudrait encadrer. Par ailleurs, les trois premières années de l'enseignement secondaire mène, pour un nombre significatif d'apprenants, à la vie active alors que pour d'autres, elles doivent jeter les bases pour le développement de compétences non seulement plus complexes mais aussi de nature différente. Ce sont là les défis auxquels doit répondre le programme d'études.

3.2.2 Un Profil Différent et des Enjeux Déterminants

L'enfant qui arrive au collège est un préadolescent qui sait beaucoup de choses déjà. Toutefois, la croissance de ses connaissances va de pair avec le développement de sa personnalité. Pendant son séjour au collège, il passera par cette phase cruciale qu'est l'adolescence, période marquée d'un côté par le développement de l'intelligence et des opérations formelles et d'un autre côté par l'ouverture sociale et la construction d'un soi qui veut s'émanciper de la détermination ou de l'influence parentale. C'est aussi l'âge de la découverte des disciplines en tant que champs de savoir et de construction de connaissances de même que de l'appropriation de méthodes spécifiques qui les définissent. Par ailleurs, le collégien est désormais conscient de vivre dans un monde vaste et aux dimensions multiples sur lequel il est avide d'inscrire son empreinte. Au plan social, il est très conscient de lui-même et cherche à définir sa personnalité moins dans la conformité avec le désir de ses parents que dans le regard de ses pairs et des jeunes adultes avec lesquels il s'identifie. C'est donc un âge de potentialités fortes et de définition de traits de comportements tant sociaux que cognitifs et psychiques durables. Le collège peut par conséquent être considéré comme un cycle scolaire déterminant pour la construction d'une personnalité post-enfantine et pré-adulte saine d'une part et préparatoire d'une citoyenneté active, participative et éclairée d'autre part.

3.2.3 Les Finalités de l'Enseignement du Français au Collège Obligatoire

Le séjour au collège doit permettre à l'adolescent de développer, à un niveau appréciable et de façon durable, les compétences de base de la communication verbale orale et de la lecture-écriture en français. Ces compétences opératoires seront étroitement articulées avec une compréhension des structures et du fonctionnement de la langue (*cf*. grammaire, syntaxe, vocabulaire et orthographe) de manière à assurer les conditions nécessaires pour un développement équilibré de son état de compétence transitoire – dans la mesure où il est appelé à évoluer encore – en français. En clair, l'enseignement/apprentissage de cette langue doit permettre à l'adolescent de s'exprimer, à l'oral comme à l'écrit, avec une aisance grandissante, correctement et clairement, et en ayant recours à un large répertoire de structures caractérisées par une certaine complexité, dans une diversité de situations ; il doit aussi lui permettre de raisonner et d'argumenter de manière cohérente et sophistiquée sur un éventail de sujets qui lui importent, de même qu'à développer sa créativité langagière et son imagination. A cet effet, on associera à cet enseignement l'acquisition de repères culturels et artistiques qui enrichiront son potentiel de création de soi et lui serviront à évoluer avec confiance et aisance dans un contexte de mondialisation grandissante. En d'autres termes, l'apprentissage de la langue française doit inscrire l'adolescent dans la logique positive d'une construction de soi volontaire et responsabilisante, nourrie par des valeurs saines, généreuses et humanistes ; il doit aussi assurer une inscription dans une modernité inclusive, respectueuse des droits et de la dignité de chacun. En un mot, le français doit servir à la formation de l'adolescent, au développement de ses aptitudes intellectuelles, de ses compétences méthodologiques et techniques, de ses facultés de discernement éthique, moral ou juridique, de même qu'à l'enrichissement de ses connaissances et de sa culture générales.

3.2.4 Les Objectifs Terminaux de L'apprentissage du Français au Collège Obligatoire

Niveau de scolarité	Objectifs généraux
Forme I	La première année du secondaire sera une année de consolidation des savoirs et savoir-faire acquis ou en cours d'acquisition notamment en lecture et en écriture. En effet, de très nombreux enfants quittent encore le primaire sans avoir développé un savoir-lire/écrire suffisamment automatisé pour ressentir un sentiment de sécurité et de confort devant des tâches qui requièrent la mise en œuvre de ces savoir-faire. On peut en dire de même pour les savoirs et savoir-faire qui se rapportent à la connaissance du système de la langue (*cf*. systèmes et sous-systèmes de structuration syntaxique, morphologique, lexicale et orthographique). Cette année servira donc à s'assurer que chaque enfant, quel que soit son profil de départ à l'entrée en Forme I, • développe une compétence communicative et langagière à l'oral qui lui permette de bénéficier de l'environnement sociolinguistique francophone et d'y évoluer avec une certaine aisance ;

	• maîtrise les règles élémentaires du fonctionnement grammatical et phonologique du français de manière à contrôler avec un certain succès ces deux dimensions de ses productions orales ; • soit engagé dans l'enrichissement des structures lexicalisées de même que des structures syntaxiques et phrastiques qui lui servent à échanger avec autrui et à exprimer sa pensée; • internalise des comportements de lecteur/scripteur appropriés ou souhaitables pour son âge grâce au contact avec des écrits divers en nombre suffisant et à la participation à des situations de réception et de production de ces écrits, dont des écrits littéraires ; • maîtrise les mécanismes de fonctionnement de l'écrit français et applique les procédures de lecture fondées sur cette connaissance ; • se dote d'un vocabulaire écrit automatisé suffisamment étendu quoique basique ou élémentaire pour rendre possible la reconnaissance immédiate d'un nombre de mots conséquent dans n'importe quel texte de son niveau ; • soit engagé dans l'extension en autonomie de ce vocabulaire écrit automatisé ; • soit engagé dans l'automatisation de stratégies et de procédures de construction de la signification de textes et puisse s'adonner à l'exercice de verbalisation de ces procédures. • s'essaie à l'interprétation de textes en prenant appui – outre le contenu –sur les techniques d'écriture, les aspects matériels du texte et des éléments de son contexte de production • développe un goût pour un/des auteur(s)/genre(s)/style(s) grâce au contact avec des (extraits d') œuvres. Pour cela, le programme et les matériels de travail devront être soigneusement conçus selon une pédagogie de la différenciation et une didactique qui tire le plus grand profit du vécu expérientiel et de l'environnement linguistique, notamment francophone, des enfants, de même que des ressources littéraires auxquelles ils seraient sensibles ;il faudra aussi que les enfants qui en ont besoin bénéficient d'un encadrement rapproché et d'un soutien ajustés à leurs besoins.
Formes II & III	L'enfant étant désormais bien installé dans le cycle secondaire et dans l'adolescence, ces deux années seront des années de construction de nouveaux savoirs et de nouvelles compétences. On distinguera quatre grands domaines d'intervention et de travail : ▪ la communication verbale, tant orale qu'écrite ; ▪ le fonctionnement de la langue, avec un programme qui articule grammaire de la phrase et grammaire du texte ; ▪ le fonctionnement des discours, ce qui implique l'exploration tant de textes sociaux ou fonctionnels que la découverte de textes dits littéraires du patrimoine aussi bien national qu'international et de produits culturels de notre ère, ▪ l'éveil à la littérature par le biais de la découverte de textes du patrimoine aussi bien national et régional qu'international, ▪ l'éveil à l'actualité et aux affaires courantes de même qu'aux phénomènes sociaux de notre temps.

3.2.5 Le Répertoire de Compétences a Développer

Niveau de scolarité	**Compétence 1** **Communiquer à l'oral en français**
Forme I	**Capacité 1 S'exposer de son plein gré à des occasions d'assister et de participer** en tant que récepteur à des situations de communication en français ;
	Capacité 2 S'exprimer en français lors de situations routinières ou de micro-

		situations qui le demandent en tirant le plus profit de structures ou de matériaux linguistiques pratiqués en classe ;
		Capacité 3 Participer, moyennant une préparation au préalable, avec à-propos, à un échange relativement soutenu sur un thème, une situation, un texte d"auteur, *etc.* en recherchant diverses stratégies communicationnelles pour éviter l"interruption ou la panne de communication ;
		Capacité 4 Prendre la parole en classe en français sur un sujet convenu ou de son choix et ayant fait l"objet d"une préparation tant procédurale que langagière et linguistique.
Forme II		**Capacité 1 S'exprimer volontiers en français** lors de situations de la vie de tous les jours qui le demandent ou le permettent - en recourant à une syntaxe phrastique qui cherche à être relativement complète (phrases avec expansions ou complexes, recours à divers temps et modes verbaux, *etc.*) ; - en se conformant avec une certaine systématicité à certaines règles d"accord de base et en adoptant des intonations phrastiques appropriées.
		Capacité 2 Rapporter en introduisant de la cohérence dans la relation, un récit, un événement vécu, un projet.
		Capacité 3 S'exprimer en français lors de situations d'étude et de travail scolaire **-** en s"appliquant à rechercher un vocabulaire de plus en plus juste et précis ; - en faisant des efforts pour adopter un registre approprié pour de telles situations.
		Capacité 4 Développer son vocabulaire de manière à améliorer la qualité de son expression lors de tâches et d'activités se déroulant en français. **Rendre compte de manière intelligente et sensible d'une œuvre artistique (roman, nouvelle, poème, film, …).**
Forme III		**Capacité 1 S'exprimer avec une aisance grandissante en français lors de situations de la vie de tous les jours qui le demandent ou le permettent** - en adoptant une syntaxe de plus en plus complète et en ménageant des effets pour une communication efficace.
		Capacité 2 S'exprimer en français lors de situations d'étude et de travail scolaire **-** en recourant à un vocabulaire de plus en plus juste et précis ; - en adoptant un registre approprié pour de telles situations.
		Capacité 3..Organiser logiquement son propos pour exprimer et commenter ses actions, ses attitudes et ses productions.
		Capacité 4 S'exprimer sur des (extraits de) textes littéraires pour en construire son interprétation et en dire son appréciation.

Niveau de scolarité	Compétence 2 Lire et écrire en français
Forme I	**Capacité 1 Achever d'internaliser le traitement des mots** de manière à ressentir un confort de lecture. **Capacité 2 Répondre à l'oral et/ou en écrit à des questions** sur un livre/texte/ document en manifestant une compréhension littérale des informations données et une compréhension par inférences lexicales ou grammaticales. **Capacité 3** Développer un comportement autonome de lecteur francophone approprié pour son âge (emprunter régulièrement des livres, en lire régulièrement en autonomie hors de l'école, en donner son appréciation, *etc*.). **Capacité 4** Prendre l'habitude de produire seul(e) et/ou en groupe des textes courts divers, dont de petits textes littéraires. **Capacité 5 Lire avec fluidité** un texte fonctionnel ou littéraire d'une douzaine de lignes à haute voix.
Formes II & III	**Capacité 1 Lire avec les yeux** et à une vitesse compatible avec une fluidité de lecture un texte de deux pages environ en démontrant une bonne compréhension générale. **Capacité 2 Manifester** à l'oral et en écrit **une compréhension fine** de textes (*cf*. paraphrase, inférence, anticipation d'épisodes ou de réactions des personnages étayée par des prises d'indices, identification de l'/des information(s) principale(s), offre de titres appropriés pour un texte ou des parties d'un texte, résumés, *etc*.) de même qu'une sensibilité à la langue et aux procédés d'écriture employés. **Capacité 3 Internaliser la lecture comme trait de comportement** de manière à arriver à lire avec un certain confort et en en dérivant un certain plaisir un éventail de genres (magazines à thèmes, BD, romans d'aventures /policiers/ de science-fiction, d'amour, *etc.,*) et de styles. **Capacité 4** Dire de mémoire avec fluidité et une certaine expressivité un texte poétique d'une page. **Capacité 5** Développer une capacité d'observation et d'analyse de textes divers, fonctionnels et littéraires, de manière à en faire apparaître la structure et le fonctionnement lors de tâches guidées. **Capacité 6** Interpréter avec plaisir, sensibilité et intelligence un texte (documentaire, essai ou d'auteur, en prose, en vers, ou dialogué) à haute voix. **Capacité 7** Prendre l'habitude de produire seul(e) et/ou en groupe des textes fictionnels divers (récits de fiction ; poèmes ; planches de BD ; saynètes, mini-pièces de théâtre, *etc*.) **Capacité 8** Prendre l'habitude de produire seul(e) et/ou en groupe des textes informatifs, scientifiques et fonctionnels divers (prise de notes à partir de recherches documentaires effectuées en français à des fins d'étude d'une autre discipline ; prise de notes à partir d'un enseignement/d'une explication ; rédactions après prise de notes; préparation de fiches de révision ; formulation d'un raisonnement, d'une procédure, comptes-rendus, articles, e*tc*.). **Capacité 9 Etendre sa culture de l'écrit et lire couramment** avec confort et plaisir un large éventail de genres et de styles.

Niveau de scolarité	Compétence 3 Maîtriser le système
Form I	**Capacité 1 Appliquer correctement le système verbal** dans son fonctionnement grammatical. **Capacité 2 Démontrer sa connaissance d'un vocabulaire usuel** et de l'organisation du lexique du français de même que des principales règles de dérivation lexicale. **Capacité 3 Mettre en œuvre les principales règles élémentaires d'orthographe** grammaticale et lexicale. **Capacité 4 Démontrer sa connaissance des structures fondamentales** de la phrase simple et de la phrase complexe relative et conjonctive dans ses manifestations les plus courantes.
Forme II & III	**Capacité 1 Démontrer sa connaissance d**es éléments qui assurent la cohérence d'ensemble d'un texte (*cf.* procédés de référenciation tels que les pronoms ou les reprises nominales, connecteurs inter phrastiques comme les conjonctions de subordination, choix de formes verbales dominantes, *etc*.). **Capacité 2 Automatiser les choix grammaticaux permettant d'adapter ses propos à la personne** à laquelle ils s'adressent, en fonction de l'effet recherché. **Capacité 3 Distinguer entre les registres** de langues. **Capacité** 4 **Développer la compréhension de la variation du vocabulaire** francophone.

3.2.6 Le français en Forme IV et V

Les objectifs généraux de l'apprentissage du français en Forme IV & V

Ces deux années seront consacrées à la mise en place de compétences devant amener les élèves à être des **utilisateurs indépendants** du français. L'enseignement du français en FIV et en FV devra doter les élèves d'une maîtrise suffisamment avancée de cette langue véhiculaire

- pour entreprendre avec succès une formation professionnelle et technique, à l'IVTB ou ailleurs, pour évoluer immédiatement après dans la vie active, ou encore pour préparer le *Higher School Certificate* ou un *Brevet Technique Supérieur* ;
- pour évoluer avec confiance tant dans le contexte local de plurilinguisme que dans le contexte régional et international francophone ou bi/multilingue ;
- pour nourrir une sensibilité au langage et une créativité dans son utilisation ;
- pour se composer une personnalité riche et gratifiante d'individu cultivé ouvert sur des espaces culturels et sociaux divers.

Quant à l'enseignement de la littérature en Form IV et en Form V, il visera à faire

- découvrir qu'elle est une voie particulière d'expression et de création artistiques, engagée dans un dialogue avec les autres formes d'art ;
- découvrir qu'elle est une voie d'exploration du monde, des peuples et des cultures du monde et de ce fait, de dialogue entre des peuples et des cultures;
- découvrir qu'elle permet d'explorer la complexité humaine et l'histoire de la pensée humaine ;
- à devenir sensibles à la part prise par les auteurs mauriciens dans la quête d'une conscience de soi en tant que peuple, groupe humain ou individu.

Le répertoire de compétences à développer

Compétence 1 : Communiquer à l'oral en français	
Niveau de scolarité	**Capacités**
Forme IV	**Comprendre sans effort pratiquement tout ce qu'il entend de façon routinière** (conversations, émissions de variétés, journal avec reportages, interviews, *etc.* sur des chaînes de radio ou de télévision locales et régionales/ internationales francophones).
	Comprendre en se concentrant moyennement un éventail de textes longs ou moyennement longs sur une diversité de sujets d'intérêt courant (documentaires, enquêtes, émissions magazines ou plateau, conférences, débats, *etc.*).
	S'exprimer couramment en français lors de situations routinières de la vie de tous les jours ou de situations sociales formelles et lors de situations d'étude et de travail scolaire ou de stages de formation technique et professionnelle - en adoptant une syntaxe complète courante (phrases avec expansions, phrases complexes, recours approprié à divers temps et modes verbaux, mise en relief par des moyens syntaxiques autant que prosodiques, *etc.*).

Forme V	**Comprendre avec un sentiment de relatif confort et de manière assez fine** des textes moyennement longs ou des échanges de niveau relativement soutenu, à destination d'un auditoire alphabétisé et portant sur une diversité de sujets.
	S'exprimer avec aisance et spontanéité en français dans une diversité de situations en adoptant une syntaxe complète courante.
	Examiner un énoncé ou une situation problématiques en en faisant ressortir l'enjeu et/ou le contenu ou ses implicites et en considérant verbalement les procédures pour sa résolution.
	Résumer un texte technique ou informatif moyennement long en en faisant ressortir la structure ou les informations saillantes.
	Rendre compte et discute de son interprétation d'un(e) livre, article, musique, film, *etc.* de manière à la fois valide et personnelle et originale.
	S'exprimer de manière claire et structurée sur un certain nombre de sujets complexes ou d'actualité de son choix et/ou travaillés au collège.

Compétence 2 : Lire et écrire en français	
Niveau de scolarité	**Capacités**
Forme IV	**Automatiser les procédures d'identification interne des mots** de textes de longueurs variables relevant de différents genres et traitant de sujets divers avec exactitude et rapidité, le plus souvent par reconnaissance automatique.
	Automatiser les procédures de constitution des groupes de mots et de suites de phrases selon lesquelles faire la lecture fluide de textes de longueurs variables, relevant de différents genres etc. de manière à en faciliter la construction de la signification (lecture par groupes de mots plutôt que par mots isolés).
	Automatiser le comportement de lecture approprié (*cf.* lecture-survol, lecture sélective, lecture de recherche, lecture de travail, *etc.*), en situation, en tenant compte de l'intention de lecture.
	Lire avec un confort et un plaisir grandissants un éventail de genres (romans, presse générale ou spécialisée, B.D., poésie, …)
	Lire et comprendre de manière fine des textes qui touchent à ses domaines d'étude et d'intérêt.
	Développer la lecture de certains genres techniques comme un trait de comportement approprié pour ses projets de formation ou d'activité future.
	Ecrire à des fins d'étude (*cf.* résumés de cours, prise de notes linéaire ou sous forme de schéma, rédaction de fiches-synthèses, *etc.*) en visant l'efficacité tant par le contenu que par l'organisation et la présentation matérielle de ce contenu.
	Produire des textes d'argumentation ou de réflexion sur des sujets ou des thèmes d'actualité ou d'intérêt général.
Forme V	**Lire couramment et comprendre des articles de journaux et de magazines** d'information nationaux aussi bien qu'internationaux et pouvoir en rendre compte ou les résumer oralement ou en écrit.
	Lire et comprendre des articles ou des textes d'information spécialisés se rapportant à ses domaines d'étude et d'intérêt et pouvoir en rendre compte.
	Lire et comprendre des critiques se rapportant au contenu et à l'appréciation de thèmes culturels (film, livre, concert, exposition, théâtre, etc.) et pouvoir en résumer les informations les plus importantes oralement ou en écrit.
	Lire avec confort et plaisir certains genres ou sous-genres qu'il/qu'elle apprécie particulièrement et peut écrire une brève critique sur une œuvre découverte.
	Produire une diversité de textes appropriés pour des situations de formation et d'activité professionnelle (*cf.* compte-rendus, rapports, lettres, CV, lettres de motivation, *etc.*).
	Produire en développant une certaine originalité de ton ou de style des pièces de

	correspondance personnelle où l''on exprime différents sentiments et attitudes, raconte les dernières nouvelles, etc.
	Développer systématiquement un sujet d'étude et de réflexion sous forme de rédaction ou de rapport en soulignant les points essentiels et en donnant des informations qui soutiennent son argumentation ou sa présentation.
	Ecrire avec fluidité et avec une certaine originalité sur des faits ou des expériences/situations réelles ou fictives.

Compétence 3 : Maîtriser le système	
Niveau de scolarité	**Capacités**
Forme IV	**Démontrer une automatisation des règles orthographiques** d''usage – dont les règles de ponctuation – courantes et pouvoir contrôler et justifier ses conduites y relatives.
	Manifester sa connaissance du lien entre choix de formes et de structures et genre textuel et discursif (ex : formes verbales du discours ou du récit ; évitement de l''usage excessif de « Il y a *X* » dans des textes formels et recours à la place à la nominalisation de *X* placé en tête de phrase ; utilisation de la phrase active ou passive ; formes du discours direct, indirect, indirect libre, etc.).
	Faire un usage approprié des registres en fonction de la situation de communication.
	Manifester sa compréhension de la construction de phrases avec expansions.
	Développer une compréhension des correspondances lexicales et syntaxiques entre le français et d'autres langues pratiquées et apprendre à en tirer profit de même qu''à en rendre compte.
	Démontrer une compréhension claire et automatisée de la structuration du système verbal (modes, temps, personne, *etc.*)
Forme V	**Démontrer la maîtrise des règles orthographiques** même fines et justifier ses conduites.
	S'appuyer sur sa compréhension des homologies lexicales et syntaxiques entre le français et d''autres langues pratiquées pour contrôler ses productions.
	Manifester sa compréhension de la construction de phrases avec expansions dont des expansions propositionnelles et s''y appuyer lors de la réception ou de la production de textes divers.
	Automatiser les choix grammaticaux permettant d'adapter ses propos à la personne à laquelle ils s'adressent, en fonction de l'effet recherché **-**

Compétence 4 : Etudier la littérature	
Niveau de scolarité	**Capacités**
Forme IV	Manifester une sensibilité à certains genres et sous-genres littéraires;
	Démontrer une sensibilité à quelques thèmes importants d''une oeuvre ;
	situer une œuvre dans un contexte historique et social et montrer comment cette situation éclaire l'œuvre ;
	Etudier les personnages d''une œuvre et leur fonction dans cette œuvre ;
	Dégager le mode principal de narration et les principaux points de vue adoptés dans une œuvre
	Mettre en lumière quelques procédés d'écriture déterminants pour l'appréciation d'une œuvre.

	Distinguer avec une certaine finesse les différents genres et sous-genres littéraires ;
Forme V	**Démontrer l'importance du contexte et du contenu culturel pour la compréhension de certaines œuvres ;**
	Démontrer une familiarisation avec certaines dimensions déterminantes des différents genres (la métrique en poésie, la construction de personnages et l'intrigue dans le roman ; la conception spatio-temporelle dans la pièce de théâtre, ….) ;
	Analyser la construction du personnage comme une dimension déterminante de la création d'une œuvre ;
	Conduire une analyse thématique d'une ou de quelques œuvres ;
	analyser les modes de narration et les points de vue et montrer qu'ils participent à la mise en sens du texte.

Pour mieux répondre aux besoins et aux attentes différenciés des jeunes parvenus à ce niveau de scolarité, on pourrait proposer des modules parmi lesquels les élèves choisiraient selon leur intérêt et leur projet d'évolution ultérieure. Ces modules pourraient être les suivants :

- L'oral pour la communication courante
- L'oral commercial et technique ou des affaires
- L'oral académique ou les méthodes de travail et d'étude scolaire qui prennent appui sur le langagier
- L'éveil à l'actualité et aux affaires courantes de même qu'aux phénomènes sociaux de notre temps.
- La lecture et la production de textes professionnels, commerciaux et techniques divers à des fins diverses
- La lecture de textes d'auteurs du patrimoine mondial, national contemporain (extraits et œuvres intégrales relevant de différents genres) ou d'auteurs populaires
- La lecture et l'étude de textes d'auteurs dans la perspective d'études littéraires
- Le français par la traduction

Certains modules pourraient être pris en charge conjointement par l'école et le secteur privé de manière à ce que les jeunes développent une accointance avec le monde du travail et de la vie active.

3.2.7 Les stratégies d'enseignement et d'apprentissage

La manière dont on a procédé pour déterminer le contenu et les objectifs de ce programme suppose que l'on passe d'une pédagogie centrée sur l'enseignant à une pédagogie centrée sur l'apprenant et l'apprentissage. Cette nouvelle centration se caractérise entre autres par la mise en œuvre d'activités pour impulser, réguler et orienter l'apprentissage. Elle suppose que l'on favorise la prise de parole – entre pairs et/ou avec l'enseignant – comme une stratégie d'apprentissage qui requiert ou favorise l'engagement de l'apprenant dans la tâche. La parole peut notamment servir à la négociation de la compréhension de ce que la tâche implique et des stratégies ou procédures à mettre en oeuvre pour la réussir ; elle peut aussi servir à la verbalisation des conduites effectivement adoptées ; elle devient ainsi utile pour la révision et le contrôle de son travail de même que pour le réemploi raisonné de

stratégies et procédures efficaces. Dans toutes ces fonctions, la prise de parole joue un rôle déterminant dans la construction progressive d'une capacité de planification et de « self-monitoring » et partant, d'une autonomie chez l'apprenant.

Cette démarche, qui s'inscrit dans une approche socio-constructiviste, s'articulera autour d'un certain nombre de types d'activités spécifiques:

- L'apprentissage coopératif
- Le casse-tête ou le remue-méninge
- Le contrat d'apprentissage
- Les travaux dirigés
- L'enseignement assisté par ordinateur
- Le journal des apprentissages
- La recherche

L'évaluation des compétences

Dans le cadre de cette réforme éducative, il s'agira de changer de paradigme en matière de pratiques d'évaluation des connaissances et des compétences. La démarche préconisée ici s'appuie sur les objectifs suivants :

- elle doit permettre à l'enseignant de situer chaque élève dans son parcours d'apprentissage ;
- elle doit fournir des pistes pour une comparaison entre les résultats des élèves dans un établissement et ceux du système ;
- elle doit permettre de déterminer si les objectifs fixés par l'éducation nationale sont atteints ;
- elle doit pouvoir donner lieu à des stratégies de soutien ou de remédiation adaptées à ceux qui en ont besoin.

On recommande en Forme IV la préparation tout au long de l'année d'un portfolio individuel pour lequel l'élève bénéficiera de l'encadrement de l'enseignant de la classe. Ce portfolio rassemblera diverses pièces (travaux dirigés, extraits de journal, travaux assignés et recherche) selon les modules d'apprentissage choisis et servira de base pour une validation des acquis qui lui sera délivrée à l'issue de cette année d'orientation.

3.3 Other Languages: Asian Languages and Arabic

3.3.1 Asian Languages - Introduction

In Mauritius, our strength will continue to reside in the sincere effort to allow multilingualism and multiculturalism to flourish. The multilingual nature of our society opens a number of windows to look at the wider world. Knowing an additional language is a matter of enrichment, more so when the known languages belong to various and varied cultures. With the emergence of India and China in the world economy, knowledge of an Indian language/Mandarin is a great advantage. It is desirable that the teaching-learning of Asian languages be reinforced.

The „*Lower Secondary Curriculum Framework*" for Asian languages and Arabic has been worked out in the context of curriculum reforms initiated by Ministry of Education, Culture & Human Resources. The intent is to bring about qualitative improvement in the teaching and learning process, value, education and the development of further skills and competencies in Hindi/Urdu/Tamil/Telugu/Marathi and Mandarin, as well as Arabic.

3.3.2 Generic Learning Outcomes

Students should be able to:

- Acquire the skill to listen and understand.
- Develop communicative skills, with a range of styles and engage in lively discussion.
- Develop the habit of reading for information and pleasure; draw inferences and relate texts to previous knowledge.
- Read critically and develop the confidence to ask and answer questions.
- Be able to express in writing ideas and feelings in an error free language.
- Develop healthy attitudes and acquire a set of human values.

3.3.3 Learning Outcomes

3.3.3.1 Listening and Speaking

The student should be able to:

1. Practise oral courtesies to greet, congratulate and seek permission properly.
2. Express her/his thoughts feelings and opinions clearly in the language
3. Hold guided conversation on a given topic.
4. Narrate stories or simple events.
5. Express her/his problems clearly.
6. Communicate with peers, friends and teacher using appropriate vocabulary.
7. Role play.
8. Answer in grammatically correct sentences.

3.3.3.2 Reading

The student should be able to:

1. Read texts and poems with proper diction, pitch, intonation, stress and fluency.
2. Recognize all the new words of his/her vocabulary.
3. Understand, recall, rearrange ideas or infer.
4. Enjoy and appreciate what he/she reads.
5. Identify the main points of the read materials.

3.3.3.3 Writing

The student should be able to:

1. Write grammatically correct language.
2. Maintain coherence and sequence.
3. Frame structured sentences of various types.
4. Express opinions on a topic in writing.
5. Write essays on given topic, using appropriate idioms, words, punctuation and elaborate ideas.
6. Write short dialogue/informal letters.
7. Write in her/his own words.

3.3.3.4 Attitudes & Values

The student should have:

1. Developed taste for speaking, reading and writing in the language.
2. Developed healthy attitudes towards other linguistic and ethnic traditions and cultures.
3. Developed positive attitudes towards learning of ancestral languages.
4. Developed a sense of patriotism and civic responsibilities.
5. Acquired a set of human values needed to lead a good life.

3.3.4 Content

The content of lessons/units will have two major components: linguistic content and thematic content. The linguistic component will include language structures, vocabulary, grammar and application of grammar – all important and necessary to develop language skills and competence. Both language skills and competence are developed in certain contexts and situations.

The themes chosen must help to achieve the subject goals and national educational goals. The following may be taken in an integrated manner:

- Self, Family, Home, Friends and Pets
- Me and my Country
- Professions and Trades
- The Environment (Physical and Social)
- Culture and Tradition
- Stories
- Science and Technology
- Travel and Tourism
- Fauna and Flora
- Food and Nutrition
- Sports and Games

3.3.5 Teaching and Learning

The Audio-Lingual Method and the Situational Method are considered appropriate for the lower secondary level. However, for those who are learning the language for the first time, the Bilingual Method would suit better. Some of the techniques suggested are:

- Role play
- Dramatization
- Reading aloud
- Recitation of rhymes, poems and making observations on a given topic/theme
- Telling and retelling stories, anecdotes and jokes and riddles
- Discussion, debate
- Simple projects
- Interpreting pictures, sketches, cartoons
- Activities, tasks, and language games
- Pair work, group work, and short assignments, both individual and group
- Exploring and using multimedia

3.3.6 Evaluation

As for evaluation, an ongoing formative evaluation is proposed. This is going to be a process of finding out and reflecting on students" strengths and weaknesses on the basis of which corrective measures will be taken. Students will have an idea of how well they are progressing in terms of the achievement level expected of the class. The end of term tests and end of year examinations will also be part of the assessment scheme to determine the level of achievement.

In order to make evaluation a tool for learning, it has to be used more frequently as part of the teaching and learning process. Apart from the traditional examination, emphasis should be on continuous assessment, for which the student herself/himself is the reference point. It has to be a means to an end and not an end in itself.

Evaluation will be a diagnostic device rather than a grading instrument. Attention will be focused on improvement of students" learning rather than on measurement of their learning alone. Emphasis will be laid on the individual based rather than class based evaluation in terms of mastery of the fundamentals.

3.3.7 Level Descriptors

Skill	Form I	Form II	Form III
Listening and Speaking	- To listen to cluster of words, phrases and sentences and reproduce with correct pronunciation. - To listen to instructions, questions and requests and respond accordingly. - To practice oral courtesies. - To listen and participate in conversation. - To listen to narration of simple stories, events. To express sorrow, joy, gratitude.	- To listen to various kinds of instructions, and requests and respond accordingly. - To listen to and participate in longer conversation. - To listen to simple stories and give summaries. - To express problems one encounters. - To speak on simple topics. - To interpret pictures and cartoons. - To listen and speak about daily activities.	- To follow Radio/TV programmes - To converse on a number of familiar topics. - To listen to simple speeches and talks. - To narrate stories and events. - To narrate simple experiences. - To express opinions on topics related to students" interests. - To listen and respond to telephone calls. - To communicate with peers, friends and teachers using appropriate range of vocabulary.
Reading	- To read with meaning words, sentences and simple texts. - To read aloud with correct pronunciation and intonation. - To do silent reading with understanding and for enjoyment. - To read, recall and rearrange ideas of given texts. - To read posters, messages and simple	- To read with appropriate speed. - To read various types of fonts. - To read texts and poems with proper diction and intonation. - To read aloud expressing feelings, according to texts. - To read , with understanding of specific and central ideas. - To read for pleasure - To engage in further	- To read texts with appropriate speed maintaining correct pronunciation and diction. - To read correspondences of informal nature. - To create interests in reading various types of writings. - To enjoy reading through supplementary materials. - To practise silent reading further. - To read aloud dialogues/monologues

	advertisements. - To read simple stories and poems - To read with appropriate speed. - To read invitation and greeting cards.	silent reading. - To read invitation and greetings cards - To read name boards and advertisements.	expressing the mood
Writing	- To write words, phrases and sentences with correct spelling. - To write legibly and with desirable speed. - To write grammatically correct phrases and sentences. - To write various types of sentences. - To write from unseen texts (Dictation) - To write guided composition. - To write on given topics. - To write simple informal letters	- To write with correct spelling - To write with desirable speed and appropriate punctuation marks. - To write grammatically correct language structures. - To write guided simple compositions. - To write simple compositions. - To write with proper sequence of words, phrases and sentences. - To write informal letters - To express thoughts and feelings in simple language.	- To write with accuracy - To write on daily activities. - To exchange correspondences - To express ideas coherently in writing. - To write simple messages and invitations. - To write simple narrative and descriptive pieces. - To take dictation using appropriate punctuation marks. - To write simple composition of narrative and descriptive nature.

3.3.8 Other Languages: Forms IV & V

3.3.8.1 LEVEL DESCRIPTORS

Skill	From IV	Form V
Listening and Speaking	- To follow films and documentaries - To listen to talks and speeches - To listen to discussions of literary nature. - To introduce people you know to others. - To indicate agreement/disagreement during discussion. - To make suggestions and requests. - To provide reasons and supporting evidence to justify one"s action.	- To follow TV serials and films and summarize. - To listen to talks and speeches and report on them. - To listen to news broadcast and comment on them. - To listen and participate in quiz and debates. - To participate in discussions of literary nature. - To participate in skits, sketches and drama. - To recite poems.
Reading	- To read and relate facts, events and ideas. - To read books other than textbooks for developing a liking for reading. - To read magazines and newspapers for information. - To read aloud maintaining speed and diction, according to the required level. - To read correspondences, both formal and informal. - To retrieve and read materials from the net.	- To read various types of books: short story, novel, drama, poem. - To read posters, advertisements, name boards, handouts, leaflets, etc. - To read extracts from selected texts and articles. - To use dictionaries for retrieving words and meaning. - To read critically so as to ask and answer questions.
Writing	- To summarize ideas in given texts. - To translate simple texts into the language. - To write coherently avoiding spelling, grammatical and syntactic mistakes. - To write brief reports on events. - To write simple descriptions of objects, places and people. - To write both informal and informal letters. - To write free compositions- narrative and descriptive. - To develop simple conversation.	- To write briefs, using idiomatic expressions and proverbs. - To write letters, compositions, dialogues, stories and simple poems. - To write reports and simple speeches. - To summarize texts in one"s own words. - To write different types of composition: narrative, descriptive and argumentative. - To use appropriate techniques for taking notes.

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Curriculum Framework Secondary-

MATHEMATICS

November 2009

4 Mathematics

4.1 Introduction

Mathematics is a powerful tool and the driving force of our school curriculum. It helps to produce numerate citizens who can think logically and rationally, solve complex problems, make informed decisions and communicate fluently in this highly technological world. Building on knowledge and skills acquired at the primary level, students need to be provided with opportunities to develop deeper understanding of mathematical knowledge as well as the relationship of Mathematics with other curriculum areas and the real world around.

At the secondary level, the emphasis of the curriculum will be on developing the **mathematical power** of students, thus empowering them with knowledge, skills and attitudes to be able to „mathematize" situations by formulating, solving and reflecting critically on problems. The objectives will be to enable learners to think and **reason** mathematically and make **connections** with other subject areas of the school curriculum. The approach to Mathematics instruction will be premised on the **process-product** approach which links with concept formation and skills development. The **process-product approach** enables learners to view mathematics from a holistic perspective rather than as a set of unconnected, discrete topics. The approach involves optimal use of the language of Mathematics in problem solving and helps in the development of mathematical disposition of learners.

Mathematics is the most textbook driven subject in the school curriculum. It is important for teachers to develop situational learning strategies based on integrating the commonsense experiences of children with the world outside classrooms and bring an additional value-added input when teaching mathematics. The approach enables learners to make sense of their mathematical knowledge, to develop a positive attitude towards Mathematics and, at the same time, to enrich their learning experiences. Teachers must recognize that Mathematics learning is an area where it is only too easy for a learner to enter a „failure cycle". Thus, it is imperative to ensure full participation of learners in constructing their own mathematical knowledge and applying it in familiar as well as unfamiliar situations.

4.2 Importance of Mathematics

We live in a period of accelerating change and, in order to function effectively in the real world, we must understand and be able to use Mathematics both in our personal as well as professional lives. Our rapidly expanding society and economy require that we are mathematically literate. Understanding and doing Mathematics well provides numerous opportunities and options that open doors to other areas of learning.

Students need to acquire the necessary mathematical concepts and skills for everyday life, derive satisfaction, enjoyment and confidence from the understanding of the concepts and mastery of the

skills. They need to recognise and use connections within Mathematics and with other subjects in the school curriculum. They are also required to develop logical and rational thinking skills to solve non-routine problems. The development of a positive attitude towards Mathematics through the appreciation of pattern, structure and the power of Mathematics thus becomes very important.

4.3 **Model of Curriculum Framework**

In general, at the end of Form V, the learning aims of a course in Mathematics are to:

(a)   develop mathematical language as a means of communication and investigation;

(b)   acquire and apply skills and knowledge related to number, measure and space in mathematical situations encountered in everyday life;

(c)   appreciate the pattern, structure and power of Mathematics;

(d)   develop an understanding of mathematical principles;

(e)   develop a positive attitude towards Mathematics, including satisfaction, confidence, enjoyment and perseverance;

(f)   develop an ability to reason logically;

(g)   enhance intellectual curiosity and excel in creative work arising from mathematical ideas;

(h)   appreciate the interdependence between different branches of Mathematics;

(i)   integrate technology to enhance mathematical experience;

(j)   acquire a foundation appropriate to a further study of Mathematics and skills and knowledge pertinent to other disciplines.

In order to meet the challenges and changing demands of the Mauritian society, the proposed secondary Mathematics curriculum stresses the development of **Mathematical Power** of all students. The learning attributes of the curriculum are highlighted in the „Star" Model as shown in Figure 1.
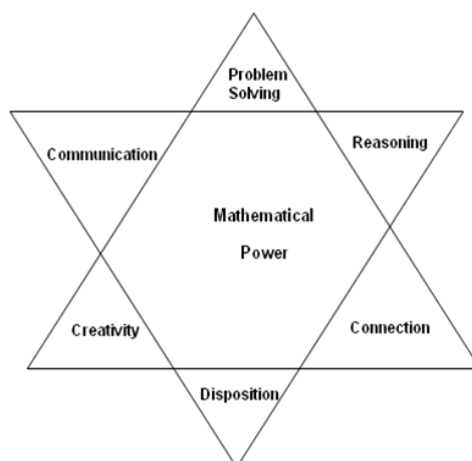
Figure 1: The Star Model of the Secondary Mathematics Curriculum

The Star Model (Figure 1) forms the basis of the development of the Mathematics curriculum at the secondary level. Students start the core secondary Mathematics curriculum in Form I up to Form III and they can opt for either syllabus A or D for School Certificate examination on reaching Form IV.

Possibilities of taking more than one Mathematics course exist through the availability of Additional Mathematics and Statistics.

Mathematics teaching and learning should focus on development of Mathematical Power which comprises mathematical disposition, creativity, problem solving, connection, communication and reasoning of all learners. The notion of „mathematical disposition" encompasses the acquisition of crucial aptitudes of competent learning and problem solving. These involve the ability to acquire domain-specific knowledge, heuristic methods, metacognitive kowledge and skills, and affective components like beliefs, motivations and emotions, together with the ability to develop mathematical competence through the application of these categories integratively and interactively.

Creativity is associated with child development, typically with children in the early years of primary schooling. All too often, children have a strong desire to convey their feelings and ideas about personally significant events and often, to keep a record of them. Children experience impulses toward pictorial or plastic creativity and vent those impulses in literary and other forms of creative self-expressions. One of the aims of education is to foster „growth" and development of individual potentialities, (that is, an. all-round development of the child), while the curriculum reflects the needs and interests of society.

Problem solving is the primary function of Mathematics education. Teachers should recognize that solving problems involves the application of reading, understanding, planning to solve the problem, and a host of other skills specific to the process, and that the skills developed should be extended to other subject areas of the school curriculum and in practical life. By developing problem-solving skills, students will come to realize the potential usefulness of Mathematics in their daily lives.

In general, the secondary Mathematics curriculum is viewed as comprising several unconnected and discrete strands. In the proposed model, mathematical connection is of paramount importance as students need to connect ideas among and within the different domains of Mathematics as well as other subjects in the school curriculum. Making connections enables students to develop a holistic perspective of the general principles in Mathematics and other related areas rather than acquiring and remembering too many isolated concepts and skills.

The study of mathematics should be regarded beyond its visual collection of facts, figures, symbols, graphs, etc. Mathematics has a language of communication with a variety of modes: listening, speaking, reading, and writing of the visual representations. Each of these can help learners understand Mathematics and use it effectively. Learners should communicate to generate and share ideas to clarify and solidify their understanding of mathematics. Communication as a component of mathematics education facilitates mathematical understanding and connects to natural language and everyday thinking

Mathematical reasoning is one of the critical thinking skills that enable a student enhance concept formation and problem solving skills. With the development of mathematical reasoning, students identify common features in mathematical situations and make generalizations about numbers, space and data. They know how to evaluate situations, and attempt to confirm or refute their own and others" generalizations while also preparing argument to convince themselves and others that a generalisation must hold in every case and not only for all the studied cases. Mathematical reasoning enables learners to reflect on solutions, and to determine whether or not they make sense.

Although there are various ways of approaching Mathematics as illustrated by the learning aims of the model, they can be grouped into two distinctive classes, namely,

      (i)   Lower Secondary School (Form I to Form III), and

      (ii)   Upper Secondary School (Form IV to Upper VI).

However, this document is restricted to the curriculum framework of the Lower Secondary School and Form IV and Form V.

A schematic representation of the relationships between the learning attributes of the two aforesaid classes is shown in Figure 3.1.
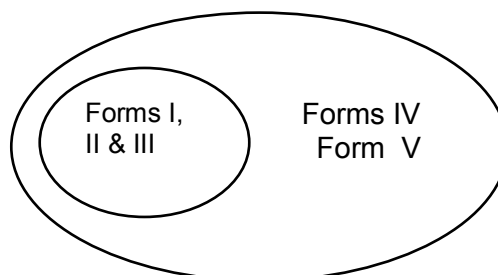
Figure 2: A diagrammatic illustration of the learning attributes of Lower Secondary School being a subset of those of Form IV and Form V.

From Figure 2, it can be seen that the learning objectives of the Lower Secondary School are contained in those of Form IV and Form V. In other words, the Lower Secondary School lays the foundation for Form IV and Form V, which, in turn, prepare the demands of the workplace and further study.

Hence, the first stage in defining the curriculum goals of the two classes is to identify the essential skills that students must develop from their early schooling experience and are expected to use these skills in Form IV and Form V. The second stage requires the development of knowledge and skills specific to Form IV and Form V.

4.4   **Learning Goals**

In order to provide a curriculum consistent with the philosophy of the Star Model, the main differences between the learning goals of Lower Secondary School and Form IV and Form V can be summarized as follows:

(a)   At Form IV and Form V levels, the students should be able to select, identify and use appropriate methods to solve a given problem, whereas, in the lower secondary school, they are required to use the methods given in the context.

(b)   Mathematical models are generally formulated for lower secondary school, whereas, in Form IV and Form V, students are expected to formulate the models for a given problem.

(c)   Emphasis is laid on the mental and paper/pencil approach to computation at Lower secondary level, while calculations are performed using an electronic calculator at Form IV and Form V levels.

The various learning goals of lower secondary level common to Form IV and Form V, as well as goals specific to the Form IV and Form V levels as shown in Table 1 and Table 2 respectively.

Table 1: Learning goals common to lower secondary level and Form IV & Form V.

Learning Areas	Learning Aims
Problem Solving	- demonstrate an understanding related to numbers and use this understanding to solve problems; - acquire and apply appropriate computational skills – mental, paper/pencil, and estimation; - use problem-solving skills and strategies to solve routine problems; - acquire knowledge and apply skills related to measurement; - acquire knowledge and apply skills related to geometry and space.
Reasoning	- develop an understanding of mathematical principles; - understand the significance of the results of computations obtained; - check all computations for logic and interpret the results; - develop the abilities to reason logically; - make prediction about probable outcomes from given data.
Communication	- present the solutions to problems clearly; - must use vocabulary, speech, numerals and symbols to develop their mathematical knowledge and skills.
Connection	- recognize number patterns and relationships; - apply mathematics in everyday situations; - acquire the foundation appropriate for further study of mathematics, e.g., Additional Mathematics.
Creativity	- organize, record and interpret data; - appreciate creative work arising from mathematical ideas.
Disposition	- develop their mathematical knowledge and skills in such a way which encourages confidence and provides satisfaction and enjoyment.

Table 2: Learning goals specific to Form IV and Form V.

Learning Areas	Learning Aims
Problem Solving	- use problem-solving skills and strategies to solve non-routine problems; - select an appropriate method to solve a problem; - develop an ability to classify, generalise and to prove.
Reasoning	- recognize when and how a situation can be represented mathematically; - identify and interpret relevant mathematical principles to solve a problem.
Communication	- check solutions of problems and interpret the results clearly; - use mathematics as a means of communication with emphasis on the use of clear expression.
Connection	- develop an understanding of the part which mathematical principles play in the world around them; - develop an ability to apply mathematics in other subjects, e.g., Science, Accounts; - appreciate the interdependence of different branches of mathematics; - integrate information technology to enhance understanding of mathematical principles; - acquire a foundation appropriate to further study and to meet the demands for the workplace.
Creativity	- produce creative work arising from mathematical ideas.
Disposition	- enhance their intellectual curiosity which encourages confidence and provides satisfaction and enjoyment.

4.5 Level Descriptors for Forms I to III

Subject Learning Outcomes	Form I	Form II	Form III
Numbers and Numeration All learners will develop number sense and an ability to represent numbers in a variety of forms and use numbers in a variety of situations	• Represent and order numbers on the number line. • Identify negative and positive integers • Apply operations of addition, subtraction, multiplication and division on rational numbers • Apply operations of addition, subtraction, multiplication and division on decimals • Represent rational numbers in decimals • Find square root of numbers • Apply exponential notation to integers and rational numbers • Understand commutative, associative and distributive properties • Apply ratio, proportion and percentage to consumer mathematics	• Extend the number system to include irrational numbers • Approximate and estimate real numbers. • Round off numbers to a required number of decimal places. • Use rate, ratio, proportion and percentage • Perform direct and inverse variation • Apply profit and loss • Apply simple interest and hire purchase • Find prime factors of numbers and its use in calculating HCF and LCM (including word problems involving HCF and LCM) • Find squares, cubes, square roots and cube roots of numbers • Use inequality symbols	• Use simple interest and compound interest • Understand hire purchase • Apply consumer mathematics - Discount - Conversion of currencies - Sharing and ratio - Profit and loss - Salaries and wages - Taxation and deduction • Interpret sequences
Geometry All learners will develop spatial sense and an ability to use geometric properties and relationships to solve problems in Mathematics as well as in	• Classify angles • Measure angles • Perform line symmetry and rotational symmetry. • Classify triangles • Find areas of plane geometric figures • Convert from one unit of area to another • Recognise Cartesian coordinates	• Use Pythagoras" theorem • Understand properties of triangles – similarity and congruence • Understand properties of circle (excluding angle) • Construct special types of quadrilaterals • Find properties of quadrilaterals • Find areas of quadrilaterals • Find properties of polygons	• Plot equation of a line of the form $y = mx + c$. • Use gradients and intercepts of lines, including parallel lines. • Perform transformation geometry - Translation - Reflection - Rotation • Understand similarity and similar

everyday life.	in a plane • Plot points in the Cartesian coordinate system • Use compass and protractor for geometrical constructions. • Drop a perpendicular onto a line • Construct parallel lines • Construct bisector of lines • Construct bisector of angles • Construct equal angles • Perform basic transformation: reflection and rotation.	• Perform bilateral symmetry • Understand bearing • Work with bearing and scale drawing • Plot equation of a line of the form x = k, y = k.	triangles • Understand properties of vectors in 2-d • Perform operations with vectors • Apply sine, cosine, and tangent ratio
Measurement All learners will develop an understanding of measurement and will use it to describe and analyze phenomena	• Measure length in SI units • Measure mass in SI units • Work with time	• Find surface area and volume of solids (cube, cuboids) • Perform conversion of units • Work out financial transaction: discount, buying price, selling price, profit and loss, including problems involving simple and compound interest	• Find surface area and volume of solids (cylinder, sphere, cone, right prism) • Work out personal and household finance • Convert from one currency into another.
Algebra All learners will develop an understanding of algebra and algebraic concepts and processes in the formal learning domain and will use them to represent and analyze relationships among variable quantities as well as to solve problems	• Use letters to represent numbers. • Compare operations on literal numbers with integers • Evaluate algebraic expressions by substitution with integers • Expand and simplify algebraic terms and expressions • Add/ subtract like terms • Add/subtract compound terms • Perform operations using rule of signs • Formulate simple equations and word problems involving simple equations • Understand concept of sets,	• Add and subtract algebraic terms • Represent inequalities using number line • Solve inequalities by addition or subtraction • Solve inequalities by multiplication or division • Solve harder linear equations in one variable and applications • Factorise algebraic expressions • Find H.C.F. and L.C.M. of algebraic terms • Add and subtract algebraic fractions • Find compound factors	• Simplify algebraic equalities • Solve linear equations involving factors • Understand properties of binomial expressions • Understand matrix as a store of information and types of matrices • Perform operations involving matrices • Understand properties of matrices • Perform operations on sets • Translate word problems into algebraic expressions and equations • Recognize and represent number patterns (including finding an algebraic expression for the general term) • Solve simultaneous equations (including

subsets, and notation of sets	• Work out factorization by grouping, including difference of squares • Apply operations to sets	word problems) • Understand formal language of sets • Factorise quadratic expressions
Statistics & probability All learners will develop an understanding of statistics and elementary probability and will use them to describe sets of data, model real-life situations, and support appropriate inferences and arguments.		• Construct ungrouped frequency table • Construct charts and pictograms • Find mode, median and mean • Experiment probability with coin, die, etc. • Record outcomes • Draw possibility diagrams • Interpret charts and graphs

Topic	Form IV	Form V
Numbers and Numeration	- Read, write and order numbers and signed numbers including decimals, commonly used fractions, percents and numbers in standard form. - Express large and small numbers in standard form. - Calculate squares, square roots and cubes of numbers. - Use and apply order of operation rules as appropriate with or without a calculator. - Use and apply estimation techniques. - Solve problems, using appropriate strategies such as guessing and checking, looking for patterns, making or drawing a model, eliminating possible answers or solving simpler problems. - Solve, identify and create word problems that match exercises involving natural numbers, integers, rational numbers and irrational numbers. - Solve problems with more than one possible solution and recognize answers that are not admissible.	- Use directed numbers in practical situations (e.g., temperature change). - Select the most appropriate methods of computation to use in a given situation. - Give appropriate upper and lower bounds for data given to a specified accuracy. - Solve problems using the most appropriate tools, methodologies, processes and operations in solving a variety of problems. - Identify alternative solutions to problems. - Solve, identify and create word problems that match exercises involving ratio, percentage, formula and proportion. - Translate real-world problems in mathematical statements and mathematical problems and answers back into the real-world context. - Generalise patterns to simple algebraic statements.
Geometry	- Use and interpret geometrical terms and vocabulary. - Identify similar and different attributes of two or more geometric figures, including side and angle measurements.	- Identify and compare common 2-dimensional and 3-dimensional geometric shapes and solids according to attributes and properties.

	- Model or make drawings of 2- and 3-dimensional shapes and solids to solve problems. - Use locus. - Apply and use circle and right-angled triangle relationships in solving problems. - Use ruler and compass to make geometrical constructions. - Draw the net (2-dimensional pattern) for geometric solids, e.g., cube, rectangular prism, cylinder. - Use and apply perimeter, area and volume concepts. - Calculate surface areas of solids. - Use symmetry properties. - Calculate unknown angles and bearings and give simple explanations to geometrical properties. - Use sine and cosine rule.	- Recognize and apply the concepts of symmetry, similarity and congruency of geometrical figures, including man-made objects. - Read and make scale drawing. - Draw cross-sections formed by slicing geometric solids. - Estimate perimeter, area and volume. - Identify and give precise descriptions of similar and congruent figures. - Solve simple trigonometrical problems in 3-D.
Coordinate Geometry	- Locate and give coordinates of points on graph paper and maps. - Demonstrate familiarity with Cartesian coordinates.	- Locate points and lines and determine distance and area in a Cartesian coordinate system. - Interpret and use graphs in practical situations including travel graphs and conversion graphs. - Draw graphs from given data. - Represent linear inequalities.
Measurement	- Create and solve problems involving time, money, mass, length, capacity. - Determine the most appropriate unit and instrument for a measurement task. - Calculate percentage increase of or decrease of a given quantity.	- Estimate length, area, volume, time, weight, angle etc., with reasonable accuracy. - Find and record measurements using proportions and formulas. - Apply mathematics in practical situations e.g., utilities bills, hire-purchase… - Interpret and use graphs in practical situations. - Extract data from tables and charts.
Statistics and Probability	- Use tree diagrams to organize all possible outcomes of an experiment. - Read and interpret graphs, tables and charts. - Organize and display data, using charts, tables, graphs and diagrams. - Understand the merits of the different forms of statistical representations.	- Interpret everyday uses of probability. - Read and interpret graphs, tables and charts and make predictions based on them. - Identify misleading or incorrect methods of displaying or interpreting data. - Display and interpret data using mean, mode, median, range and percentile.

Patterns and Relationships	- Use equality and inequality concepts and symbols. - Solve inequalities and equations. - Find numerical patterns and use in order to complete charts and tables.	- Represent inequalities by region in a Cartesian coordinate system. - Relate new information to previous knowledge. - Evaluate or make a table for two-variable formulas and match a graph or table of values of the formula. - Describe the nature of change of each variable as suggested by a graph, table of values of formula. - Generalize patterns
Algebra and Functions	- Use letters to express generalised numbers and express basic arithmetic process algebraically; - Subject of formula; - Manipulate directed numbers; - Factorise expressions; - Manipulate simple algebraic expressions; - Solve equations. - Use function notations and describe their inverses. - Manipulate indices. - Sketch of graphs of simple functions.	- Construct equations from given situations; - Estimate gradients of curves by drawing tangents.
Matrices and Transformations	- Represent information in matrices. - Perform operation with matrices, including inverse of a matrix. - Use geometrical tools for transformation: reflection, rotation, translation, enlargement, shear, stretching, and their combinations.	- Identify and describe transformation. - Represent and use matrices to represent transformation.
Vectors	- Write vectors in the correct notation. - Use and perform operations with vectors.	- Express a given vector in two coplanar vectors.
Communication Skills	- Use context clues in the selection of appropriate words and symbols. - Recognize common abbreviations, e.g., cm. - Use of an electronic calculator. - Use set language and notation.	- Use basic mathematical terms and symbols to convey concepts of quantity, order, operation and shape. - Provide logical answers based on factual data.

4.6 **Assessment Objectives**

The learning outcomes - common to lower secondary level, Form IV and Form V, and specific to the latter, discussed in the previous section, have a significant bearing on the assessment objectives for the students at these levels. Although the assessment objectives are largely governed by the requirements of the School Certificate/ Ordinary Level examination, they are adapted, in particular, to meet the needs of the Lower Secondary level.

The main distinctive characteristics of the assessment objectives at both levels are shown in Table 3 below.

4.7 **Modes of evaluation pertaining to specific subject area**

Based on the vision of the National Curriculum Framework, the mode of assessment and evaluation will be premised on problem based .learning (pbl), continuous and periodic, standards-based assessment. Traditional forms of assessment and evaluation were examination-oriented with a tendency that encouraged „teaching to the test", thus putting undue pressure on many learners, not mentioning the high drop-out rates often couched in automatic promotion.

All three generic forms of pbl, namely portfolio-based, problem-based, and project-based learning will be adapted to assessment methods in mathematics instruction that emphasizes activity- and constructivist-based teaching and learning strategies.

Effective teaching and learning also requires continuous and periodic, standards-based assessment to determine what learners have learned and what they still need to learn in order to meet the curriculum standard indicators, performance objectives and learning competencies as set out in the National Curriculum Framework. Such information plays a critical role in planning how and what to teach at every level of classroom and school so as to ensure that no child is left behind.

Also referred to as formative assessment, the continuous assessment process would be used at the:

National Level to

I. Monitor student progress relative to curriculum goals and standards and/or the approved instructional sequence, and then plan appropriate school improvement strategies.
II. Provide disaggregated data for comparison and instructional planning and monitor overall progress in the education sector.
III. Identify the needs and challenges of specific schools, grade levels, and demographic groups.
IV. Track trends in student learning from year to year.

V. Provide public with indicators of school effectiveness and guide policy formulation and research.

School Level to

I. Track student progress through the approved domain curriculum and against standards set in the National Curriculum Framework.
II. Create profiles of individual learners, and identify learners with specific needs, and plan instructional sequences that meet their needs.
III. Identify leaders among the teaching faculty and areas where sharing instructional plans and strategies may help to provide additional support to individual teachers.

Classroom level to

I. Evaluate student knowledge and skills as an on-going process during classroom instruction, with results used to determine areas of special emphasis and focus before the beginning of a new instructional unit or term.
II. Enable teachers modify content and teaching strategies to address the needs of less talented students so that „no child is left behind‟ in the classroom.
III. Identify strengths and weaknesses of individual student achievements, and, on the basis of this information, improve the achievement levels of students.
IV. Evaluate student knowledge and skills toward the end of an instructional unit or term, with results used to measure what students have learned and determine what areas may need further work.
V. Identify ways and means to improve the achievement levels of students.

Lower Secondary School	Form IV and Form V
Organise, interpret and present information in written, diagrammatic and tabular form.	Organise, interpret and present information in written, diagrammatic, tabular and graphical form.
Perform calculation without calculating aid.	Perform calculation with or without calculating aid.
Estimate, approximate and work to specified degrees of accuracy, namely decimal places.	Estimate, approximate and work to specified degrees of accuracy, namely decimal places and significant figures.
Use geometrical instruments.	Use geometrical instruments for accuracy appropriate to the context.
Understand and use mathematical language and symbols.	Interpret, transform and make appropriate use of mathematical statements expressed in words or symbols.
Make use of common systems of measurements.	Understand systems of measurement in everyday use and in the solution of problems.
Recognise and use spatial relationships in 2-D.	Recognise and use spatial relationships in 2-D and 3-D, particularly in solving problems.

Recall and apply mathematical knowledge in the context of everyday situations.	Recall, apply and interpret mathematical knowledge in the context of everyday situations.
Rake logical deductions from given mathematical ideas.	Deduce, generalise, justify and prove from mathematical ideas.
recognise patterns and relationships in various situations.	Recognise and generalise patterns and relationships in various situations.
Set out mathematical work, including the solution of problems, in a logical and clear form using suitable symbols.	Understand and use mathematical language and symbols effectively and present mathematical arguments and solutions to problems logically and clearly.
Use combinations of mathematical skills and techniques in problem solving.	Analyse a problem, select a suitable strategy and apply an appropriate technique to obtain a solution; Translate a problem relating to a relatively unstructured situation into an appropriately structured form.
analyse problems and check results.	Analyse problems, check results and interpret solutions in terms of the problems.

Table 3: The main differences between the assessment objectives of Lower Secondary School and Form IV and Form V levels.

Curriculum Framework

SCIENCES

5 Sciences

5.1 Introduction

Science comprises our knowledge about the natural world and the processes by which that knowledge is acquired, synthesized, evaluated, applied and reviewed. Therefore, science education must emphasize exploration and direct evidence from the natural world. Science is a problem-solving activity that seeks answers to questions by collecting and analyzing data in an attempt to offer a rational explanation for naturally occurring events. The knowledge that results from scientific problem-solving is most useful when it is organized into concepts, generalizations and unifying principles which lead to further investigation of objects and events in the environment.

Technology has always played a role in the growth and development of scientific knowledge. Science and research today lead to the technology of tomorrow, which is one of the crucial elements of a modern economy and hence, the welfare of the society.

Science is practised in the context of human culture. As a result, dynamic interactions occur among science, technology and society. In this respect, a proposal is being made to teach Science, Technology and Society (STS) as a broad-based discipline to our young students at Lower Secondary Level.

The present curriculum framework for Science, Technology and Society at lower secondary should be seen as a consolidation of pupils" achievements in Science at primary level and a deepening of the foundations for future learning of Science and Technology.

5.2 Scope and Context

At present, students at lower secondary level learn Integrated Science. At Forms I and II, Integrated Science comprises themes from the three sciences (Biology, Chemistry and Physics). At Form III level, there are three separate textbooks (one for Biology, one for Chemistry and one for Physics) and the three sections are taught separately by three different teachers.

The new proposal of a curriculum framework for Science, Technology and Society at Lower Secondary level seeks to broaden the scope of the subject. There is a need to place more emphasis on key societal thematic issues, such as health, energy, food, environment,

poverty, technology, benefits and limitations, etc., as dimensions in an integrated /interdisciplinary approach. This will, hopefully, reverse the trend of students shying away from Science and Technology.

This framework proposes that in the first two years of the lower secondary education, Science and Technology be taught using a thematic approach. The themes would be related to each of the three sciences (Biology, Chemistry and Physics), which would help to support cross links within the sciences. The themes also reflect some of the current societal issues in Mauritius, such as energy, sustainable development, social ills, health and environment. It will also help our youths to develop an awareness of contemporary and controversial issues.

In order to help students develop a broad educational outlook, the policy document for curriculum reform (MOEHR, 2006) proposes *that General Science (GS) becomes compulsory for those students who are not opting for any pure Science (Biology, Chemistry and Physics)*. GS makes provision for the promotion of scientifically and technologically literate citizens and hence supports the underlying principle of "Science for All" (Science for the 21st Century Report, UNESCO, 2000).

The new Curriculum Framework for Science, Technology and Society at Lower Secondary level will cater for students of both non-science and science streams (Figure 1).

5.3 **Rationale**

Science and Technology is increasingly affecting our everyday life. Scientifically-literate citizens, equipped with the skills and knowledge to study and solve complex problems, are essential to sustain and improve quality of life on earth, to enhance democratic societies and promote global economy. The need to promote a world community of scientifically and technologically literate citizens was recognized as being urgent by the World Conference on Education for All (1990). Scientific and Technological literacy plays a crucial role in ensuring the sound economic and environmental development of all countries. To meet the above aims, each country needs to focus on the following four educational pillars:

- Personal development through acquisition of scientific knowledge.
- Personal mental development through use of scientific skills and methods.
- Development of individual attitudes and perceptions.
- Development of values and skills for a responsible citizen.

Thus, the goal of this Curriculum Framework for Science, Technology and Society is geared towards laying the foundation for producing scientifically and technologically literate citizens. The underlying principle of this proposed curriculum framework is to help young people acquire the necessary competencies to become productive adults in this increasingly technologically driven society. This curriculum also intends to keep learners abreast of various issues and examples from the Mauritian context.

5.4 Structure of the Lower Secondary Curriculum for Science

The proposal of a curriculum framework for Science, Technology and Society at lower secondary level proposes a broader outlook with emphasis on key societal issues, such as health, energy, food, environment, poverty, technology etc as dimensions in an integrated/interdisciplinary approach.

It is proposed that science will be taught as an integrated subject at Forms I & II. Components of Biology, Chemistry and Physics will constitute the science curriculum. It is also envisaged that some elements of application of scientific concepts will be included so that students can learn concepts in contexts. The Form I curriculum should make a link between the primary science curriculum and the secondary science curriculum, which will be a „bridging the gap" initiative. For example, part of year one term one could be dedicated to gauge the competencies acquired in primary science in various themes such as energy, electricity, the earth and our body.

At Form III level, the three science subjects will emerge as separate subjects; Biology, Chemistry and Physics. The focus at this level will be more on promoting conceptual development from contexts. This will pave the way for students of the science stream to develop appropriate knowledge, skills and attitude in the three subjects for School Certificate level (Figure 1). Elements of applications of scientific ideas will also form part of the Form III curriculum. For the non-science stream students at Form IV level, the knowledge and skills acquired up to Form III level will be reinforced through General Science as part of their SC award. Thus students from both science and non-science streams will have a broader knowledge and understanding of scientific ideas which will be useful in all aspects of life like family planning, decision making and contemporary debates on scientific issues such as conservation of energy, water and so on.
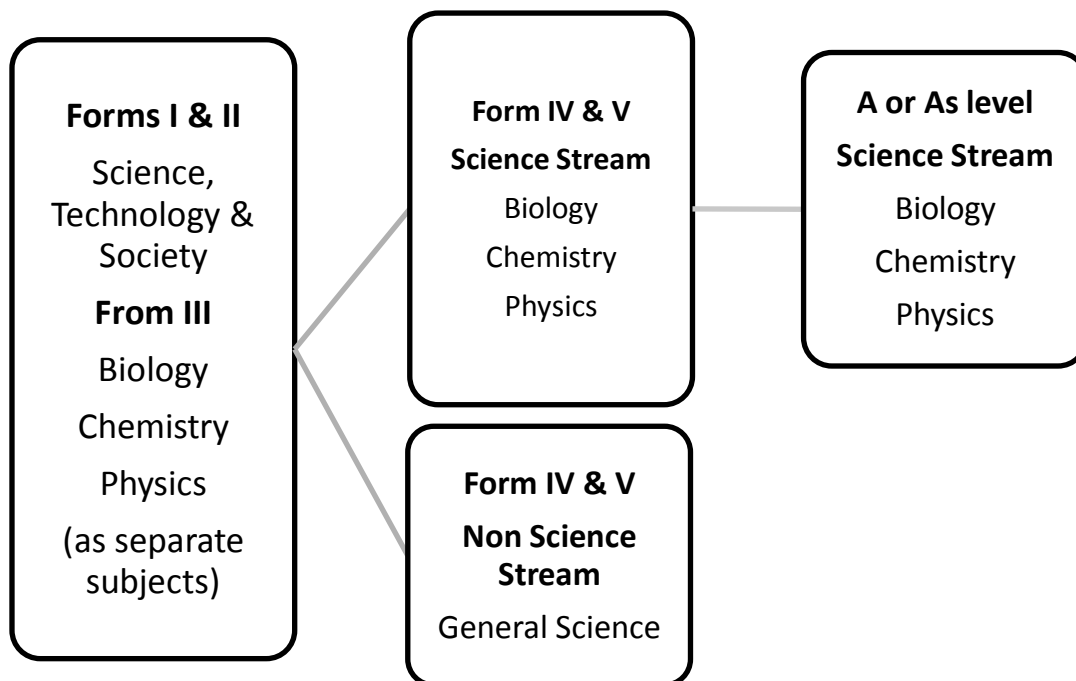
Figure 1: Pathways for Science and Technology learning at secondary level

5.5 Learning Outcomes for Science

- Acquire knowledge and understanding of important scientific ideas and explanatory frameworks that relate to their everyday life experiences and needs.

- Select and apply scientific knowledge, understanding and skills across a range of contexts in their daily life.

- Understand how scientific inquiry is conducted and appreciate the reasoning and kinds of evidence that underpin scientific knowledge claims.

- Discuss with confidence a range of personal, social, ethical and other issues that have scientific and technological dimension.

- Develop skills and attitudes necessary to help them contribute to sustainable social and economic development.

- Communicate scientific understanding to different audiences for a range of purposes, including safe practices.

- Appreciate the role that science and technology, including ICT, play in the modern world.

- Search for relevant scientific data and information from a wide range of sources and communicate these effectively through various means.

5.5.1 LEVEL DESCRIPTORS – Forms I & II

Themes	Learning Outcomes – Form I	Learning Outcomes – Form II
Energy and Matter	- identify the sun and other sources of energy - adopt steps to conserve energy - demonstrate understanding of the importance of matter - Observe, compare and classify properties of matter - list activities of living things (characteristics of life)	- list the common forms/types of energy - describe conversion of energy - explain how energy flows from the sun to organisms - identify elements and compounds as the basic units of all kinds of matter - differentiate between elements, mixtures and compounds - distinguish between physical and chemical changes - demonstrate an awareness of the importance of some physical and chemical changes in living organisms
The Environment	- list the common constituents of our solar system - describe basic information related to formation and structure of the Earth - demonstrate an awareness of the occurrence and importance of air, water and soil - describe the properties of air and water - list the components of air, state their importance and uses - identify biotic and abiotic factors in the environment - develop an understanding of how humans depend on others - learn about classification - identify main parts of plant and explain their respective structure and functions	- identify different ecosystems - state the importance of food chain and food web - demonstrate the existence of different types of forces in nature - explain how forces affect motion and shape of bodies - explain the effects of human activities on the environment - demonstrate an awareness of the importance of some physical and chemical changes in the environment - show understanding of the impacts of human activity on the environment - demonstrate knowledge of different types of pollution, their effects and prevention - suggest measures to avoid harm to the environment

Sustainable Living- Use of resources	• differentiate between renewable and non-renewable sources of energy and resources • demonstrate an awareness of the different kinds of resources and materials and their importance • distinguish between natural and man-made materials • Identify simple ways to manage resources at school/home • develop an understanding of the need for protection of the environment and the conservation of nature and its resources	• recognise the importance of conservation of resources • explain how the choice and use of renewable energy sources protects our environment • demonstrate an understanding of sustainable living and its importance • develop and use checklists for doing simple audit of a particular resource used at the school • show awareness of the importance of "reduce, reuse and recycle" in relation to environmental protection • recognize the need for developing new materials
Health and Safety	• identify basic structures and their functions of the different systems in the human body • compare some communicable (eg HIV/AIDS) and non-communicable diseases • identify health risks and abuses such as substance abuse • list preventive measures to avoid diseases (eg HIV/AIDS and STIs) and any substance abuse • health and safety at home and the workplace.	• explain the structure and functions of different systems in the human body • outline stages of the menstrual cycle and how fertilisation leads to foetus • identify acids, bases and salts as chemical substances • state the importance of acids, bases and salts • show an awareness of the hazards associated with some chemical substances • state that the quality of the environment has an effect on health • show an awareness of the importance of a clean environment for healthy living
Science and Technology	• major contributions to science throughout history by famous scientists. • describe basic applications of science and technology in our everyday life • assess the impact of science and technology on our everyday life	• describe common applications of science and technology in various fields of our everyday life • explain ethical problems associated with the applications of science and technology in our everyday life

5.5.2 LEVEL DESCRIPTORS – Form III

It is proposed that Science at Form III level be split into Biology, Chemistry and Physics. They will stand as subjects on their own and will be taught by subject specialists.

5.5.2.1 Biology

Topics	Learning outcomes
The Cell: Cell Structure and Cell Multiplication	- explain the cell as a unit structure of a living body - draw the different parts of a cell and explain the functions of the different parts - differentiate between prokaryotic and eukaryotic cells - distinguish between a plant cell and an animal cell - describe the process of cell division - explain the role of genetic material in a cell and relate it to chromosomes and genes in a living body - estimate the magnification of a diagram of a cell - draw appropriate - to illustrate various concepts
Identification of all forms of Life- Classification of Living Organisms	- describe the structure of a single cell organism - relate its structure to its functions as a whole living entity - to describe the organization of cells into tissues, organs and organ systems - develop an understanding of the role specialized cells in complex organisms - identify features and characteristics for elaborating a key for classification - classify these organisms using the established key - explain biodiversity and its importance to mankind - reflect on the threats towards biodiversity and formulate solutions to these threats
The Life Processes	- explain breathing as a physical process in aquatic and terrestrial organisms - explain respiration as a process for energy production - explain why animals move from one place to another - describe how plants, animals and microbial organisms get food from their environment - list the wastes produced in living organisms and the ways of their disposal from the body - describe reproduction as a process of maintaining a species

Topic	Learning Outcomes
	o Explain briefly the menstrual cycle o Demonstrate an understanding of fertilisation and development of the foetus • explain sexual and asexual reproduction • explain growth as a process of cell multiplication, increase in size and increase in complexity
Diseases: Communicable and Non-Communicable	• differentiate between communicable and non-communicable diseases • determine the characteristics of an infectious disease and its risks • explain sexually transmitted diseases and their significance • explain the causes, consequences of the prevalent diseases in the country • assess the impact of these diseases on the socio-economic development of the country • formulate solutions to the diseases • identify the venues where testing and counselling for STI or HIV status can be done
Ecology and Society	• list different types of environment • explain the dynamics in terms of inputs and outputs in ecosystems • comprehend the equilibrium state in a given ecosystem • explain the threat towards disturbing a balanced ecosystem • assess the impact of imbalances on the ecosystem and their consequences in the environment as a whole • formulate alternative ways of using ecological systems • develop the ability to implement an environmental management plan, and manage and make sustainable use of resources in various environments • carry out a project involving environmental auditing using appropriate tools (e.g checklist) and identify specific areas needing improvement

5.5.2.2   Chemistry

Topic	Learning Outcomes
Chemical substances	• recognise elements, mixtures and compounds • show an understanding of the periodic table as a classification of elements • recall the terms symbols and valencies • list some common mixtures and compounds and list differences between mixtures and compounds • state what is the PH scale and its importance

The Language of Chemistry	• recall the differences between physical and chemical changes
	• appreciate that during a chemical reaction/change new substances are produced
	• define the terms chemical reactions, reactants and products
	• use symbols and valencies to find formulae of compounds
	• use symbols, formulae and valencies to:
	   (i) describe and show understanding of elements and compounds
	   (ii) represent chemical reactions
	   (iii) convert word equations to balanced chemical equations

Chemical reactions in general	• recall the meaning of the terms reactions, reactants, products, word equations and balanced chemical equations
	• explain how different compounds can be made by chemical reactions
	• appreciate that different metals differ in their reactivity
	• use the reactivity series of metals to describe:
	   o reactions of some metals with air, water and dilute acids
	   o displacement reactions
	• show an understanding of the process of rusting and how it can be prevented
	• describe and explain how some gases can be prepared by chemical reactions in the laboratory

Important chemical reactions	• describe neutralization reaction and some characteristic reactions of acids and bases • show an appreciation of the importance of neutralisation in cases of indigestion and insect stings, in agriculture and in the prevention of acid rain • explain combustion, respiration and photosynthesis as chemical reactions and their importance • state the importance of respiration and photosynthesis in maintaining the composition of air • relate burning of fuels to global warming and acid rain
Experimental techniques in Chemistry	• consolidate knowledge and understanding about different types of mixtures • recall the different changes of states (evaporation, freezing, melting, boiling and condensation) • define the terms boiling point, melting point and freezing point • appreciate the importance of pure substances • identify and describe some techniques that can be used for separating the components of different types and mixtures • show an understanding and appreciation of the applications of different separation techniques in real life contexts

5.5.2.3 Physics

Topic	Learning outcomes
Measurement	- measure length using metre rule, measuring tapes and Vernier callipers - explain a few types of errors in measurement and their prevention - measure the volume of liquids - calculate the volume of regular solids - determine the volume of irregular solids, using the displacement method - enumerate a few precautions taken during measurement
Motion	- explain the meaning of linear motion - define distance and displacement, state their units - explain the difference between distance (scalar quantity) and displacement (vector quantity) - calculate distance and displacement - define speed and velocity and state their units - differentiate between speed and velocity - calculate speed / velocity - calculate average velocity - define acceleration and state its unit - calculate acceleration - draw graphs to illustrate motion
Energy	- explain the meaning of energy and state its unit - illustrate the various forms/types of energy and their conversion - identify some sources of energy in the local context and list their advantages and disadvantages - explain the meaning of work done and state its unit - state the difference between energy and work done - calculate kinetic and potential energy - explain the meaning of power and state its unit - discuss ways and means of saving energy (electricity and fuel)
Optics	- state the laws of reflection of light - discuss common application of reflection of light - state the laws of refraction - discuss common application of refraction of light
Electricity	- understand that matter consists of charges - explain current as a flow of charges - use an appropriate analogy to explain current

	- explain what is meant by potential difference using an appropriate analogy - recognise that resistance is the opposition to current in a conductor - determine resistance, using Ohm"s law - determine resistance in series and parallel circuits – 2 resistors - calculate current, potential difference and resistance in simple circuits - state ways to use electrical energy safely at home and at school - state ways of saving electrical energy.

5.6 Modes of Evaluation Pertaining to Specific Subject Area

It is a strongly held view that significant change in curriculum requires development of new and appropriate models of assessment. Assessment in science should be designed to assess not only the factual knowledge of children but also their understanding, skills and attitudes which will be required for prospective employment and livelihood. These could be achieved by using a range of evidence of students" progress, collected in various situations at different times through a portfolio, for example.

5.6.1 Assessment for Learning

This curriculum framework recommends the development of assessment tools for learning which will aid teachers to monitor students" learning and their sense of achievement. Strengths and weaknesses of students should be communicated to learners and parents for appropriate and corrective steps.

5.6.2 Assessment of Learning

It is proposed to maintain the written examination (WE), but it should not be the sole mode of assessment. Assessment can also be conducted through project work. Students will keep a portfolio and this will be an evidence of their progress. Oral presentations by students (in groups or on an individual basis) are other innovative ways of assessing not only their knowledge and understanding but also the way they process and communicate scientific information. This initiative has already been introduced in the 21st century science syllabus.

5.7 **Upper Secondary Level**

The curriculum framework for science at lower secondary level will pave the way for the science stream and the non-science stream students at upper secondary level.

5.8 **The Non-Science Stream**

As has been proposed in the document on reform, students not opting for a pure science subject at O level will study a General Science subject. The 21st Century Science has already been proposed. This is in recognition of the increasingly important role of science and technology in contributing to our understanding of the natural and physical world and in sustaining and improving the quality of life. However, apart from promoting scientific literacy, the lower secondary science curriculum seeks to help students develop cognitive and ethical perspectives needed to deal effectively with the mass of scientific knowledge produced by modern societies and the concomitant issues raised. It is proposed that the approach be thematic rather than discipline-oriented to allow for problem solving and practical skills to be explored and acquired by grounding learning in the real life experiences of the student. Disciplinary boundaries must be dismantled to make the curriculum meaningful to each and every learner. Science education must enable our students to appreciate and value the processes that support life on our planet and become useful contributors in the building of a strong, ecologically sustainable world.

The aim of the O level 21st Century Science is to put prominence on scientific literacy. It intends to develop knowledge and understanding that any individual needs to be able to engage confidently in science based issues as an informed and scientifically literate citizen. Other salient features of this course are to empower students to recognise the impact of science and technology on everyday life, to make informed decisions about issues and questions that involve science and to understand and reflect on the information included in (or omitted from) media reports and other sources of information (O level 21st Century Science Syllabus for 2010). We are, however, proposing the appellation "General Science" rather than 21st century Science

5.8.1 Level Descriptors for General Science for O level

Topic	Learning Outcomes
You and Your Genes	- explain what genes are - describe why people from the same family resemble each other - identify how genetic information can be used, especially in prevention of diseases - relate stem calls to treatment of diseases
Air and Water Quality	- differentiate between chemicals in air and pollutants - state which chemicals pollute the atmosphere and how - describe the effects of pollution on our health - explain what can be done to improve air quality at local, regional and international levels - demonstrate an understanding of water pollution and identify substances that pollute water - show an awareness of resources that can be obtained from the sea - show an awareness of the need for managing water and marine resources
The Earth in the Universe	- explain the position of the Earth in our Solar System - differentiate between rotation and revolution of Earth - describe continental drift and its consequences - list the constituents of the Universe such as stars and galaxies - explain how scientists develop explanation about Earth and space
Keeping Healthy	- explain how our body resists infection - describe the effects of vaccines and antibiotics on the human body - discuss how new drugs are developed and tested - search for factors affecting heart diseases
Material Choices	- state properties of various materials - develop understanding of crude oil, plastics and fibres - model molecular structures - dispose waste materials
Radiation and Life	- list the types of electromagnetic radiation - explain the effects of radiation on matter - describe the risk of exposure on living things - state the uses of electromagnetic radiation - explain the relation between electromagnetic radiation and global warming
Life on Earth	- recognise the Earth as a place to live - demonstrate an understanding of classification of organisms - explain how life began and evolved - list basic ideas of evolution - describe the organisation of the nervous system

	• illustrate why species become extinct and its relation to biodiversity • list reasons for conservation of biodiversity/species
Chemical substances in our everyday life.	▪ recognise that different types of chemical substances are used at home, in medicine, in agriculture and industries ▪ explain the importance of chemical substances at home (eg. medicine, detergents, food additives, cosmetics, including sunscreen and perfumes) in agriculture, industries ▪ explain the differences between organic and intensive farming ▪ discuss why additives are mixed with food ▪ identify chemicals found in food and their harmful nature ▪ relate food consumed to health ▪ show awareness of the safe use of chemical substances
Radioactive Materials	• explain what is radioactivity • list some radioactive materials • identify risks associated with radioactivity • describe precautions that should be taken when handling, storing, transporting, using and disposing radioactive materials • explain how nuclear power is generated • state what can be done with nuclear wastes

5.9 Science Stream -All Sciences: Biology, Chemistry and Physics

The O and A level syllabi should reflect the trend in science where more and more unifying principles (evolution, health, environment) are used to promote the subject so as to make it more systemic. The proposed curriculum framework for science, technology and society (STS) promotes conceptual development using appropriate contexts, and the conceptual development is further consolidated after Form III level. It would be interesting if some meaningful and contextual applications of concepts could be introduced at O - level and further consolidated at A - level. There has been an interesting initiative in the current syllabus of introducing emerging concepts which need to be further consolidated.

It would be advisable that CIE starts consultations at this stage with Mauritian counterparts to discuss future O and A level Biology, Chemistry and Physics Syllabi, in terms of its content, context and assessment objectives. For example, we propose that "Alternative-to-Practical" papers at O level should be replaced by practical examinations which would test skills in a practical situation. Along with the practical papers there should be continuous assessment that represents a significant proportion of the total assessment marks. Project based assessment should be introduced so as to assess a wider range of skills mastered by students. These skills can be in the language, ICT, creativity and so on.

5.9.1 Proposal for Amendment in Physics at O level (5054)

It is recommended that O level Physics introduces some basic aspects of applications of Physics, similar to the A level syllabus *(which is not offered in current section 25 of the Syllabus-Physics 5054)*. This should include ideas related to applications of Physics in areas such as telecommunications, medicine, industries, agriculture, environment, global warming, climate change and other emerging issues more appropriate for Mauritian students.

5.9.2 Proposal for Amendment in Biology at O level

It is recommended that a section on biodiversity (variety of life and classification) and evolution be added to the syllabus. It must address issues and examples from the Mauritian context.

5.10 Teaching and Learning Strategies Specific to the Subject Area

Science is a human activity. Teachers need to structure learning activities that promote interaction, so that children learn to reflect on and evaluate their own ideas by talking with others. Pupils will learn how to learn. Opportunities for children to learn about science concepts should be offered in technological and problem-solving contexts, allowing links to be made across learning areas. Learning experiences must empower children to explore their own world. Teaching and learning strategies should be designed such that children are able to think about science events and processes and make links with science at school, at home and in the community and learn to act in a responsible way. Investigative work as well as fair tests should be a reality in classroom experiences so that we can broaden the spectrum of Science process skills learnt through the Science curriculum.

MOE C & HR

Curriculum Framework Secondary

TECHNOLOGY:
ICT

DESIGN AND TECHNOLOGY

HOME ECONOMICS:
Design, Clothing & Textiles

6 Technology: ICT, Design and Technology, Home Economics: Design, Clothing & Textiles

6.1 **Information and Communications Technology**

6.1.1 Introduction

Information and Communications Technology (ICT) has developed to become an integral part of everyday life. It influences the lives of people everywhere in the world. Almost every aspect of our daily lives now implies using ICT. In the increasingly dynamic world of work, people need to be able to work effectively with ICT, develop transferable ICT skills and apply those skills in different contexts, and with different software packages.

In the context of the current curriculum reform, rooted in an evolving social and economic context, students use ICT tools to find, explore, analyse, select, exchange and present information in a responsible and creative manner. They learn how to employ ICT for rapid access to information, ideas and experiences from a wide range of people, communities and cultures. Increased capability in the use of ICT promotes initiative and independent learning with students being able to make informed judgments about when and where to use ICT to the best effect, and to consider its implications for home and work, both at present and in the future.

6.1.2 Learning Outcomes for ICT

In the secondary curriculum, ICT is a core subject, taught from Form I to Form III. The learning of ICT as a subject provides opportunities for students to develop an awareness of the nature and importance of ICT in a rapidly changing world. It enables students to acquire the relevant knowledge and skills and a better understanding of ICT. Students become competent and confident users of ICT which they use for various purposes, such as to produce reports, perform mathematical calculations and modelling, and to work on computer-based projects. There is no doubt that the future of our economy depends on the skills and adaptability of our workforce. Students, therefore, need to be equipped to adapt to the changing world of work and flexible labour markets. They should learn about ICT and its multiple uses.

Students should be able to:

- Demonstrate an understanding of social, legal, ethical and economic issues relevant to the use of ICT in modern society.
- Demonstrate an understanding of health and safety issues in the use of computers.
- Show confidence and competence in the handling of the computer and the use of computer applications.
- Access, select, interpret and evaluate information for suitability, correctness, and currency.
- Communicate with others, using computer-mediated commutation.
- Produce multimedia-based reports.
- Perform mathematical calculations and modelling using the computer.
- Effectively present their work, using appropriate computer applications.

6.1.3 Level Descriptors

Learning Area	Form I	Form II :	Form III
Computer System	• Describe various types of computers. • State the use of various computer peripherals. • Describe the components of a computer system.	• Compare the computational capabilities of various types of computers. • Differentiate between different types of peripherals.	• Discuss the importance of an operating system. • Explain how data is stored in various computer storage devices. • Describe the different types of operating systems.
Computer Operation	• Start and shut down the computer system. • Work with the Windows environment. • Store files on the computer.	• Manipulate the Windows environment confidently. • Manage stored computer files. • Produce print-outs of work done on a computer.	• Use different input/output devices. • Use the control panel to perform simple tasks. • Perform basic trouble-shooting.
Using Computer Applications for problem solving	• List various computer applications. • Use various computer applications to perform tasks such as writing of simple reports, doing calculations, and drawing.	• Produce graphically-enhanced reports. • Perform mathematical calculations and modelling. • Use a presentation software to develop simple multimedia presentations.	• Use advanced features of computer applications in problem solving tasks . • Develop purposeful multi-media presentations for a given audience. • Write computer programs for simple problems.

Electronic Communication	• Use the Internet to access web pages and perform simple searches. • Send and receive emails.	• Use the Internet to perform complex searches and download files. • Share files via emails.	• Describe various computer networks. • Demonstrate understanding relating to gaining access and using the Internet. • Evaluate the suitability, accuracy and currency of web-based materials. • Use the Internet to engage in e-discussions.
Computer Ethics, Health and Safety	• Show awareness of various health and safety issues in relation to the use of computers and take preventive measures.	• Show understanding of ethical and social issues related to the use of ICT. • Show understanding of the various threats to the computer system and of the ways in which it can be protected.	• Show understanding of economic issues related to the use of ICT.

6.1.4 Teaching and Learning Strategies

- Use of personally relevant tasks that students can find useful to engage with, such as the design of greeting cards that they can then send to loved ones, research on various topics.
- Tasks of manageable difficulty and challenge so that individual attention can be given to those who need it while more able ones feel challenged enough to work on their own.
- Problem solving and inquiry-based learning such as preparing a home budget, model using spreadsheet.
- Use of practical tasks along with off-computer tasks so that students realise that not all tasks need to be performed by the PC.
- Activity-based tasks with either group or individual students along with class discussion to encourage debates and sharing of views on an issue.
- Use of a combination of exposition, demonstration and hands-on approach.
- Integration of theory with practice to show the connection between these two, for example, by making practical sessions to immediately follow theory classes.

6.1.5 ICT Forms IV & V

Learning Outcomes
- Demonstrate understanding of the implications of computer use in society.
- Distinguish between different types of computer-based systems.
- Distinguish between different forms of data and representations for processing and relate them to a given problem.
- Use computers to solve real world problems.
- Use computers to communicate.

Learning Areas
- Computer Ethics.
- Computer Systems.
- Using Computer Applications for Problem Solving.
- Electronic Communication.

6.1.6 Assessment

Students will sit for a national examination, consisting of a written paper and coursework. For the coursework, the students will be required to identify a real world problem, to analyse it and develop a feasible computerised solution, using database. The students will be allowed to use their software platform but they will be required to show evidence of programming. They will submit both a report and a soft copy of the computerised solution.

6.2 **Design and Technology**

6.2.1 Introduction

It is acknowledged that the world has now been transformed into a global village. For any emerging nation to survive, it has to resort to different technologies.

Design and Technology, in our lower secondary curriculum, equips our youths with the necessary tools so that they make sense of the changing world and integrate the society as responsible citizens. It is an area of learning which allows students to apply knowledge, skills, experience and resources to design and develop technological solutions in order to cater for the needs of individuals, societies and environments.

Design and Technology enables students to become creative, innovative and reflective individuals as they select materials, information systems and processes to devise sustainable solutions for an improved quality of life.

This subject has so far been largely restricted to boys" schools, with a very few exceptions. Thus girls have been deprived of career opportunities, such as engineering, that this subject leads to. It is to be noted that the pathway- communication at Forms V & VI- is offered in a number of boys" schools which have no workshop for Technology. The communication pathway does not require any major investment and can be carried out within a classroom with minimum equipment that any girls" school should be able to afford.

Thus, in a bid to provide gender equity, girls should not be debarred from taking Design & Technology with Communication as the pathway. It is, therefore, proposed that the option for girls in Forms I to III be either D & T or Design & Textile.

6.2.2 Learning Outcomes in Design & Technology- Forms I to III

At the end of the lower secondary level of schooling, students should be able to:
- Select tools and techniques to make products from a range of materials.
- Explore the sensory qualities of materials.
- Assemble, join and combine different materials and components for different purposes.

- Develop, plan and communicate design ideas by using a variety of methods, including drawings, modelling and ICT.
- Adopt a systems approach to the design process.
- Design artefacts and generate ideas for solving problems in our everyday life.
- Apply organisational and manipulative skills appropriate to the realisation of solutions.
- Appreciate and understand how cultural beliefs, values and ethical considerations interplay with Design & Technology.
- Apply technological principles to solve design problems.

6.2.3 Learning Outcomes

Learning Area	Form I	Form II	Form III
Materials	-Name common materials in use in the environment. -State the properties and uses of materials. -Use materials in a safe way for the making of artefacts.	-Classify materials according to their nature and properties. -Compare the properties of various materials. -Use materials safely for the realisation of products.	-Carry out simple tests on materials. -Record data from tests on materials. -Use materials appropriately in simple project work.
Technological Processes and Skills	-Name basic bench tools used in materials processing. -Describe the safe work practice to be observed while processing materials and artefacts.	-List a range of basic processes for shaping materials. -Use basic hand tools for shaping materials and artefacts.	-Select appropriate tools and techniques for shaping materials. -Use appropriate finishes on materials and artefacts.
Presentation of Information	-Draw objects in pictorial projection. -Use rendering techniques to enhance presentation. -Make simple models to present information.	-Draw objects in pictorial projections. -Present information by using charts, graphs and pictograms. -Use scale drawings and models to present ideas and information.	-Present information in 2D and 3D. -Use scales in drawings. -Produce accurate drawings by using appropriate conventions and standards. -Use rendering techniques to enhance presentation of information.

Systems and Design	-Identity the main steps of the design process. -Use the design process to solve simple problems.	-Apply the design process to solve problems related to products and systems.	-Apply the concepts of input, process, and output to the solutions of problems.
Realisation	-Use materials, processes and techniques for the making of simple artefacts.	-Combine, assemble and join materials, using appropriate safety techniques.	-Realise solutions in 2D and 3D modes by using appropriate techniques safely.
Design, Technology and Society	-State the importance of design in society. -List the effects of technology in our everyday life.	-State how design and technology interplay with our value system and culture. -List methods to maintain a safe and proper living and working environment.	-Explain the interplay between design, technology, cultural change, fashion, values, material utilization, leisure and work.
Technological principles	-Name basic mechanisms in common use. -State functions of common mechanisms. -Identify basic mechanisms in simple machines and equipment.	-Name different types of structures. -State the importance of structures in everyday life. -Make models of simple structures.	-Name basic electrical and electronic components. -State the functions of basic electrical/electronic components. -Use basic electrical/electronic components in the design and realisation of artefacts.

6.2.4 Design & Technology: Forms IV & V

6.2.4.1   Key Learning Areas in Design & Technology

- Design Principle and Process
- Communication and Design Presentation
- Materials
- Technological Processes
- Control Technology
- Design, Technology and Society

- Design Realisation

6.2.4.2   Broad Learning Outcomes in Design & Technology

At the end of the secondary level of schooling, students should be able to:
- Use a systems approach in the design process.
- Design artefacts and generate ideas for solving problems in our everyday life.
- Develop, plan and communicate design ideas by using a variety of methods, including drawings, modelling and ICT.
- Explore the sensory qualities/properties of materials.
- Select tools and techniques for making products from a range of materials.
- Assemble, join and combine materials and components for a meaningful purpose.
- Apply organisational and manipulative skills appropriate to the realisation of solutions.
- Apply technological principles in the design of control systems.
- Appreciate and understand how cultural beliefs, values and ethical considerations interplay with Design &Technology.

6.2.4.3   Assessment in Design & Technology

- The very nature of Design & Technology; open-endedness, creativity and independence of thinking, necessarily means that a careful, holistic and user-friendly approach to assessment is needed in this area of learning.
- Assessment of learning needs to focus on student"s development, adaptation, and application of a wide range of skills to solve problems.
- Assessment modes should include students" self-evaluation, keeping of log and journals, portfolios, interviews, observations, together with student interaction with the learning environment.
- Students should be encouraged to engage in reflective thinking. This will enhance validity in assessment.
- Both formative and summative modes of evaluation should be encouraged. These evaluations should be educational in nature to promote a positive contribution to students" learning.
- Clear guidance and criteria should be established and made explicit to the learners in the assessment of tasks in Design &Technology.

6.2.5 Teaching and Learning Strategies in Design and Technology

- Students must be encouraged to work on a variety of tasks as they investigate, communicate, create and use appropriate technologies to solve problems. The tasks should involve the processing of materials such as wood, metal and plastics.

- Teachers must organize activities where students are given the opportunity to observe, select and apply good practice. Demonstration works, visits to appropriate institutions and industries should be included to make the concepts and principles in Design & Technology more meaningful.

- Opportunities for learning should be related to the students" experience and ways of thinking. Students" individual needs should be at the centre of any teaching-learning activity. Students should therefore be allowed the freedom to relate the design process to their own abilities to solve problems in order to satisfy specific needs.

6.3 Home Economics Curriculum

6.3.1 Introduction

Home Economics is an interdisciplinary subject drawing on the fields of nutrition and dietetics, textiles, fashion and design, human development, relationships and behaviour. The subject has evolved over the past few decades; it is no longer characterized as women"s knowledge for the private domain of the home. With improved living standards, changing patterns and roles in the family and in the world of work and globalisation, the focus has broadened.

Home Economics education nowadays is concerned with promoting the development of skills to identify needs and wants as well as to manage available resources effectively and efficiently*. It should, therefore, be offered to ALL adolescents in the lower secondary, irrespective of gender.* This will also assist in achieving gender equity in the secondary school curriculum, in line with recommendations of the current educational reform. In countries like Singapore, Japan, Finland, Sweden and UK, the subject is compulsory at lower secondary level; educational policy makers have recognized the contribution of the subject to the overall development of the adolescent.

The present lower secondary framework has been worked out to make room for the implementation of the subject even in schools which do not have any specialist room. It consists of three strands (Human Development and Family; Food and Nutrition; Design, Clothing and Textiles) to provide opportunities for adolescents to develop a unique repertoire of knowledge, practices and dispositions that will assist them in meeting the challenges of everyday life in our evolving society. The challenges include:

- Establishing and maintaining a diverse range of effective interpersonal and family relationships.
- Balancing personal and family responsibilities with leisure.
- Selecting and preparing simple nutritious foods from complex and changing markets.
- Making informed, responsible and ethical consumer decisions about new products that become available because of changing technologies and lifestyles.
- Resolving the influences of peer pressure, body image, marketing and media when selecting food and textile items.

Home Economics is offered as two discrete subjects at upper secondary level. Students reaching Form IV can opt for Food & Nutrition and/or Fashion & Fabrics. Presently, the CIE „O" level syllabus is used in local secondary schools. The syllabus will need to be reviewed if we want Mauritian adolescents to develop a set of core skills and knowledge (refer to General Learning Outcomes) that will help them to become informed and empowered consumers.

Given the multidisciplinary nature of Home Economics, the present framework addresses two essential learning areas:

- Health and Physical Education - Human Development & Family and Food & Nutrition strands.
- Technology – Design, Clothing and Textiles strand.

6.3.2 General Learning Outcomes

Home Economics education in the lower secondary is geared towards striking the right balance between theoretical understanding and their practical application to everyday situations related to human development and family, food and nutrition, clothing and textiles. It provides opportunities for students to:

- Acquire knowledge and develop understanding of facts, concepts, principles and terminology associated with health, nutrition, materials, resources, individuals, and families.
- Develop practical and organization skills and creative abilities.
- Develop skills of reasoning and deduction through practical investigation.
- Engage in technology practice to develop a wide range of products and processes that meet the needs of individuals and families and that reflect imagination, originality and aesthetic judgement.
- Develop skills in handling and interpreting information relevant to Home Economics.
- Make informed, responsible and ethical decisions and take action in order to promote personal, family and community well-being.
- Investigate issues of personal and societal significance.
- Develop a range of interpersonal, verbal and nonverbal skills to meet personal and family needs.

At Forms IV and V levels, Food & Nutrition and Fashion & Fabrics should provide opportunities for students to develop the following core skills and knowledge:

6.3.2.1   Food & Nutrition

- Ability to apply understanding of factors influencing food requirements and current dietary guidelines and to plan meals for themselves and others.

- An understanding of the nutritive value of foods commonly consumed in Mauritius.

- An understanding of the relationship between diet and health while recognizing the factors that influence one‟s food choice.

- Application of costing skills when selecting nutritious foods at home or when eating out.

- Ability to make informed food choices to maintain a healthy weight and to decrease the risk of non-communicable diseases such as diabetes, cardio-vascular diseases and cancer.

- Application of practical/culinary skills and theoretical understanding to plan, prepare and safely cook dishes that will form part of a balanced and varied diet.

- Ability to modify recipes and dishes to make them healthier while taking into consideration the availability of ingredients and the acceptability of the finished product.

- Application of food safety principles when purchasing, storing, preparing, cooking and serving foods.

- Ability to read and interpret food labels when choosing, preparing and storing food.

- Administration of first aid for injuries which are likely to occur in the kitchen area.

6.3.2.2   Fashion & Fabrics

- Ability to understand key theoretical concepts and demonstrate knowledge and skill associated with the areas of design, clothing and textiles.

- Ability to apply knowledge and understanding of the functional and aesthetic requirements of textiles for a range of applications and apply the properties and performance of textiles to the construction of simple textile items.

- Ability to demonstrate planning, organisational, creative and manipulative skills in the construction of textile items, which include both machine and hand work, from simple pattern drafting and/or pattern adaptation/alteration to the final pressing.

- Ability to make informed decisions and rational choices in the selection, design and construction of simple textile items commonly used by adolescents and use „dress sense‟ and a discriminating approach as a consumer, considering choice, suitability, cost and quality in the context of fashion and textiles for wise buying.

- Ability to apply knowledge and skills on textiles, fashion and garment construction in everyday life e.g. in the use, care, repair and recycling of textile items.
- Ability to appreciate the versatility and importance of textiles in our lives, given its wide range of uses as clothing and in the home, in industry, in leisure goods, in transport and even in medical goods.

6.3.3 Level Descriptors

	Form I	Form II	Form III
Human Development and Family			
Family	- Identify roles of families in society. - Practise skills by which students can contribute to their own family activities. - Demonstrate behaviours that build positive relationships at home, in the classroom and society. - Create ways to increase communication and establish relationships between people.	- Demonstrate an understanding of the roles of the family within various societies. - Gain an understanding of the importance of the family unit to the well being of individuals and the global society. - Evaluate factors that influence the ways families meet their needs as well as consequences of their actions.	- Gain an understanding of how families can improve the capacity to nurture and care for the other. - Analyse individual and family needs. - Discuss society-related issues to improve communication, information and awareness among members of the family. - Practise table manners and etiquettes.
Growing Up/ The Emerging Adult	- State the changes at puberty. - List habits for healthful growth. -Develop an understanding of human life span. - Promote personal development.	-Explain the importance of practising healthy habits. - Demonstrate an understanding of adolescence as a stage of the life span - Identify life changes that are most stressful for adolescents.	- Describe types of conflict, conflict response styles, conflict resolution and mediation. - Identify concerns for reproductive health. - Discuss early sexual activity, its harmful effects (physical and emotional) and its impact on life goals.
First Aid and Hygiene	- Describe how to care for the body during puberty. - List the items to include in a first aid kit. - Describe how to administer first aid for small cuts and wounds. - State the safety rules at school and at home. -Learn about healthful behaviour.	- Demonstrate the ability to advocate personal and family health. -Describe ways to keep your home environment clean. - Explain how to dispose of waste properly.	- Demonstrate the ability to advocate personal, family health and community health. - Describe relationships between personal health behaviours and individual well-being.
Resources Management	- Appreciate the importance of time management through identification of priorities.	-Make a plan to manage time and money -Identify criteria for wise shopping and wise buying	-Apply time, money and management skills to real-life situations. -Apply decision-making skills to manage time and money.

Consumer education	- Develop an understanding of consumer rights and responsibilities. - Identify factors affecting consumer decisions. - Read labels properly.	- Identify the different forms of advertising. - Discuss the advantages and disadvantages of advertising.	- Analyse advertisement claims. - Work collaboratively to address contemporary personal and community issues.

	FORM I	FORM II	FORM III
Food and Nutrition			
Nutrients and Food Commodities	• State the importance of food. • List the six nutrients. • Identify and classify the main sources of macronutrients (protein, fats and carbohydrates). • State the importance of macronutrients and dietary fibre.	• Identify and classify the main sources of vitamins, minerals and water. • State the importance of water and selected vitamins and minerals. • Describe the importance of the regular consumption of milk and milk products, fruits and vegetables. • State how commonly consumed milk products are made.	• Identify sources of saturated fats, unsaturated fats and cholesterol. • Interpret recommended nutrient and energy intakes for adolescents. • Describe the importance and common uses of cereals, meat, fish, eggs, pulses and nuts.
Meal Planning and Food Choice	• Define terms commonly encountered in nutrition. • List the main factors influencing food intake. • Classify foods according to the basic Three Food Groups. • Define a balanced meal in terms of Basic Three Food Groups and dietary guidelines.	• List the guidelines for healthy eating. • Define a balanced diet in terms of balanced meals and dietary guidelines. • Describe the importance of main meals and healthy snacks. • Describe the factors to consider when planning meals. • Plan balanced meals.	• Examine the factors that influence food choice and eating habits. • Apply the guidelines for healthy eating when eating out. • Compare the advantages and disadvantages of convenience foods and their home-made counterparts. • Explain food security problems prevailing nowadays and identify alternative starchy food to replace rice. • Analyse the energy and main nutrient values of different dishes in a meal, using food tables and/or nutritional analysis software.

Diet-related Diseases	• Describe the effects of excessive and/or deficient consumption of macronutrients and dietary fibre.	• Describe the effects of excessive and/or deficient consumption of selected vitamins and minerals. • State the benefits of healthy eating in the prevention of diet-related diseases.	• Explain the relationship between dietary habits and diseases such as obesity, diabetes, cardiovascular diseases and eating disorders.
Food and Kitchen Safety	• Identify the safety hazards in the kitchen. • Describe precautions to be taken to prevent common accidents in the kitchen.	• Describe the causes, signs and prevention of food spoilage and food poisoning. • State proper ways of choosing, storing and preparing milk, fruits and vegetables.	• State the reasons for preserving food. • Identify the type of preserved foods available locally. • Describe the uses of some food additives. • Interpret food labels.
Food Management	• Explain the function of selected food utensils and equipment. • Define basic food preparation terms. • Interpret the information given in a recipe. • Measure various ingredients correctly and accurately. • Prepare nutritious foods using basic kitchen equipment and basic culinary skills.	• Explain the function of selected food utensils and equipment. • Prepare nutritious foods using various kitchen equipment and other culinary skills. • Apply principles of food and kitchen safety during food preparation.	• Identify the types of technologies used in the production of home-made and commercially made foods. • Apply the design process in adapting/modifying basic recipes. • Evaluate the sensory characteristics of prepared dishes.

Design, Clothing and Textiles -			
	Form I	**Form II**	**Form III**
Fibres and Fabrics	• Classify the main natural textile fibres. • Define the basic textile terms used for fibres and fabrics. • State the advantages and disadvantages of cotton and linen. • State how to care for cotton and linen items. • Name a few cotton and linen fabrics commonly available. • Identify plant fibres through burning test.	• Classify main textile fibres. • List the main processes used in the manufacture of wool and silk fabrics. • Differentiate between wool and silk in terms of properties, care and uses. • Distinguish between silk and wool fabrics. • Identify animal fibres through burning test.	• Classify man-made textile fibres. • Differentiate between regenerated and synthetic fibres. • Describe briefly the different processes involved in the manufacture of man-made fibres. • Explain briefly the textile terms used. • Compare the properties of the different man-made fibres, relating to end-uses. • Identify typical characteristics of man-made fibres through the burning test.
Clothes and Styles	• Name, draw and briefly describe the different types of protective clothing and kitchen linen used for different purposes.	• Name and sketch basic clothes style. • List the basic style features of selected textile items. • Identify and illustrate selected fabric designs. • Select appropriate fabric design for the making of textile items.	• Discuss the different ethnic styles of clothing representing the different communities in Mauritius. • Evaluate the choice of clothes based on purposes/occasions, figure type, personal image, design and style lines. • Plan a wardrobe for self. • Appreciate the use of textiles to create different types and styles of clothing and household articles. • Interpret clothing care labels.
Sewing Equipment	• Explain the function and choice of basic sewing equipment. • Use and care for	• Explain the function of selected sewing equipment. • Use and care of these sewing equipment. • Apply safety	• Use of and care for basic sewing equipment. • Handle electric sewing machines and steam irons.

	basic sewing equipment. • Describe safety measures taken to prevent common accidents while using these sewing equipment.	precautions to prevent common accidents while using sewing equipment.	• Apply safety precautions to prevent common accidents while using sewing equipment.
Textile Applications	• Trace or draft pattern for the making of a textile item. • Work basic stitches to create items for self and/or the home. • Select and apply appropriate embroidery stitches to decorate textile items. • Manage time and resources effectively in the making of the textile item.	• Take and use selected body measurements. • Draft and use patterns, following instructions to create textile items. • .Apply knowledge of the properties of textile fibres in the choice of fabric and construction of textile items. • Select and apply appropriate fabric decoration techniques to decorate textile items. • Demonstrate basic practical skills in the manipulation of textiles through the use of appropriate techniques and sewing equipment. • Manage time and resources effectively in the making of the textile item.	• Take and use selected body measurements. • Interpret, use and alter or adapt patterns in the design and construction of a textile item. • Apply knowledge of the properties of textile fibres in the choice of fabric and construction of textile items. • Select and apply appropriate fabric decoration methods to decorate textile items. • Demonstrate practical skills in the design and manipulation of textiles to create items for self and/or the home. • Manage time and resources effectively in the making of the textile item.

6.3.4 **Teaching and Learning Strategies**

In this new technological age, teachers are called upon to shift their paradigm and move towards a more learner-centred approach where students can assume responsibility for their own learning. Home Economics educators are responsible for creating conducive learning environments. A learner-centred approach will certainly provide opportunities for students to practise critical and creative thinking, problem solving and decision making skills. The teacher can be a facilitator, a resource person as well as a fellow-learner, as learning is an ongoing process. Moreover, a learner-centred approach will help the students to develop conceptual understandings related to food and nutrition, human development and family as well as design, clothing and textiles.

A variety of teaching strategies can help to cater for the different learning styles of all learners. In order to achieve this, students must have the opportunity to co-operatively brainstorm, discuss, evaluate information, and make informed decisions. Teachers will be ultimately responsible for determining the best teaching methods [for both theory & practical classes], the best way of grouping students, and the best way to deliver the lessons. They have the flexibility to adapt the different learning strategies to the learners" needs in order to make learning meaningful and captivating.

6.3.4.1   Suggested Teaching .Strategies

Direct Instruction	Expository/Lectures
Indirect Instruction	Inquiry, problem solving, decision making and discovery.
Interactive Instruction	Class discussion, brainstorming sessions, mind-mapping, peer teaching, group work, demonstration
Independent Study	Research, project work, assignments, coursework.

The use of different teaching strategies (see table above) and teaching approaches would help to cater for the students" varying learning needs and to achieve the general learning outcomes of Home Economics Education.

6.3.5 **Modes of Evaluation**

Assessment and evaluation are integral parts of the teaching and learning process. Meaningful learning involves reflection, construction and self-evaluation. Evaluation may take different forms depending on its purpose. Diagnostic evaluation will identify individual problems and suggest appropriate corrective action. Formative evaluation should be used to monitor progress and to make necessary adjustments in instructional strategies while summative evaluation should be used at the end of a particular instructional unit.

Given the nature of the subject, both theoretical understanding and their practical applications should be evaluated, using a variety of techniques. The different techniques that can be used are:

- Teacher observation
- Oral questioning
- Written tests
- Performance tests
- Group work [posters, charts, experiments]
- Practical work & reports
- Projects
- Students self-evaluation
- Oral presentations

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Curriculum Framework
Secondary Forms I-III

HEALTH (Home Economics: Food &
Nutrition and Human Development)
&
PHYSICAL EDUCATION

November 2009

7 Health and Physical Education

7.1 General Introduction

The Mauritian economy is limited by its natural resources. The only possible avenue for further development and progress is through the improvement of the quality of its human power and working population. The country has a very high rate of obesity and incidence of Non-Communicable Diseases. This impacts negatively on the national productivity and expenses on health. Mauritius must aim at developing a healthier and more efficient workforce to be able to survive in an ever changing and demanding international economic environment. The Health and Physical Education curriculum will aim at educating the younger generation to develop a sense of personal and social responsibility by engaging in healthy and sustainable physical activity so as to contribute to the well being of the community, the environment and the society at large. It will also guide students towards the adoption of healthy leisure activities in later life, thus provide the incentive for reducing the incidence of social ills, such as alcohol and tobacco consumption, drug addiction, crime and delinquency. It is premised on the belief that the foundation for a healthy way of life should be laid as early as possible; we have witnessed the limited impact of health campaign on the adult population, owing probably to the lack of commitment to healthy habits early in life.

7.2 Why Study Health and Physical Education?

Health and physical education will contribute significantly to the development of a fit and balanced youth in all aspects of life. The students will also learn about the benefits of regular physical activity on the physical, mental, emotional and social well being of an individual.

Participation in a variety of strenuous physical activities develops physical fitness and resistance to diseases. Team games and activities develop the notions of fair play, respect for others, discipline and other personality traits, necessary for the person"s development as a citizen.

Learning about body movements, body mechanics and skills in games and sports will improve their understanding of movement efficiency and give the students the skills for performance improvement, while participating in challenging outdoor and adventurous activities they will develop strong character and personality, team spirit, respect for others and their environment.

Health education will provide the students with the necessary knowledge of nutritional needs for a healthy lifestyle. They will also be acquainted with changing needs and will develop the necessary knowledge, skills and attitudes to understand and manage changes in their body, behaviour and

actions as well as those of their peers. It is also expected that engaging in physical activities will help students better cope with the stress of daily life.

7.3 **Learning Areas/Components**

7.3.1 Personal Growth and Health

Through Health and Physical Education students will understand the different stages of their physical, social and emotional growth and the changes that their body and behaviour undergoes. They will also be able to describe the impact that these changes will have on their health. Students will thus be empowered to manage and adapt to these changes and take the responsibility of their personal growth, self care, health and hygiene. They will understand the physiological effects of exercise on their growth, maturation and fitness.

7.3.2 Development of Movement and Motor Skills

Students will practise a range of general and specific movement and motor skills related to different games and activities. They will show the ability to analyse those movements and adapt to changing situations and to facilitate the development of physical competence. They will demonstrate the ability to link and transfer that learning to other activities in the sports field and everyday life. Through participation in dance and rhythmic activities they will develop artistic sensitivity and creativity.

7.3.3 Regular and Sustainable Physical Activity and Leisure

Through regular participation in a variety of individual and team games, outdoor and adventurous activities, and rhythmic exercises that are fun and enjoyable, students will develop a love for physical activity and exercise. They will explore a variety of activities that they will be able to carry over for leisure beyond schooling. They will be able to describe, as a result of experience, the benefits regular and enjoyable physical activity on their health and well being.

7.3.4 Good Practices, Healthy Lifestyle and Safety

The students will identify the good practices concerning participation in sports and physical education. They will identify and assess the risks involved in handling of equipment and apparatus

in sports and physical education. They will use safe practices concerning appropriate clothing and outfit, warming up and cooling down. They will develop first aid skills. The students will assess the benefits of a healthy and active lifestyle.

7.3.5 Positive Personal and Societal Attitudes and Values

Through participation in team games and challenging activities students will demonstrate a range of positive values such as team spirit, cooperation, respect for others, discipline and responsibility. They will develop self confidence and strong character through participation in outdoor and adventurous activities. They will contribute to the well being of the community by organizing and actively participating in a range of community fitness activities.

7.3.6 Interpersonal Skills and Conflict Resolutions

Students will analyse and understand the changes in their body and behaviour that will help them resolve differences and conflicts with parents, peers and their environment. Regular participation in team games and activities will give them the opportunity to develop interpersonal skills and to accept differences in ability, gender, race, religion and culture.

7.3.7 Rights and responsibilities

Students will show an understanding of their rights and responsibilities on and off the play field. They will analyse the consequences of their actions on the lives and rights of other people. They will demonstrate an understanding of and obedience to the rules of the games and respect for authority as they indulge in competitive activities. They will show respect for team mates, opponents, officials and spectators and exhibit fair play in all activities. All these factors combined should lead to the development of responsible citizens.

7.4 Teaching and Learning Strategies

The teaching and learning strategies adopted by the schools and teachers for the acquisition of knowledge, development of skills and adoption of positive attitudes among the students will be most influential in the success of the endeavour. Teachers should, therefore, make use of a wide range of strategies to meet the demands of a varied range of students and activities as they might judge suitable. Discussions and demonstrations by the teacher may be effective in conveying

information and theoretical knowledge to students, while observation, active participation, peer tutoring, organisation and participation in workshops and seminars might prove to be more effective in gathering practical knowledge and in the development of skills and attitudes. Community service, research and self study and the use of ICT can be used to further consolidate teaching and learning. Demonstrations by the teacher or specialists in the field, followed by active participation and hands-on practice by the students, will be most effective in the learning and acquisition of physical skills. Through careful planning and organisation of activities by the teacher learning in Health and Physical Education will become fun for the students, and thus they will show increased interest in the subject. The teacher will also relate the importance of the subject to the individual"s well being. The importance of teachers as role models and facilitators cannot be overemphasized here.

7.5 **Assessment**

Assessment is effective when it is used to enhance learning. Both formal and informal assessment will be used by teachers to assess to progress of students and provide feedback for improvement. Informal assessment will be used by teachers during the sessions to give feedback on learning and for motivation. Formal assessment will be used at regular intervals to assess the progress of the students. Formal assessment will be based on the achievement objectives and attainment targets. Teachers will keep records of students" progress and credits will be awarded to students. These can be carried over from one level to another and beyond schooling. The credits earned by the students can also be used for certification purpose. Written tests will be used for formative and summative evaluation of concepts and knowledge, while projects and practical work will be used to assess the understanding, application, and analysis of knowledge and skills. In physical education standard tests and teacher-designed tests will be used to assess fitness, performance and the acquisition and application of skills. Observation sheets will be used to record, and eventually assess, the acquisition of values and attitudes.

7.6 Level Descriptors

	Form I	Form II	Form III
Personal Growth and Health	• Identify factors that affect personal, physical, social, and emotional growth and analyse the effect of physical activity on these aspects of growth.	• Discuss factors such as posture, physical activity and their effects on puberty.	• Develop skills to manage changes in their growth processes and develop strategies to adjust to the problems of adolescence.
Development of Movement and Motor Skills	• Develop basic movement and motor skills specific to team games and sports necessary for proficiency in competitive sports.	• Demonstrate consistency and control of movement in a range of situations in individual/team games and activities.	• Develop new skills, and extend their abilities in movement-related activities, such as creative dance, adventure activities, team games, and outdoor pursuits.
Regular and Sustainable Physical Activity and Leisure	• Maintain regular, enjoyable physical activity with an increasing understanding of its role in sustained health and well-being. • Develop a positive body image and positive attitudes towards physical activity.	• Investigate and analyse different lifestyles and influences that contribute to common health problems across the lifespan of people such as smoking, alcohol, , body image, attitude to physical and recreational activities,	Develop an understanding of the relationship between physical activity, fitness, cognition and health by setting goals, meeting their own nutritional needs, planning for regular physical activity, relaxation, and recreation.
Good Practices, Healthy Lifestyle and Safety	• Identify and make use of safe practices in physical education during physical activities and games.	• Demonstrate an understanding of the appropriate use of and care for sports equipment.	Access and use information to identify and investigate risk factors for risk management and safe practice.

		• Show consistency and mastery in simple first aid skills pertaining to sports injuries.	
Positive Personal and Societal Attitudes and Values	• Demonstrate confidence in challenging situations through involvement in outdoor and adventurous activities. They will develop care for nature and their own environment.	• Demonstrate willingness to accept new challenges, and participate in cooperative and competitive activities. Develop strong character and self confidence through outdoor and challenging activities.	• Organize and actively participate in community fitness activities.
Interpersonal Skills and Conflict Resolutions	• Identify the pressures that can influence their interactions with other people and demonstrate basic assertiveness strategies to manage these, in relation to pressure from peers or other specific groups .	• Develop a range of interpersonal skills through team games and activities. • Analyse the changes in their behaviour and their influence on their performance and environment.	• Access and use information to understand the changes in their behaviour and body and to manage their relationships and self image.
Rights and Responsibilities	• Act responsibly to protect their own rights and feelings and those of other people, in relation to bullying, gender stereotyping, cultural differences and fair play, during play and games.	• Demonstrate an understanding of the rules of games and their application during play.	• Actively participate in community activities to inform people about their rights and responsibilities as citizens.

	Form IV	Form V
Personal Growth and Health	• Describe physical, social, emotional, and intellectual processes of growth and relate these to features of adolescent development and effective self management strategies. • Investigate and understand reasons for the choices people make that affect their wellbeing and explore and evaluate options and consequences.	• Assess their health needs and identify strategies to ensure personal well-being across their lifespan.
Development of Movement and Motor Skills	• Acquire and apply complex motor skills by using basic principles of motor learning.	• Acquire, apply, and refine specialised motor skills by using the principles of motor skill learning.
Regular and Sustainable Physical Activity and Leisure	• Experience a range of personally enjoyable physical activities and describe how varying levels of involvement affect well-being and lifestyle balance.	• Choose and maintain ongoing involvement in appropriate physical activities and examine factors influencing their participation.
Good practices, Healthy Lifestyle and Safety	• Investigate and practice safety procedures and strategies to manage risk situations. • Experience and demonstrate how science, technology, and the environment influence the selection and use of equipment in a variety of settings.	• Demonstrate understanding of responsible behaviours required to ensure that challenges and risks are managed safely in physical and social environments.
Positive Personal and Societal Attitudes and	• Develop skills and responsible attitudes in challenging physical situations. • Investigate societal influences on the wellbeing of student	• Investigate and experience ways in which people"s physical competence and participation are influenced by social and cultural factors.

Values	communities.	• Analyse societal influences that shape
	• Demonstrate an understanding of how attitudes and values relating to difference influence their own safety and that of other people.	community health goals and physical activity patterns.
Interpersonal Skills and Conflict Resolutions	• Investigate and describe ways in which individuals define their own identity and sense of self-worth and how this influences the ways in which they describe other people. • Demonstrate a range of interpersonal skills and processes that help them make safe choices for themselves and other people in a variety of settings.	• Plan strategies and demonstrate interpersonal skills to respond to challenging situations appropriately.
Rights and Responsibilities	• Identify the rights and responsibilities of consumers and use this information to evaluate health and recreational services and products in the community.	Compare and contrast personal values and practices with policies, rules, and laws and investigate how the latter contribute to safety in the school and community.

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Curriculum Framework
Secondary Forms I-III

THE ARTS:
Visual Arts
Music
Drama
Dance

8 The Arts

8.1 **Visual Arts**

8.1.1 Introduction

Visual Arts education contributes to the holistic development and lifelong learning of the individual. It stimulates creativity, imagination and aesthetic appreciation. The Visual Arts education lower secondary curriculum comprises drawing, painting, print-making, collage and sculpture. It aims at making students recognize art as a means of communicating feelings and experiences, as well as one‟s worldview. Through its interpersonal dimension, Visual Arts education leads to an understanding of oneself as a member of society and of others‟ perception of the world. It helps the individual develop a sense of personal identity by relating art practices to cultural, historical and contemporary contexts. Students consequently gain a deeper insight into the role and function of art over time, across places and cultures.

Through Visual Arts education, students have the opportunity to learn about and apply conventions, codes and practices for a variety of artistic productions, using traditional and new technologies. They develop their senses and kinaesthetic skills, along with visual, spatial and rhythmic awareness. Through the process of experimentation and investigation, they develop an inquiring mind that opens the way for innovative ideas.

Visual Arts education is job oriented as it prepares students for a career in the field of design, be it fashion, advertising, architecture, digital art or photography. There is no doubt that Visual Arts is closely linked to our country‟s economic activities, especially when it comes to the tourist industry. Artistic works are highly prized in the form of local artefacts.

8.1.2 Learning Outcomes

- Understand the elements of art and the principles of design. Students acquire basic background knowledge that will guide them in their understanding, critical appreciation and interpretation of artistic productions. It also allows them to create art work, using appropriate skills, processes and techniques.

- Understand the role and function of art in society. By linking art practices to the historical, cultural and contemporary contexts, students will realise that art plays

multiple roles in society such as transmitting values, reflecting ideologies, entertaining, providing an outlet for creativity and emotions. Art works, as such, reflect social and cultural changes. Students note that Art is, in fact, intricately linked with man and evolves along with society. By developing sensitivities in aesthetics, students can articulate their views and make informed judgments on art works.

- Communicate and express feelings and ideas through art. By experimenting with a range of materials, patterns, processes and technologies, students learn to express themselves creatively. They carry out research while planning art projects to enhance self-expression. Just as they can understand, analyse and reflect on art works, they can also view their own work critically. They find solutions to art problems and work from both primary and secondary sources, using different media and techniques.

8.1.3 Level Descriptors

Level 1	Level 2	Level 3
• Explore the visual, tactile and sensory qualities of materials and processes. • Develop an understanding of art making, colour mixing, shapes, patterns, forms and textures in making 2D and 3D art work. • Record from direct observation, experience and imagination • Use tools, techniques, materials and processes with confidence. • Demonstrate risk management • Use a range of materials and processes (drawing, painting, print making, collage, sculpture) • Work on their own and in collaboration with others. • Engage in problem solving. • Understand the social, cultural and historical contexts of art. • Use ICT	• Explore the visual, tactile, and sensory qualities of a wider range of materials and processes. • Develop an understanding of the elements of art and build up a working vocabulary. • Record from direct observation, experiences and innovation. • Use a range of materials and processes, including ICT. • Improve acquired skills and competencies in the use of tools, materials and processes. • Carry out problem solving tasks. • Express themselves and communicate with more confidence. • Articulate views and comments on art work • Understand the role and function of art in society. • Analyse and appreciate art work	• Build and improve on the exploration of materials and processes. • Use a range of materials and processes including ICT. • Visit art exhibitions to appreciate works with a variety of styles and subjects. • Record from primary and secondary sources. • Engage in art work and art projects with greater confidence. • Develop independent thinking • Apply and extend experience acquired in a more selective way. • Understand the function of art in society. • Analyse and evaluate their work and the work of others. • Link art experiences to social, historical and contemporary practices.

8.1.4 The Teaching of Visual Arts

Given the creative dimension in art, Visual Arts education is taught with emphasis on the processes that lead to the final product. Students have the opportunity to express their ideas after selecting the most appropriate mode and materials, based on their knowledge and understanding of the elements of art. Teaching is done through lectures, demonstrations, use of media (video, ICT) and site visits. Students work both individually and as part of a group. Collaborative learning leads to a more comprehensive view of the subject and also allows different interpretations of art works to be considered.

Through guided discovery, students experiment with a range of materials, processes and techniques, both traditional and contemporary, and evaluate the outcome. Because each work of art expresses individual feelings and experiences, the work of every single student is valued and displayed in exhibitions. Students are encouraged to discuss their work and the work of their peers critically with a view to enhancing visual literacy.

8.2 **Music, Drama and Dance**

This component is introduced with certain specific objectives. Music, drama and dance are today an integral part of the lives of many youngsters. They provide the opportunity for young adolescents to actively engage in some physically and mentally satisfying activities as well as to display a degree of creativity, autonomy and a sense of well being that would reduce the stress of the day to day student life. Alongside these activities, schools can also initiate students into body movements associated with activities such as Yoga, leading to better control of emotions and thus developing better inter-personal skills, cooperation and general well being.

Teachers can also explore the possibility of integrating music, drama and dance as pedagogical approaches in a number of disciplines. Thus music, dance, drama need not necessarily be separate subject areas, but form part of the skills and pedagogical approaches that would be applied across several disciplines in the secondary school curriculum.

8.2.1 Music

8.2.1.1 Rationale

Music practices involve the exploration and development of ideas and feelings through the use of a range of skills, knowledge, techniques and processes. Music provides a powerful means of expression and communication of life experience and imagination. It contributes to the development of an understanding of the emotional, intellectual, aesthetic, social, moral dimensions of human experience. It provides also major means of personal creativity, satisfaction and pleasure.

8.2.1.2 Learning Outcomes

- Demonstrate aural and interpretive skills and vocal and instrumental techniques.
- Analyse, interpret and evaluate their own music and that of other cultures and styles.
- Identify a wide range of musical forms and styles.
- Link an experience repertoire to a variety of cultures and historical periods, including local and other countries.
- Know the basic techniques of the chosen musical instrument.
- Perform simple melodies in various styles.
- Read and notate.

8.2.1.3 *Level Descriptors*

Level I	Level II	Level III
- Notate simple pitch and rhythm. - Read pitch pattern from staff. - Read rhythmic patterns in simple duple and quadruple times - Create simple rhythmic and melodic patterns. - Apply basic technique of the given musical instrument: - correct posture; - breathing; - hand coordination. - Perform simple melodies in various styles. - Perform technical elements: - scales; - arpeggios. - Identify tone colours. - Know music of various cultures as prescribed.	- Notate simple pitch and rhythm - Read rhythmic patterns. - Create rhythmic and melodic patterns. - Show dynamic and expressive techniques. - Differentiate between families of musical instruments. - Perform melodies of various styles of the given musical instruments. - Perform styles of the given musical instruments. - Perform technical elements as prescribed. - Identify music of various cultures as prescribed. - Know current music as prescribed. - Discuss on selected contemporary music.	- Apply concepts of duration. - Apply concept of pitch. - Apply dynamics and expressive techniques - Perform with correct techniques: - posture; - breathing control; - hand coordination; - synchronization. - Perform simple melodies. - Perform in solo and in ensemble. - Perform technical elements: - scales; - arpeggios; - studies. (appropriate for the level) - Read at sight. - Know music of various cultures and styles (as prescribed). - Know tone colour and sound. production methods. - Know major orchestral instruments and instrument families.

8.2.1.4 Teaching Strategies

- Brainstorming
- Learning by doing
- Use of multimedia and visual aids
- Presentation
- Attending to individual concern

8.2.2 Drama

8.2.2.1 Rationale

Drama provides opportunities for students to be engaged in activities that will involve people and life experiences. It sharpens perception and enables personal expression, growth of intellectual and emotional literacy. Through engagement in such activities learners develop a sense of confidence and positive self concept and self esteem.

8.2.2.2 Learning Outcomes

- Understand the core elements of Drama through play and games.
- Coordinate corporal, facial and vocal expressions.
- Communicate through mime.
- Develop the skills of story-telling.
- Read/recite poems with the appropriate diction, intonation and gestures.
- Convey ideas through sketches.
- Improvise in known or proposed situations.
- Understand some of the techniques involved in short play/sketch production.

8.2.2.3 Subject Learning Outcomes

Level 1	Level 2	Level 3
• Acquire the different skills and abilities involved in theatre games. • Angage in theatre exercises (both physical and vocal). • Perform mime through objects transformation. • Improvise with the use of specific objects (prop.). • Use mime in story telling.	• Coordinate corporal, facial and vocal expression. • Communicate through mime. • Participate in guided improvisation on known situations. • Read/recite poems, using the appropriate diction and intonation. • Use the technique of the magic stick and hot-seating in story-telling.	• Create situations using mime. • Improvise on proposed themes. • Rewrite/continue the story in story-telling. • Recite/read poems with the appropriate diction, intonation and gestures.

8.2.2.4 Teaching and Learning Strategies

- Learning through demonstration and participation
- Learning through observation
- Use of multimedia
- Site visits

8.2.3 Dance

8.2.3.1 Rationale

Dance education enables students to discover their own innate capacity for the communication of ideas, thoughts, and feelings. Dance includes creative work, dance forms and techniques, performance and production, aesthetics, and criticism. It contributes to a healthy lifestyle, as well as the development of individual and social skills. Students will get the opportunity to learn a wide range of skills through movement and dance that incorporate the use of auditory, visual, and kinaesthetic modes. Dance will be used as an educational device for meeting the physical, intellectual, and social needs of students.

8.2.3.2 Learning Outcomes

- Demonstrate the ability to use perceptual and movement skills in order to perform and respond in dance.
- Perform movement in order to express and communicate meaning.
- Explore, perform, and create dances from various cultural and social genres to increase their knowledge and appreciation of dance
- Use/apply various processes for dance construction in order to express and communicate meaning through informal or formal dance performance.
- Develop personal and interpersonal skills through dance in order to work respectfully, cooperatively, and safely with others.
- Make connections between dance and healthy living in order to understand and maintain a healthy lifestyle.

8.2.3.3 Descriptors

Given the nature of this discipline, a set of experiences will be cumulatively developed at each level. These experiences will include:

- Development of movement, skill development and refinement
- Exploration of values and ideas

- Performance
- Expression
- Originality in movement
- Creative approach to learning
- Appreciation of cultural/social heritage
- Development of self-esteem
- Respect for others
- Self-discipline

8.2.3.4   Teaching and Learning

As a participatory experience, dance nurtures and fosters a sense of community. The value of group work and cooperation is inherent and will be reinforced. Dance education will also provide students with exploration, selection, organization, and evaluation experiences.

8.2.4 Indian Dance

Indian Dance will be offered as an option

8.2.4.1   Introduction

Dance refers to a visually powerful art form of beauty and aesthetic perfection. Dance communicates man‟s deepest, highest and most truly spiritual thoughts and emotions far better than words, spoken or written, by using vivid and eloquent hand gestures.

Dance is effectively used to convey some meaning, emotion and cultural values. It is the imitation of one‟s own action, reaction and conviction presented in sophisticated gesticulation, exploiting the body, mind and soul.

8.2.4.2   Aims

- Gain practical knowledge and basic understanding of different classical dance forms and acquaintance with them through lines, gestures and movements.

- Develop aesthetic sensibilities.

- Develop the overall personality through the coordination of body and mind.

- Understanding their inherent cultural and literary heritage.

- Familiarize with the musical components of dance forms.

- Develop a set of values related to music and dance.

- Develop team spirit and self-discipline.

8.2.4.3   Learning outcomes

- Define and explain the different terminologies of the various classical dance forms with a clear understanding.
- Perform the basic dance postures.
- Execute dance movements skilfully in rhythmic time-cycles and speed (tala and laya).
- Recite and demonstrate the single and double hand gestures.
- Develop self-confidence while performing.
- Recite and demonstrate the nine kinds of head gestures.
- Participate in dance performances organised by schools and the community.
- Appreciate dance performances.
- Describe the historical development of the various Indian classical dance forms.

8.2.4.4   Level descriptors

Level I	Level II	Level III
:		
• Give a brief history of the classical dance forms of India and regions they originally belong to. • Memorise and recite the Sanskrit shlokas of different Indian deities. • Practise the exercises with accuracy to develop flexibility, agility and endurance. • Differentiate between folk and classical dances. • Execute namaskara (salutation to mother earth as a prelude). • Memorise the Sanskrit shlokas pertaining to Asamyuta hasta-s. • Describe the mythological background of Indian Dance. • Recite and demonstrate the Asamyuta hasta-s. • Execute the (dance steps) maintaining the basic dance postures. • Describe the historical aspects of the Indian classical dances.	• Memorise and recite the Sanskrit shlokas of the Indian deities. • Explain verbally the meaning of Sanskrit shlokas. • Memorise the Sanskrit shlokas pertaining to Samyuta hasta-s. • Recite and demonstrate the Samyuta hasta-s. • Identify the fundamentals of the traditional dance forms from a historical perspective. • Explain the concept of South Indian and North Indian tala system. • Interpret the signs and symbols used in a notation. • Notate the prescribed Adavu-s in Adi Talam. • Count and recite all the prescribed Adavu-s at a chosen regular rhythm. • Execute complex dance movements maintaining the basic dance postures. • Notate the prescribed dance compositions. • Count and recite all dance compositions learnt.	• Memorise and recite the Sanskrit shloka-s of the Indian deities. • Explain the prescribed dance terminologies. • Dance on imaginative themes, using simple dance movements and music. • Memorise the Sanskrit shlokas form of the nine Shiro bheda-s. • Describe the components of „Sangeetam". • Notate all prescribed dance Adavu-s. • Interpret the signs and symbols used in a notation. • Count and Recite all prescribed dance Adavu-s. • Explain the moral principles of the dances of Lord Shiva and Krishna and other. • Execute more complex dance movements maintaining the basic dance postures. • Perform the various dance Adavu-s in rhythm. • Perform in ensemble. • Describe the historical aspects of the Indian classical dances.

Curriculum Framework
Secondary Forms I-III

SOCIAL SCIENCES:
History
Geography
Sociology

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November 2009

9 SOCIAL SCIENCES

9.1 Social Studies

9.2 Introduction

In this domain, students learn to appreciate the relevance of Social Sciences for an informed understanding of the social context in which they live. This requires a multi-dimensional approach – a *historical* dimension that develops awareness of the past so as to understand the evolution of society to its present state; a *geographical* dimension that addresses ways in which human beings have changed their physical environment and the consequences of such changes, a *sociological* dimension that addresses contemporary issues related to the changing human society.

This approach allows learners to relate the past and the present and helps them to better understand the diverse aspects of their everyday life as well as cope with their daily preoccupations and anxieties. A combination of social sciences, thus, provides a broad outlook of the essential social dimensions of life. This domain of learning assumes greater significance in the context of providing a broad based education to those students who will branch off to the natural and physical sciences.

Students are challenged to think clearly and critically about human behaviour and to explore different values and viewpoints. Commonly held values, such as concern for social justice and the welfare of others, acceptance of cultural diversity and respect for the environment are fostered, along with commonly valued attributes, such as individual initiative, effort, and responsibility.

They examine the events, beliefs, and forces which have shaped our world and explore the influence of different groups and individuals on society, including the contributions and achievements of both women and men. Students develop an understanding of their own culture and heritage as well as those of others.

Students learn how and why change and continuity have affected people's lives in various contexts and times. They develop an understanding of how and why individuals and groups live together, interact with and within their environment, manage resources and create institutions and systems.

Special emphasis should be placed on learning about Mauritius, Rodrigues and the Outer Islands.

To provide balanced learning in the social sciences, schools should ensure that all students participate in a wide variety of experiences, drawing on a range of areas related to History, Geography and Sociology.

9.3 Learning Area I: History

Through the study of history, the students learn to appreciate and examine the events, beliefs and forces that have shaped our world. It enables them to explore the influence of different groups and individuals on society, including the contributions and achievements of both men and women. Students develop understanding of their own culture and heritage and also learn how and why change and continuity have affected people"s lives in various contexts and times.

9.4 Learning Area II: Geography

Geography, which is about people and the environment, is related to the physical and human interactions within the environment and to the issues, questions or problems arising from them and affecting our daily life. Students are made to understand that the interaction people have with places in which they live is shaped by the location, patterns and processes associated with natural and built features.

Geography enables students to realise that people"s use of the environment often creates change and conflict, implying that investigations would not be complete without recognition of resulting issues.

9.5 Learning Area III: Sociology

Students will be helped to develop an informed awareness of the forces that influence their life as well as the ways in which they actively participate in shaping the social reality. This approach is expected to foster responsible citizenship and prepare the students to face the challenges of living in a fast changing society. They will be exposed to issues that affect them directly on a daily basis as young adolescents. Students will be encouraged to take responsible and informed decisions about their own life. They will also be encouraged to inquire into values of tolerance and peace.

9.6   Level Descriptors – Forms I- III

Form I	Form II	Form III

From Ancient to Contemporary Societies
 	
Map Skills.
 	
   ▪ Use an Atlas to locate specific places and features (e.g. continents, oceans, countries, major cities, rivers, mountain ranges, etc.)
 	
Ancient Civilisation
  • Name and locate ancient civilizations on a modern world map.
  • Situate on a time line when ancient civilizations flourished.
  • Compare and contrast the organisation of society of any two ancient civilizations
 	
Renaissance & Voyages/Discovery
 	
  • List major developments during the Renaissance period.
  • Consider the importance of the maritime routes to the east.
  • Appreciate the contribution of the main explorers.
 	
Pre-colonial Indian Ocean
 	
  • Discuss the Arab activities on the east coast of Africa.
	The Europeans in the Indian Ocean
	Setting up of East India Company in Europe
	Creation of trading posts in the Indian Ocean.
	
	The Portuguese and the Dutch
	
	  • Explain the discovery of the maritime route and its impact on Indian Ocean Trade.
	  • Explain the reasons for the Dutch settlement.
	  • Describe the activities of the Dutch in Mauritius
	  • Analyse the reasons for the failure of the Dutch settlement.
	  • Give an account of the first settlement of Francois Leguat in Rodrigues.
	
	The French in the Indian Ocean
	
	  • Evaluate the contribution of East India Company & Labourdonnais in the development of Port Louis & Agriculture.
	  • Discuss the slavery system in Ile de France.
	  • Explain the development of trade.
	  • Discuss the causes and impact of the French Revolution.
	  • Examine the rule of the last French Governor.
	
	Our Environment
	
	  • Differentiate between weather and climate.
	  • Understand the use and purpose of weather
		The British in the Indian Ocean
		  • Key events during the British period.
		  • Discuss the Anglo- French rivalry in the Indian Ocean and the role of Mauritius.
		  • Describe the British conquest of Mauritius and the transition from French to British administration.
		
		  • Explain the Development of the Sugar Industry.
		  • Analyse the evolution of the plantation economy - the story of sugar in Mauritius.
		  • Describe The Abolition of Slavery.
		  • Explain Indian Immigration.
		
		British Administration
		  • Discuss the political constitution and socio-economic development and pre and post-independent Mauritius.
		
		Travel and Tourism
		  • Show an understanding of the geography of tourism in Mauritius.
		  • Show an awareness of the different types of tourism in Mauritius and Rodrigues.
		  • Assess the positive and negative impacts of tourism.
		  • Analyse conditions for making tourism sustainable.

- Explain migration in Indian Ocean from South East Asia to Madagascar.
- Identify cultural aspects of migration.

Introduction to Geography

The Lithosphere, & Hydrosphere.
- Recognise that the Earth is made up of the 4 spheres: Atmosphere, Lithosphere, Hydrosphere and Biosphere.
- Describe the major characteristics of each sphere.

The Formation of Mascarene Islands:

- Show awareness of the role of vulcanicity in the formation of Mauritius, Reunion and Rodrigues.
- Describe the stages in the formation of Mauritius and Rodrigues.

Environmental Concerns

- Show awareness that our natural environment is fragile and under threat.
- Identify major global and local environmental issues.
- Identify and discuss some measures to deal with environmental issues.

Changes in Land Use
- Recognise changes taking place in agricultural land use.
- Understand the competition for land today
- Show awareness of major developments in

instruments.
- Understand the factors affecting temperature and rainfall in the Mascarene region.
- Interpret and compare climatic graphs of the islands (Mauritius, Reunion and Rodrigues).
- Describe the distribution of the world"s climatic types.

Environmental Concerns

- Understand the importance of fauna and flora in Mauritius.
- Explain how and why fauna and flora are threatened in Mauritius.
- Describe policies of conservation of flora and fauna.
- Show awareness of the impact of deforestation (including Madagascar).
- Describe the impact of global warming.

Industries

- Describe the different types of industries in Mauritius.
- Describe and explain the locations of these industries.
- Appreciate the role of these industries in diversifying our economic base.

Role of Media in Contemporary Society

- Identify the different types of media through the ages
- Identify the functions of media.
- Identify the impact of media on the individual

Environmental Concerns

- Describe the extent of global warming.
- Describe the human-included causes and consequences of global warming.
- Appreciate and evaluate the measures to reduce the impact of global warming.
- Reflect on one"s own contribution to reduce greenhouse gas emission.

Hazards

- Recognise that tropical cyclones constitute a major hazard for Mauritius and Rodrigues.
- Explain how volcanoes and earthquakes result from the internal forces of the movement of plates.
- Realise that earthquakes and tsunamis are natural hazards.

The Role of Education

- Importance of education in the world today.
- Educational opportunities in Mauritius.
- Identify factors affecting achievement.

Deviance and Crime in Society
- Understand the notion of deviance, delinquency and crime.
- Identify the consequences of deviance in the day to day life of the individual and on society at large.

urban and rural areas. **Social Change** • Define and explain change. • Identify ways in which change has occurred in society over the ages • Identify factors that lead to change • Identify positive and negative aspects of change • Recognise that change is a normal process • Provide different ways of dealing and adjusting to change. **Social Organisation: The Family** • Show awareness of different types of family from ancient times to modern days • Explain ways in which the family changes over time • Explain the functions of the family. • Identify contributions the family makes to the wellbeing of the individual and society at large.	and society. • Develop awareness of the ethical issues in the use of media. • Identify the legal implications of misuse of the media.	**Developing Responsible Citizenship**. • Analyse different perceptions of responsible citizenship. • Construct a notion of responsible citizenship.

Social Sciences at Upper Secondary (Forms IV – V)

History, Geography and Sociology as well as Economics will be offered to students at Forms IV & V (with the possibility of offering any one or more of them at Form VI level).

In line with the broad based and holistic educational policy that aims at providing knowledge of science as well as a social science subject to all students of secondary schools, a social science subject will also be offered to students opting for the science stream. The choice of the subject will, however, depend on the subject on offer in the school.

9.7.1 Learning Area I: Social Science – History

9.7.1.1 Introduction

History at Forms IV- V aims to provide students with the opportunity not only of studying aspects of the past, but also of developing an understanding of the complexity of human societies and of acquiring a range of skills which are useful in everyday life. Through the study of history the students will learn to appreciate and examine the events, beliefs and forces that have shaped our world. It will enable them to explore the influence of different groups and individuals on society, including the contributions and achievements of both men and women. Students will develop an understanding of their culture and heritage.

The content will be organised to provide students with an understanding of the strategic, political, social, economic and religious factors that have affected the history and contributed to the making of present-day Mauritius.

Emphasis should be laid on source–based studies through which candidates will develop their skills of interpreting and evaluating evidence. Students should be encouraged to use independent study skills, to read widely, write fluently and to develop the capacity to formulate and justify their own ideas about the past.

9.7.1.2 Aims:

History at secondary level provides opportunities for students to:

- Learn about the past in Mauritius, Rodrigues and the Outer Islands.

- Develop an understanding of important historical aspects of the wider world and of the Indian Ocean.

- Develop an understanding of how and why individuals and groups settle and live together, interact with and within their environment: manage resources and create institutions and systems.

- Develop a chronological framework.

- See the diversity of human experience as individuals and members of society.

- Develop patriotism and a sense of belonging to the nation.

- Develop respect for cultural heritage and understand the importance of preserving it.

- Reflect on their personal choices, attitudes and values.

- Use evidence, weigh it up and reach their own conclusions.

- Develop skills in research, critical and creative thinking, communication, social participation and problem solving.

- Enable them to become independent learners.

9.7.1.3 Areas of Study (Forms IV-V)

The focus is on the following themes :

- The Indian Ocean: discovery, settlement, colonisation.
- Development of trade and conflicts in the Indian ocean.
- Development of plantation economy.
- Slavery, abolition of slavery and its consequences.
- The development of indentured labour.
- Achievements of important colonial administrators and leading personalities of modern Mauritius
- Economic situation and social unrest during inter-war years.
- Social, Political and Constitutional developments up to Independence.
- Problems and achievements after Independence.
- Decolonisation in the Indian Ocean Region.

9.7.2 Learning Area II: Social Science-Geography

9.7.2.1 Introduction

The study of Geography at the Forms IV and V will enable students to develop knowledge and awareness of their physical and human environments. It will eventually also help them to

develop an informed concern about the quality of the environment and the future of the human habitat, thereby enhancing their sense of responsibility and commitment to the earth and its people.

9.7.2.2 Aims of Geography

The aims are to encourage students to develop:

1. A sense of place and an understanding of relative location on a local, regional and global scale.
2. An awareness of the characteristics and distribution of a selection of contrasting physical and human environments.
3. An understanding of some of the processes affecting the development of such environments.
4. An understanding of the spatial effects of the ways in which people interact with each other and with their environments.
5. An appreciation of environments, thereby enhancing a sense of responsibility for the care of the earth.
6. A range of skills and techniques in observing, selecting, analysing and presenting data.
7. The ability to use a wide range of geographical information in making judgements and reaching decisions.

9.7.2.3 Form IV - Geography

Population Studies	Competencies
▪ Factors affecting population distribution, growth & structure (Mauritius and the world) ▪ Concept of overpopulation	▪ Describe and account for the distribution of population in the world in general and in Mauritius in particular ▪ Describe and account for the rates of population growth in (i) MEDCs (ii) LEDCs (iii) Mauritius ▪ Show awareness of population policies and the concept of over population (case studies from selected countries, including Mauritius)

Weathering, Erosion and Land from Development	Competencies
▪ Factors promoting weathering and erosion and their role in development and landforms.	▪ Describe the processes of chemical and physical weathering. ▪ Describe the processes of river erosion and explain the features associated with it: river valleys, gorges, waterfalls, etc. ▪ Describe processes of wave erosion and deposition and explain the resultant features: cliffs, caves, arches, beaches, spits, etc. ▪ Locate the features associated with the above in Mauritius and Rodrigues and in other places in the world.

Settlement Studies	Competencies
Sites and patterns of settlement. Urban settlement and the CBD. Competition for land use (Emphasis on Mauritius & Rodrigues).	• Describe and explain factors that affect location and types of settlement • Describe and explain the characteristics of the Central Business District • Recognise and appreciate the changes taking place in land use and the competition for land.

9.7.2.4   Form V- Geography

Map Reading	Competencies
▪ Reading and interpreting a topographic map.	• Make use of direction, scale, grid reference, bearing, contour lines, gradient, etc to read and draw information form a topographic map. • Interpret the physical and human landscape from a topographical map.

Economic Activities	Competencies
▪ Agriculture & Manufacturing Industries. ▪ Agricultural systems, challenges and prospects (especially with reference to Mauritius and Rodrigues). ▪ The manufacturing system: factors affecting the setting up of industries and the challenges and prospects in the Mauritian context.	▪ Describe nature and characteristics of an agricultural/industrial system (inputs – processing – output). ▪ Describe the agricultural systems prevalent in Mauritius. ▪ Realise and appreciate the difficulties the Mauritian sugar sector is facing these days. ▪ Realise the importance of these two key sectors in the Mauritian economy.

9.7.3   Learning Area III: Social Science –Sociology- F IV & V

9.7.3.1   Emphasis of the subject:

The content will be organised into study units of key institutions, issues and areas that will be used to explore the nature of social relationships, processes and structures. The foundation for sociological understanding will be provided through a consideration of the methods and procedures employed in sociological research. An understanding of research methods and their limitations will be a key component of the syllabus and it will underpin each of the other study units.

Sociological understanding will emphasise how different levels of social life (macro and micro) are interconnected and it will encourage candidates" awareness of the interrelated nature of the social structure.

Students will also be expected to recognise the significance of class, gender, ethnic and age differences within societies, engage in cross-cultural and historical comparisons and analysis so as to develop an objective understanding of their own society as well as assess the influence of local and global issues that impact on their lives.

The syllabus content will reflect contemporary developments in Sociology. Emphasis will be placed on themes that stretch across all areas of Sociology, such as research methods, social stratification, culture and socialisation.

Global processes are an increasingly important theme in Sociology. While students should show awareness of developed societies, they should also be required to demonstrate a sound knowledge of relevant sociological examples and sources that relate to other parts of the world, and the local context. The use of more „localised‟ sources is to be encouraged, particularly where it complements or supports references to important sociological themes and ideas. Thus, the educators should be able to apply their students‟ own experience, local case studies and sociological work relating to their own way of life to an understanding of the central ideas and themes of the course.

9.7.3.2   Aims: Sociology

1. Promoting awareness, knowledge and understanding of human societies.
2. Developing an understanding of sociological method, including the collection, analysis and interpretation of data.
3. Providing an introduction to sociological concepts, theories and research findings.
4. Stimulating awareness of the range and limitations of sociological theory and research.
5. Promoting understanding of continuity and change in social life.
6. Encouraging a critical awareness of social, economic and political processes, and their effects.
7. Developing the capacity for the critical evaluation of different forms of information and evidence.
8. Promoting an appreciation and understanding of individual, social and cultural diversity.
9. Enhancing students‟ ability to apply sociological knowledge and understanding to their own lives, and participation within society.

9.7.3.3   Areas of Study: Sociology

Methodology; Culture and Socialisation; Social Stratification and Inequality; Power and Authority.

Social Institutions and Social Change

Family; Education; Crime and Deviance and Control; Mass Media.

Environmental issues, sustainability, problems and policies *(this issue does not figure in the sociology yet; it needs to be tackled from an early age so as to develop awareness and attitudes in line with Government's policy of Maurice Ile Durable).*

9.7.4 Teaching and Learning Strategies in the Social Sciences

The teaching and learning strategies should be in line with the pedagogical principles and philosophy underlying this curriculum framework. Though teacher-centred strategies can still be used whenever the context so requires, focus should, however, be placed on learner-centred strategies aimed at making students construct their knowledge through direct and active involvement in the teaching and learning interaction.

Emphasis should be placed on the process of teaching and learning rather than on the acquisition of content knowledge. Through the emphasis on process, students should be made to acquire the higher cognitive skills of interpretation, application, analysis, synthesis and evaluation.

To enhance the interest and motivation of students for social sciences, teachers should:
- Ensure that students recognize the relevance of social sciences by addressing the subjects in a meaningful manner. Reference must be made to current issues and, as far as possible, address the concerns of the students.
- Engage students in discussion about events and situations that would appeal to them and develop their curiosity to learn about the past as well as the relation of the past to the present.
- Provide students with opportunities to make choices about any specific content.
- Make an effective use of a range of materials and up to date information or techniques for retrieving and using information.
- Make a sound use of maps, atlases, plans and globes, documents, contemporary news and anecdotes.
- Make an effective use of fieldwork: an approach which encourages students to visit and explore the environment, ask questions and engage in research and investigation;
- Prepare more flexible schemes to respond to, and capitalize on, children‟s experiences of natural events.
- Critical observation of the operations of business activities
- Engage in project works and presentation of reports
- Enlist the support of resource persons from the community.

- Organise workshops, seminars and exhibitions on business activities.
- Ensure that there is an effective use of ICT, which renders learning interactive and meaningful.

9.7.5 Assessment of the Social Studies/Sciences

The Social Sciences allow considerable flexibility and provide opportunity for the application of a diversity of assessment modes. This is an area of study that should incorporate continuous assessment, a strong element of project work, especially at Lower Secondary level, so as to develop such skills early in secondary education. Thus lesser emphasis will be placed on end of year examinations.

To attain the objectives set for the social sciences, the school timetable should be reorganised so as to allow ample opportunity to make the desired impact. Similarly, the introduction of project work should be envisaged at Forms IV and V levels.

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Curriculum Framework
Secondary

ECONOMICS
BUSINESS EDUCATION

10 Economics and Business Education

10.1 Introduction

This strand will be offered from Form IV onwards and it will consist of the following subjects, namely Economics, Business Studies and Principles of Accounting. It is essential that students get an understanding of the operation of the National and International economy and of the business world in general. For many students who eventually may decide to choose a career in accounting, an introduction to the basic principles of accounting is important.

10.2 Economics- Forms 1V and V

10.2.1 Aims

- Enable students to acquire an understanding of basic economic principles and elementary theories.
- Make them become familiar with the terminology used in economics and the tools used for analysis purposes.
- Develop in students an economic frame of mind and an understanding of how economists think.
- Generate an understanding of their role and responsibilities as consumers, producers and citizens both at the national and international level.
- Create an understanding of the characteristics of developed and developing economies and the relationship existing between these economies.

10.2.2 Learning Outcomes

- Explain the basic definitions, terminology, conventions, concepts, principles and theories they have learned, bearing in mind that theories have limitations and uncertainties.
- Use their acquired knowledge and understanding to explain economic phenomena and represent their views in verbal and other non-verbal forms such as graphs, diagrams and pictures.
- Analyse economic problems from several perspectives, and in an objective manner, distinguishing between evidence and opinion.

- Draw conclusions and make predictions from data collected from several sources.
- Evaluate the courses and consequences of economic actions.

10.2.3 Curriculum Content

- The basic economic problem of scarcity and exercise of choice, including a study of the economic problem, factors of production and their specialization, allocation of resources in a market, planned and mixed economies and an evaluation of the merits of each of these economic systems.

- Nature and functions of organizations and institutions in an economy. This will involve a study of business organizations in private and public sectors, trade unions, and functions of the institutions in the banking sector.

- The working of markets. This will involve a study of price determination in the free market economy and of the concept of elasticity of demand. The characteristics of other types of markets will also be considered.

- Behaviour of individuals as producers and consumers. Students will find out factors determining choice of occupations and factors influencing earning. They will also study peoples motive for spending, saving, and borrowing and how expenditure patterns differ over time and between people.

- Operation of firms in the process of production of goods and services. The focus here will be on the profit maximizing goal of firms, their different types of costs, the determination of their demand for factors of production, their profit maximizing output, size of firms, their integration and economies of scale.

- Role of government in an economy. Students will study the function of the government as a producer of goods and services, the aims of government policy and how these are achieved.

- Macro-economic indicators, including study of general price level, inflation, employment, balance of payments, patterns of imports and exports, exchange rate.

10.3 **Business Studies**

10.3.1 Aims

- Impart knowledge and understanding about the aims and objectives of business activity, its classification and its impact on the economy in general.
- Make students become aware of the forces within and outside business enterprises likely to impact on business activity.
- Provide relevant terminology, concepts and methods pertinent to business studies.
- Make students familiar with the various stakeholders in a business and appreciate that each group of stakeholders has its own perception and perspectives.
- Develop knowledge and understanding of how the main types of businesses are organized, financed, how they function and relate with other organisations.
- Appreciate the importance of human resources with business enterprises.

10.3.2 Learning outcomes

- State the aims of business activity.
- Classify business activity in primary, secondary and tertiary sectors.
- Explain the impact of business activity on the economy in particular, and the environment in general.
- Locate the factors within any given environment likely to impact on business activity and evaluate their pertinence.
- Demonstrate understanding of how businesses are structured, organized and controlled.
- Justify the importance of marketing, production and financial management for the healthy growth of a business.
- Evaluate the procedure used to manage human resources effectively.
- Examine the need for regulating and controlling business activity.

10.3.3 Curriculum Content

- Business Activity: aims and objectives, classification, impact on the environment and on the economy in general.

- Organisation of business activity: private and public sectors, their respective aims, stakeholders and their interests.

- The environment within which businesses operate and its impact on business activity: governmental policy, impact of technology, influence of the economic environment.

- Business structure, organization and control: how businesses are owned, internally organized and funded.

- Major aspects of business activity: marketing, production, financial management.

- Human resources and their management: Management style and motivation, monetary and non-monetary rewards, recruitment, selection, training, dismissal of manpower.

- Control and regulation of business activity: why regulate business activity, internal and external factors influencing business activity.

10.4 Principles of Accounts

10.4.1 Aims

- Acquire an understanding of accounting concepts, principles, procedures and terminology.

- Appreciate the importance of accounting in providing an information system for monitoring an organisation and helping in decision making.

- Develop competencies in data collection and in the preparation and interpretation of accounting information.

- Develop knowledge and understanding of appropriate accounting techniques and procedures to be used for businesses of different types and for non-profit organisations.

- Acquire essential attitudes such as accuracy, orderliness, logical thinking and a sense of ethics.

10.4.2 Learning outcomes

- Demonstrate an understanding of the basic principles of accounting.
- Use approximately accounting concepts, principles and procedures that have been learned.
- Show understanding of accounting terminology.
- Apply accurately knowledge and information acquired to various accounting situations and problems.
- Display skills in data collection and in the preparation and interpretation of information.
- Demonstrate professional traits such as accuracy, orderliness and logical reasoning.
- Select, analyse, and order information in written, numerical and diagrammatic form, according to the requirement of the situation.
- Present information appropriately in accepted accounting form.

10.4.3 Curriculum Content

- Basic principles of accounting: the role of accounting, the double entry system of book-keeping, documentary records, books of prime entry, the cash book, the general journal, the ledger, the trial balance, adjustments to ledger accounts.
- The accounting procedures: Capital and revenue expenditure and receipts accounting for depreciation, correction of errors, control accounts.
- Final accounts: trading and profit and loss accounts, balance sheets.
- Preparation of final accounts: the sole trader, partnerships, friendly societies, from incomplete reports, limited liability companies, manufacturing accounts.
- Payroll Accounting: payroll records, book-keeping entries for payroll.
- Advanced principles: financial relationship, accounting principles.

10.4.4 Assessment

The assessment process and procedure should be objective driven and, given the emphasis on process of learning rather than product of learning, there should be more weight given to formative and continuous assessment though summative assessment should still be essential to reveal the end product.

Continuous assessment should be cumulative and assigned a substantial weight in determining the overall achievement of the learner. It should be primarily used for improving performance, for revealing areas of strength and for discovering areas of weakness that need to be redressed.

Diverse assessment tools should be used, including project works, log books, portfolios, show casing, practical work, involving hands on experiences, role play, exhibitions, teacher observations and use of performance check lists and so on.

10.4.5 Teaching and Learning Strategies

The teaching and learning strategies that should be in line with the pedagogical principles and philosophy underlying this curriculum framework. Though teacher-centred strategies can still be used whenever the context so requires, focus should, however, be placed on learner-centred strategies aimed at making student construct their knowledge through their direct and active involvement in the teaching and learning interaction.

Emphasis should be placed on the process of teaching and learning rather than on the acquisition of content knowledge. Through the emphasis on process, students should be made to acquire the higher cognitive skills of interpretation, application, analysis, synthesis and evaluation.

Both the deductive and the inductive approaches should be used and involve a wide range of teaching strategies such as brainstorming, mind mapping, concept mapping, group cooperative learning, guided discovery, role play, hands-on experiences, project work and mini-research work.

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Curriculum Framework Secondary

CROSS CUTTING ISSUES

- Sustainable Development
- Peace Education
- Education and Communication for Sustainable Lifestyle
- Addressing HIV/AIDS

EXTRA & CO-CURRICULAR ACTIVITIES

November 2009

11 Integrating Cross Cutting Issues in the curriculum

This section addresses issues that cut across the curriculum. It gives an indication of four key cross cutting issues, namely, Sustainable Development, Peace Education, Education and Communication for Sustainable Lifestyle, Addressing HIV/AIDS. Such issues should be taken into consideration by all curriculum writers as they should be integrated in a number of subject areas and learning domains in the curriculum.

11.1 **Sustainable Development**

„Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their needs."

The present curriculum addresses the dimensions of Education for Sustainable Development (ESD) in line with some of the expectations of the UN Decade of Education for Sustainable Development (UNDESD) and Millennium Development Goals and NEPAD objectives.

We would wish to situate discussion on sustainable development by referring to risk issues and factors in Mauritius especially in the context of Mauritius sustainable island or Maurice île Durable (MID).

Content:

While the content for ESD is wide, encompassing diverse issues and domains of learning, this section highlights certain areas as guidelines to educators. However, this should not limit educators' possibility to include other areas of relevance.

Promoting values for peace. *(also see section 11.2)*

Sustainable Urbanization

> Half of the world"s population is now living in urban areas; Mauritius is also placing emphasis on the development of new urban spaces, lifestyles and living. We are all increasingly dependent on cities for economic, social and political progress. Students must be made aware of the role and importance of planned urbanisation for a sustainable development.

Sustainable Consumption and Production

> Students must be made aware that our choices as consumers have important impacts on our and others" life. They must be sensitised to sustainable consumption and production, that is consuming and producing goods and services without harming the environment or society.

Living a Sustainable Lifestyle: *(also see section 11.3)*

> Overcoming poverty; conserving and protecting the natural resources as a basis for all forms of life.

Responsible Citizenship.
　　Developing awareness for responsible citizenship

Education for Cultural Diversity
　　Respect for diversity.
　　Promoting teaching which respects diversity of values, knowledge, culture, traditions and so on.

Promotion of Sustainable Economic Development:
　　Tourism and cultural industries that respect the living and dynamic contexts within which each human being finds respect for her/his values and identity.

Addressing Environmental Concerns
　　Water, Climate Change, Biodiversity, Disaster Prevention. Teaching society how to behave responsibly and respect the environment

Health Promotion

　　Issues of development, environment and health such as hunger, malnutrition, water-borne diseases, drug and alcohol abuse, violence and injury, unplanned pregnancy, HIV & AIDS and other sexually transmitted infections (*Also see section 11.4).*

11.2 **Peace Education**

The concepts of „peace" and „peace education" will be addressed across the curriculum, in a number of subject areas, namely Social Studies- History, Geography and Sociology as well as Languages, Literature, Economics.

Learning Objectives

- Developing knowledge, skills and attitudes to live together peacefully
- Constructive management of conflicts
- Cooperative and constructive problem solving

Learning Outcomes

Students will develop competencies to:
- Communicate effectively
- Consider and accept multiple perspectives
- Work cooperatively to solve problems
- Negotiate and compromise
- Deal with stress, anger and traumas
- Approach media messages critically
- Manifest tolerance and respect

Content

- Diverse and multiple perspectives on social issues such as poverty, crime, deviance
- Stereotypes and prejudices in day to day social interaction
- Roots of conflicts and their manifestations in society today
- Impact of conflicts and violence on society
- Issues of social justice
- Strategies to tackle conflicts peacefully and constructively: the role of stakeholders
- Psychosocial issues : building self-esteem, respect and self-respect, confidence;
- Dealing with trauma
- Developing emotional control

Pedagogical Approaches
- Project work
- Debates
- Initiation to community service
- Role play/simulation
- Group activities

11.3 Education and Communication for Sustainable Lifestyle

The Commission for Sustainable Development (CSD, 2004) has defined sustainable lifestyles as „patterns of action and consumption, used by people to affiliate and differentiate themselves, which: meet basic needs, provide a better quality of life, minimize the use of natural resources and emissions of waste and pollutants over the lifecycle and do not jeopardize the needs of future generations".

The concepts of „sustainable lifestyles" will be covered in a range of subjects across the curriculum in order to promote education and communication for sustainable lifestyles.

Learning objectives

- Develop knowledge, skills and attitudes to deal with various environmental issues.
- Promote changes in consumer behaviour so as to reduce environmental impact
- Understand the link between action and environmental protection or between action and some other desired end/s.

Learning Outcomes

Students will develop competencies to:
- Make appropriate choice for a healthy and sustainable living.
- Care for the environment and work cooperatively to solve problems
- Manage resources efficiently
- Act with concern for future generations

The following areas will be targeted:
- Resource use (water, energy.etc) and management
- Waste
- Pollution
- Basic health
- Environmental impact
- Sustainable living

Pedagogical Approaches
- Project work
- Field trips
- Debates
- Role play/drama
- Songs/stories/ poems
- simulation
- Group activities
- Initiation to community service

11.4 **Addressing HIV/AIDS**

The integration of HIV/AIDS in the curriculum is based on 2 major principles:

- AIDS is a societal development problem rather than just a disease or an epidemic
- Problem-Solving and Competence-Based Learning can be used to address this development problem.

Teachers of different subject areas (eg, Biology, Social Studies, Languages, Visual Arts) should work together, discuss and identify inputs related to HIV/AIDS which will be addressed in their respective subject areas, ensuring that there is no duplication.

Students will be provided with learning experiences across the curriculum that help them understand problems and issues related to AIDS.

Content

The causes of AIDS.

The transmission of HIV related to drug addiction and life styles

Means of Prevention

Awareness of safe and healthy sexual practices.

Community support to AIDS patients

The Impact of AIDS:
- Problem of drug addiction and AIDS.
- AIDS patients in a family and its consequences.
- Cost of government support to AIDS patients.
- Effect on human resource.
- Poverty, prostitution and AIDS.
- Human Rights (HIV & AIDS Act).
- Problems of stigmatization.

Developing the right attitudes towards AIDS patients

Communication Skills
- Communication skills with AIDS patients.
- Comprehension of case of AIDS.
- Report writing, article.
- Survey of cases, design of questionnaire.
- Poem and life stories.
- Communication skills- signs and symbols in view of poster making for sensitization.
- Song and Arts form for sensitization.

11.5 **Co-Curricular and Extra Curricular Activities**

Extra and co-curricular activities are an essential part of learning in any educational establishment. So far we have stressed on the formal curriculum, while leaving extra and co-curricular activities to the choice of schools and students, usually the more gifted ones in each school. Nevertheless, if well planned and executed, such activities can become part of the learning experiences of each and every student in the school. The advantage of such activities lies in the fact that there is considerable learner"s autonomy and choice, especially when a wide range of activities more relevant to the life experiences of each student is offered. Besides, the importance of extracurricular activities has been widely acknowledged. For instance, participation in extracurricular activities is associated with high levels of social competencies later on in life, as well as positive achievement and better emotional adjustment.

It is with these objectives in mind that the Ministry proposes the inclusion of extra and co-curricular activities for all in secondary schools. Extra and co-curricular activities promote innovative approaches to teaching and learning, encourage students" participation in activities that offer skill-building opportunities. Students get the opportunity to learn a wide range of activities that instil active social interaction and develop important qualities, such as leadership, healthy recreation, self-discipline and self-confidence.

It is therefore proposed that students will have activity time during which they can choose from a range of co-curricular activities. These activities include art and craft, computing, debating, drama, dance, music, singing and a wide range of physical activities. Activities should centre on areas of learning that deal with a wide variety of issues related to world affairs, healthy lifestyles, sports civics, environment, literacy, culture, science, maths, ICT, the society, the economy and so on. Extracurricular activities involving outside agencies that offer a wider variety of learning experiences will be welcome.

When such activities are well planned and executed with precise objectives, schools could envisage to translate such activities into academic points at the lower secondary level. It would help to acknowledge and reward multiple intelligences that characterize all our learners.

Pre-Vocational Stream

12 Prevocational Stream: the Context

The Government of Mauritius has taken the initiative to ensure the provision of prevocational education to cater for the needs of pupils who do not meet the established benchmark to pursue education and schooling in the normal mainstream secondary education. Given the requirements for compulsory education till the age of 16 and the provisions made for the phased introduction of continuous assessment and the National Certificate of Achievement, the Prevocational stream will have to be redesigned.

In the current context, it is normally perceived that children who are channelled to the prevocational stream are those who have been less successful academically. They are the ones who have not been able to adjust, in many different ways, to the demands of mainstream education.

The present framework, however, has been drafted, keeping in mind certain universal pedagogical principles and proposes a new vision for the prevocational sector.
This vision in guided by the following core beliefs:

1. All children can learn and are intelligent in multiple ways.
2. Children learn at their own pace and have their preferred style of learning.
3. Children must be provided with alternative routes to success.
4. The school must prepare children for their role as productive citizens by developing vocational skills.
5. School experiences must relate to real life experience and make meaning for the child.
6. Method is as important as content- what the child learns is as important as how s/he learns.

12.1 **The Profile of the Prevocational Learner**

Children entering the professional stream are normally between 12-13 years old. As such, they are young adolescents with a specific set of needs and expectations. Though they have been less successful academically, their life experience and learning needs are not different from those of mainstream secondary education. But what significantly marks them out is their negative experience of schools, substantial learning difficulties which have accumulated over time, inability to cope with the demands of school life due to factors often beyond their control, low self-esteem caused by little or no experience of success and a lack of recognition for their achievements. Most of them have been unable to relate positively to the classroom and to formal knowledge and learning.

12.2 **The Learning Needs**

Each child has unique learning needs and her/his own preferred style of learning. The prevocational learner has a specific set of needs that make it difficult for her or him to adjust to formal learning situations. S/he finds it difficult to think in abstract terms and is more likely to learn from concrete real life situations. S/he also needs tactile and kinesthetic engagement to suit her/his most preferred way of learning. Learning must provide a means of creative self-expression and provide opportunities for developing positive self-concept and self-esteem. The Prevocational learner privileges a relaxed classroom atmosphere where learning is seen as concrete and fun.

The prevocational learner also needs to feel prepared to face the demands of adult life and citizenship. As such, s/he must feel confident that the school will effectively prepare her/him for the job market through the adequate provision of vocational skills.

12.3   **The Approach**

The approach adopted for designing the prevocational framework is similar to the one used for the mainstream curriculum framework insofar as it is inclusive, holistic, integrated and comprehensive. Furthermore, keeping in view the specific requirements of the Prevocational learner, emphasis will be placed on providing more diversified opportunities to celebrate success, value the learner as a person and make her/him develop a positive image of her/himself as an able and competent learners. The focus will be on enhancing learner engagement by involving everyone in projects that are concrete, broad-based and problem driven. Also, keeping in mind the reality of the world of work and the knowledge, skills, attitudes and values to be developed for active and informed citizenship, the focus will be on:

(i)   Developing functional numeracy and literacy.

(ii)   Using ICT as a support for learning.

(iii)   Developing basic scientific skills and environmental awareness.

(iv)   Learning to manage emotions and developing positive self esteem.

(v)   Promoting creativity, artistic dispositions, physical and health fitness.

(vi)   Mastering relevant technical skills.

12.4   **Reinstating the Vocational**

The term „prevocational" is understood in our context as a comprehensive term, involving general education and study of technologies and sciences, the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors.

Pre-vocational initiatives include preparing young people to enter the world of vocational education so as to become active participants in the economy. We consider vocational training as an „orientation stage" for those learners. They should get the opportunity to learn about the world of work; vocational training develops and builds on various skills (including technical skills as well as personal and employability competences) through a range of vocational training.

Keeping in mind that students will have to acquire a number of basic skills which will pave the way for further vocational specialization, the present curriculum framework proposes the

introduction of a very strong trade element. It is expected that the trade areas component will be the driver for developing knowledge and skills in other components.

12.5 **Aims of Prevocational Education**

Prevocational education must:

- Enable the holistic development and character formation of each individual learner.
- Foster the ability for understanding, judgement, critical thinking, creativity and self-expression in learners.
- Prepare learners for lifelong learning by developing the necessary mind frame, technical and entrepreneurial skills and attitudes.
- Develop functional literacy and numeracy that will serve as the basis for vocational training, apprenticeship or further education.
- Develop an awareness of own role, strengths and limitations and to contribute positively in a challenging social context.
- Acquire enabling life, livelihood and problem solving skills to become economically and independently productive persons who can earn a living with dignity.
- Develop communication, pro-social and emotional skills to facilitate integration in society and promote active democratic citizenship.

12.6 **The Learning Domains**

The interdisciplinary approach adopted in this curriculum framework has called for considerable re-thinking in terms of the learning domains. Because of the renewed emphasis on trade, social and emotional skills, communication, the need for meaningful and concrete learning experiences, the project based method, the curriculum is crafted around four learning domains, which are:

(i) **Communication Skills**
(ii) **Numeracy and Problem-Solving Skills**
(iii) **Life Skills**
(iv) **Livelihood and Trade Skills**

12.6.1 Communication skills
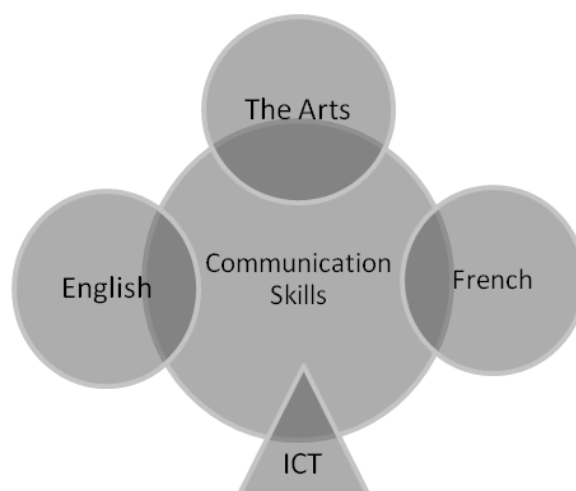
Communication skills inevitably remain a primordial consideration in a technology driven world where distances are being reduced and, more than ever, the need to understand others and promote harmonious living is felt. With adequate proficiency in the languages, namely through the development of listening, speaking, reading and writing skills, and with an ability to interact with others, the prevocational learner will be better equipped to operate in society and become employable.

Communication, however, goes beyond languages and this framework recognises the fact that the Arts, i.e. visual arts, drama, music and dance, are a form of creative expression and an effective way of conveying feelings and of joining people. By delving into the Arts, the

prevocational learners will have the opportunity to become aware of, understand and appreciate, a new dimension of expression.

The use of ICT is prevalent and the learners will be given the opportunity to make full use of its multiple functions in order to achieve the objectives of this domain.

This component will enable students to become literate and proficient in a range of creative expressions in order to enhance their communicative skills. They learn to engage in active listening, formulate opinions and views about various topics and participate in artistic and creative endeavours, hence enhancing their self-esteem, motivation, and self management skills. Students are, thus, given the opportunity to grow into active citizens who can take active roles in society.

The objectives of the domain are achieved through the following strands: Active Listening, Oral Interaction, Functional Reading and Writing; Creative Expressions

12.6.2 Numeracy and Problem Solving Skills
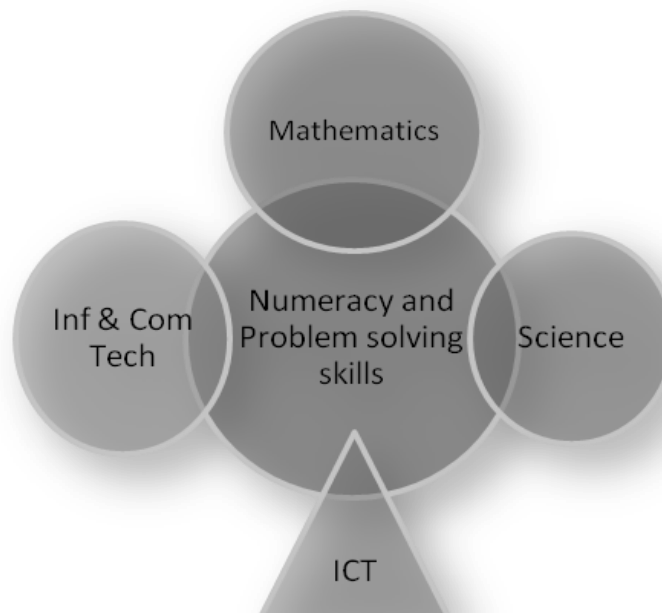
Numeracy and Problem-Solving are the foundation skills for a knowledge-based economy. They are important not only from the point of view of the labour market, but are increasingly seen as important for an individual"s ability to participate fully in the modern society. This domain includes specifically the knowledge, cognitive dispositions and skills gained through

a mastery of core problem-solving skills. It will determine the learner"s ability to handle real-life situations that require the activation of mathematical and scientific knowledge and skills as well as the learners" ability to respond to information about mathematical and scientific ideas that may be represented in a range of ways.

Numeracy and Problem-Solving will help students deal with everyday life situations. Students become functionally numerate, scientifically and computer literate, thus empowering them to take informed decisions by using rational and logical thinking skills. At the same time students are able to learn and understand how things around them work. They will learn scientific ideas, processes and skills and relate these to everyday experiences. This domain, hence, contributes to making the students operate efficiently in society and give them pride and confidence in being valuable citizens of Mauritius.

The objectives of the domain are achieved through the following strands: Functional Numeracy, Understanding Nature and the Environment

12.6.3 Life Skills
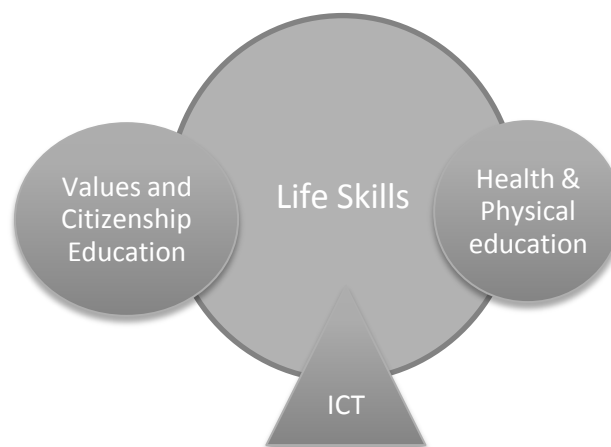
The relevance of life skills in the context of prevocational education is already well established. In our Mauritian context, this becomes even more essential, as a large percentage of the prevocational school population will join the world of work or a system of apprenticeship as from the age of 16.

Life skills refer to the set of attitudes, dispositions and social competences which any person needs in order to become functional at both the social and personal levels. They refer to a large group of psycho-social and interpersonal skills which can help students make informed decisions, communicate effectively and develop coping and self-management skills that may

help them lead a healthy and productive life. Life skills may be directed toward personal actions and actions toward others as well as actions to change the surrounding environment to make it conducive to health and sustainable development (UNICEF, 2008). They include organization, self-management skills, social competence, conflict-resolution skills, decision-making ability and environmental awareness.

Life skills aim at preparing the students to develop into healthy and responsible citizens of the world. Students will be equipped with the knowledge, skills and attitude to face the challenges in their adult life and the world of work. Through life skills, the students will learn to resolve interpersonal and intrapersonal conflicts. These will help the students develop the necessary knowledge and skills to contribute to the safeguard and improvement of the environment. They will be empowered to analyse the risks and consequences of unhealthy lifestyles and recognise the benefits of healthy lifestyles and, consequently, they will learn to take responsible decisions to manage their own life style and behaviour.

The objectives of the domain will be addressed through an integrated approach between the different strands, namely Personal growth, Interpersonal skills, Movement and Health, Conflict Resolution and Emotion Management, Heritage, Wellness and Care and Heritage, Values and Citizenship.

12.6.4 Livelihood and Trade Skills
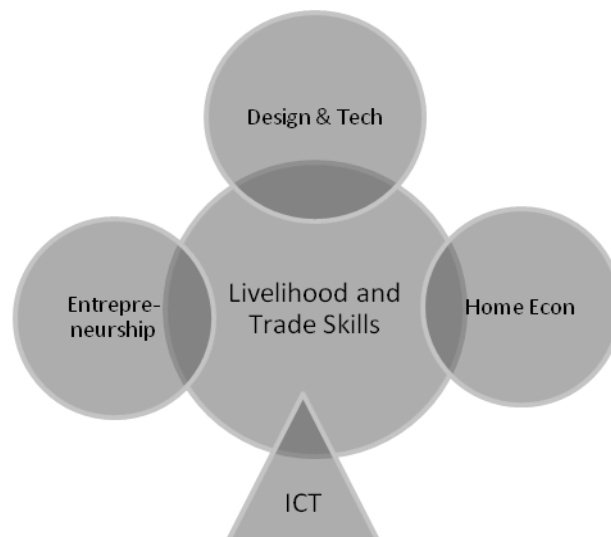
To become autonomous and productive citizens, the prevocational learners must develop capabilities, resources and opportunities to pursue individual and household economic goals. Livelihood skills relate to income-generation and include technical/vocational skills

(carpentry, sewing, computer programming), job-seeking skills, such as interviewing, business management skills, entrepreneurial skills and skills to manage money. It is proposed that the trades component be significantly reinforced through practical activities and projects. This domain will involve a strong component of science and technology.

The objectives of the domain are achieved through the following strands: Materials in the Environment; Tools and Equipment; Communication; Designing, Processing and Making; Health and Safety; Planning, Organising and Managing Resources; New Technological Practices and Entrepreneurial Skills.

12.6.5 Link between the Overarching Learning Outcomes and Domain Specific Outcomes

Overarching Learning Outcomes	Communication Skills	Numeracy and Problem-Solving Skills	Life Skills	Livelihood and Trade Skills
1. Students develop and use language through a diversity of disciplines at secondary schools to understand and communicate information, ideas, feelings and opinions. (N.C Goals: 1, 2, 3).	Students understand a range of communication skills through aural, oral, written, visual & kinaesthetic language; develop these skills and use them appropriately to convey information, ideas, feelings & opinions.	Students use mathematical terms & symbols, and scientific terminology to understand situations and express ideas, feelings and opinions.	Students develop appropriate verbal and non-verbal communication skills to express feelings and needs for a healthy lifestyle and active citizenship.	Students interpret technical data and prepare drawings and illustrations and use business language to convey specific information using appropriate convections and standards'.
2. Students recognize when and what information is needed, how to obtain it from a range of sources and how to use it and share it (N. C Goals: 2, 3, 8)	Students identify specific information required for their communicative purposes; they research and document on relevant issues and topics, access, understand and extract pertinent information from a range of sources and are able to analyse, interpret, use such information judiciously and share it.	Students make use of a range of sources to search for required information and gather data in science, mathematics and environmental education to share and use them effectively.	Students access, select, use and share information to make safe choices for the development of a healthy lifestyle..	Students develop a repertoire of basic skills for the selection, systematic collection , interpretation and sharing of data; they use ICT to store and share information with each other and in groups.
3. Students select, integrate and apply numerical and spatial concepts and techniques in a variety of situations. (N. C Goals: 3, 4)	Students select, integrate and apply numerical and spatial concepts and techniques in their learning and in the production of language and creative/performing arts.	Students use knowledge of numerical and spatial concepts to understand matters related to science and technology, mathematics and environmental education to make informed decisions on real life issues, as well as on simulated problems.	Students apply numerical and spatial concepts to analyse and learn strategies, techniques and measurements in games, physical activities and environment .	Students develop the skills of systematic reasoning through practical investigation in order to generate solutions to real life situations problems.
4. Students use logical and critical thinking to judge, assess and solve a broad range of both theoretical and real life problems (N. C Goals: 3, 4)	Students use logical & creative thinking to reflect on and find appropriate ways of communicating in a broad range of real and imaginary situations.	Students use logical and critical thinking skills to explore scientific, mathematical and environmental issues to make predictions, further investigations and propose possible solutions in a systematic and scientific way.	Students develop logical and critical thinking to solve problems related to physical activities and environmental issues.	Students develop logical, inductive and deductive reasoning and apply them to a range of situations/problems.
5. Students understand, use and adapt technologies and ICT tools confidently to meet their needs. (N. C Goals: 3, 8)	Students use ICT as a tool for language, creative and performing Arts tasks.	Students learn to solve everyday life issues in science and technology, mathematics and environmental education through the use of a range of innovative technologies	Students use technology for self-development and leisure activities.	Students use basic technological tools and apply principles to assist them in finding solutions to problems from their immediate environment and day-to-day activities and they also learn how the business world operates.
6. Students understand, appreciate and preserve the physical and natural world. (N. C Goals: 2, 3, 4, 7)	Students use language and creative activities to understand, discuss and take appropriate decisions about the environment.	Students develop an understanding of the physical and natural world, recognise their vulnerability and adopt sustainable practices.	Students understand the importance of a sustainable environment, for the bio-physical, socio-cultural and economic well-being of individuals and the community.	Students develop an awareness of the importance of conservation of natural resources and develop skills to manage resources for sustainable development.

Overarching Learning Outcomes	Communication Skills	Numeracy and Problem-Solving Skills	Life Skills	Livelihood and Trade Skills
7. Students develop awareness of their cultural, geographical and economic context and acquire the knowledge, skills and values for social integration and a culture of peace (N. C Goals: 2, 4, 5, 6, 7, 8)	Through language, creative & Performing Arts, students develop an understanding of their cultural, geographic, historical and economic contexts in a multicultural environment.	Through recognition of indigenous knowledge in science and technology, mathematics and environmental education, students develop an awareness of the cultural, geographical, historical and economic context for social integration.	Students learn about the different cultures and history of Mauritius, and take pride in preserving their national heritage.	Students identify problems in social and economic contexts and improve the living environment by taking into consideration cultural values, traditions and customs in relation to a wide range of products.
8. Students interact with others from diverse cultures, develop pride in our nation and recognize that everyone has to feel valued and safe. (N. C Goals: 5, 6)	Students use language, creative and performing arts to communicate in appropriate ways with culturally diverse people and foster understanding, respect and a sense of patriotism		Students appreciate and value cultural diversity and develop a sense of patriotism through cooperation and teamwork .	Students share information and interact with others through teamwork, thereby developing an awareness of the sensitivity and the interplay of diverse cultures and values.
9. Students demonstrate aesthetic appreciation and develop artistic, expressive and creative skills. (N. C Goals: 1, 4)	Students develop and express their artistic and creative skills by responding to, reflecting on and creating works of art.		Students learn and appreciate a range of movement skills for physical activity, leisure and artistic expression.	Students design, create, evaluate, solve problems and make informed decisions through the use of material products & services in the environment.
10. Students develop emotional, social and moral intelligence to achieve a sense of well-being. (N. C Goals: 1, 6)	Through linguistic and creative activities, students develop their emotional, social and moral intelligence, thereby achieving a sense of well-being.		Students recognize the importance of moral behaviour and engage in higher order moral reasoning through group activities.	Students demonstrate appropriate interpersonal/intrapersonal skills when dealing and negotiating with people..
11. Students demonstrate self-management skills, positive self-esteem and confidence for active participation as citizens of the Republic and of the world. (N. C Goals: 1, 3, 5, 8)	By planning, organising and implementing a range of language, artistic and creative activities, students develop self management skills, positive self-esteem and confidence.		Students apply social, cognitive and management skills in school and community-based projects.	Students demonstrate planning, organizing, management and entrepreneurial skills to operate confidently in this ever changing environment.
12. Students express their respect for people, plants, animals and resources through informed and responsible choices as consumers and producers. (N. C Goals: 2, 7)		Through their actions, students respect the Earth and Life in all its diversity and become role models in the management of sustainable resources.	Students respect the earth and life in all its diversity and become role models in sustainable resource management.	Students recognize the importance of harmonizing human activity to conserve and to maintain the balance between the technological and natural world through responsible choices.
13. Students develop awareness and understanding of their body, nurture self respect and make responsible choices in pursuance of a healthy life style. (N. C Goal: 1)		Students evaluate their surroundings, identify hazards and take precautionary measures to keep themselves healthy.	Students develop the knowledge, understanding, skills and attitudes to maintain and enhance their personal well-being, physical development and also to promote healthy lifestyle.	Students make informed judgement about safe work practices and healthy lifestyle.

Level Descriptors Year I

Communication Skills	Numeracy and Problem Solving Skills	Life Skills	Livelihood and Trade skills
Active Listening: -Develop familiarity with the sounds and units of the language. -Develop the ability to discriminate and identify different elements/characteristics of aural input. -Understand, appreciate and respond to a variety of simple aural inputs. **Oral Interaction:** -Express themselves on topics of interest using simple language. -Engage in short conversations and discussions which involve some turn taking. -Use appropriate pitch, intonation, modulation and pronunciation. **Functional Reading and Writing:** -Read and appreciate short texts on familiar topics. -Identify the topic, retrieve literal information and follow the sequence of events/ideas. -Consolidate their knowledge of basic mechanics and conventions of writing, -Develop awareness of different lay outs; produce simple texts according to purpose and audience. -Learn to use methods of music notation and basic methods of reading at sight **:Creative Expression:** -Engage in experimenting with different media and techniques in order to express their emotions and ideas in a variety of styles -Understand and use relevant elements and principles for creative work. -Express themselves in a creative, personal and original way while engaged in creative work; appreciate their compositions and those of others. -Understand, appreciate and respond to history, tradition and culture in the field of creative and artistic works -Understand, appreciate and use the basics of graphic design/communication -Learn about and discover basic techniques of expression. -Explore and experiment with different modes of expression. -Develop the ability to deliver short performances, individually and in groups.	**Functional Numeracy** -Demonstrate knowledge of numbers, fractions and decimals and basic operations there on -Identify coins and notes of the Mauritian currency and solve related problems -Demonstrate the ability, through practical activities, to collect and record data in tabular and graphical forms -Identify and construct drawings of geometrical shapes and angles -Demonstrate knowledge of concept of time and interpret time expressed in seconds, minutes, hours, days and years -Demonstrate the ability to estimate quantity/amount in terms of length, mass and capacity; measure functional quantities accurately, using simple instruments and express measurements, using appropriate numbers and units **Understanding Nature** -List the importance of air around us in relation to life, travel and entertainment -Discuss the basic causes, effects and mitigation of air ,water and land pollution -Observe objects of daily use to understand soluble/insoluble and permeable/impermeable materials -Operate appliances of everyday life to understand forms, sources and transformation of energy **The Environment** - Recognize the different types of environment -List common plants in our environment; name parts of plants and their functions; study conditions for germination of seeds -Develop an understanding of human interdependence with his environment and the importance of protecting nature and its resources -Identify different environment issues in Mauritius -Identify simple ways to manage resources at school/home -Develop and use simple checklists for an audit of resources and develop the 3 Rs principle (Reduce, Reuse and Recycle) to manage these resources	**Personal Growth:** -Develop an awareness of factors that affect growth **Interpersonal Skills.:** -Demonstrate basic assertiveness strategies to manage interactions with others **Movement and Health:** -Develop basic movement and motor skills. -Understand the role of physical activity and exercise in health and well-being. -Maintain regular, sustainable and enjoyable physical activity. **Conflict-Resolution and Emotion Management :** -Identify healthy ways to manage emotions and resolve conflicts **Wellness and Self Care:** -Develop understanding of main parts and organs in the human body and adopt caring measures -Identify basic structures of the male and female reproductive systems and emotional changes during puberty. -Outline stages of the menstrual cycle and pregnancy Develop an awareness of factors leading to pregnancy -List some examples of STIs and their causes and preventive measures and identify behaviours leading to risk of HIV/AIDS and STIs. -Identify legal and illegal drugs and some effects when used and /or abused -Develop skills to resist drug abuse. **Heritage, Values and Citizenship:** -Develop an awareness of the past so as to understand the evolution of society to its present state. -Act responsibly to protect their own rights and feelings and those of others -Develop an awareness of the importance of moral behaviour in relation to bullying, gender stereotyping, cultural differences and fair play. -Recognize the importance of values and demonstrate an acknowledgement and acceptance of the realities of diversity. -Discuss their role as active citizens.	**Materials in the Environment :** -Name and classify materials into various categories according to properties and uses -State the basic properties of materials **Tools and Equipment:** -Name basic hand tools and equipment -Explain the functions of basic hand tools and equipment -Learn to use basic hand tools and equipment appropriately **Communication:** -Interpret drawings, illustrations and symbols -Follow instructions correctly during the realisation of a product **Designing, Processing and Making** -Identify the stages in the realisation of a piece of work -Use commonly available materials and techniques to make simple products -Use simple techniques to enhance the aesthetic value of artefacts **Health and Safety** -Recognise safe working principles -List safety rules and regulations **Technological Practices** -Develop familiarity with new technologies in the production of goods and services **Entrepreneurial Skills** -Recognise costs, revenues and profits in the production of goods and services -Identify common expenditure items in the household

Information and Communications Technology:
-Operate a computer safely and identify the importance of different parts
-Use a word processing software to formulate their ideas and, at the same time, use online features, such as spelling and grammar checker to evaluate their work.
-Use a presentation software to communicate and present their work
-Use a graphic software to draw and colour shapes and to save and retrieve their work in various sessions
-Access information, using the Internet from given web addresses and sites.

Level Descriptors Year II			
Communication Skills	**Numeracy and Problem Solving Skills**	**Life Skills**	**Livelihood and Trade Skills**

Communication Skills

Active Listening
-Understand, appreciate and respond to a wider range of short aural input
-Reflect on and classify specific features/elements as required.

Oral interaction
-Express themselves on a variety of familiar topics using simple language and newly acquired vocabulary.
-Communicate with greater ease, discussing issues and provide some support for their views.
-Use appropriate pronunciation, pace, intonation and pitch, and show growing confidence in their speech

Functional Reading and Writing:
-Read and appreciate a wider range of texts on familiar topics.
-Infer information and, to some extent, react critically
-Access information from different sources and reflect on their relevance according to the purpose.
-Produce simple texts that are relevant and well structured.
-Adapt style and content to purpose and audience, and use appropriate vocabulary.
-Consolidate their ability to use methods of music notation and of reading at sight.

Creative Expression
Engage in experimenting with different media, techniques and processes.
Understand and use relevant elements and principles of creative work.
Express themselves in a creative, personal and original way while engaging in creative work; appreciate the contribution of all group members in collaborative enterprises.
Understand, appreciate and respond to history, tradition and culture in the field of creative and artistic work.
Further understand, appreciate and use graphic design/communication.
Understand, appreciate and create simple art and crafts products
Experiment with a variety of techniques/instruments with growing confidence.
Develop greater flexibility in choosing an appropriate mode of expression.
Show more ease while performing as an ensemble; value individual contribution within the larger context of the group.

Numeracy and Problem Solving Skills

Functional Numeracy
-Use knowledge of numbers, fractions and decimals to solve simple and complex daily tasks
-Apply knowledge of Mauritian currency to process monetary data in daily life situations at home and in business
-Represent and interpret data in graphical forms
-Demonstrate the ability to work out practical problems involving geometrical shapes.
-Apply mathematical operations to solve simple problems in time and time management
-Adopt safe practices in the use of basic instruments and produce accurate measurements

Understanding nature
-Describe the dangers of cyclonic wind and energy production from the wind.
-Describe the characteristics of life; recognise life-threatening hazards and take protective measures
-Discuss the importance of water in relation to life, health, water cycle, droughts, floods and crop production; conserve the limited fresh water resources and harvest rain water
-Grow various cash crops, vegetables, flowers and fruits; investigate the effects of water, aeration, compost and manure on quality of crops
-State the importance of animals to humans; investigate the basic conditions for the survival of animals; identify animals which can be used for trade
-Recognise components of mains, electric circuits; explain the safe and economical use of electricity; differentiate between renewable and non-renewable sources; adopt measures towards conservation of electrical energy
-Observe objects and appliances of everyday life to understand safe applications of conductors of electricity and heat.

The Environment
-Recognize the roles and effects of human linkages to environment systems; explain the causes of common environmental problems in Mauritius
-Develop and use checklists for doing simple audit of a particular resource used at school
-Adopt the 3R's principle (Reduce, Reuse and Recycle) to manage resources at school

Life Skills

Personal Growth
-Recognize effects of illness, posture and physical activity on puberty.

Interpersonal Skills
-Develop a range of interpersonal skills through team games and activities.

Movement and Health
-Demonstrate consistency and control of movement in a range of situations in individual/team games and activities
-Recognize influences that contribute to common health problems across the lifespan of people and choose healthy lifestyles

Conflict-Resolution and Emotion Management
-Demonstrate an understanding of the processes involved in conflict resolution and emotion management

Heritage, Values and Citizenship
-Develop knowledge, skills and attitudes needed to appreciate one's multifaceted culture.
-Develop a sense of patriotism and pride in our nation through participation in cooperative and competitive activities and school based projects.
-Recognize the importance of norms, rules and laws in society.
-Identify and prioritize one's own values and develop an understanding of how values influence decision-making and behaviour.

Wellness and Self-Care:
- Develop an understanding of human reproductive and digestive systems, their common diseases and preventive measures to avoid communicable and non-communicable diseases
-Demonstrate an understanding of human sexual behaviours and list preventive measures to avoid HIV/AIDS and STIs.
-Explain causes, mode of transmission and symptoms of HIV/AIDS and other STIs
-Develop an understanding of the impact of alcohol and drugs on behaviour and lifestyle
-Adopt strategies to resist drug abuse

Livelihood and Trade Skills

Materials in the Environment
-Identify commonly used materials
-Apply knowledge of the properties of materials in the making of products
-Describe the processing and manufacturing of common materials

Tools and Equipment
-Name powered tools and equipment
-Use powered tools and equipment safely

Communication
-Use drawings, illustrations and symbols to convey information
-Read and follow instructions to make an item

Designing, Processing and Making
-Process materials using appropriate equipment and techniques in the making of simple products
-Demonstrate designing skills to solve problems in everyday life situations

Health and Safety
-Adopt safe working habits in the handling of materials, tools and equipment

Planning, Organising and Managing Resources
-Organise work in logical sequences for the realisation of items

New Technological Practices
-Recognize new technologies in the production of goods and services

Entrepreneurial Skills
-Understand the meaning of savings and its importance in everyday life
-Demonstrate the ability to save in everyday life
-Develop an awareness of the operation and contribution of small scale enterprises

Information and Communications Technology
-Explore the use of computer systems in everyday life
-Use a word processing software to generate and communicate their ideas in different forms, using text, tables and graphics as appropriate.
-Use a spreadsheet package to explore aspects of real and imaginary situations and represent data graphically
-Use the Internet to search information related to various disciplines by formulating keywords in search engines

LEVEL DESCRIPTORS: YEAR III			
Communication Skills	**Numeracy and Problem Solving Skills**	**Life Skills**	**Livelihood and Trade Skills**
Active Listening -Listen to and appreciate a wider range of aural input on various themes -Understand that intonation, pitch and rhythm are important aspects of communication and pay due heed to these to infer meaning. -Reflect on, interpret, evaluate and synthesise aural input from different sources. **Oral Interaction** - Initiate and participate willingly in conversations and discussions. Use appropriate language, vocabulary and pronunciation. -Become more confident in sustaining interaction: express and elaborate on views and respond to other participant(s). **Functional Reading and Writing** -Read and appreciate a variety of texts; use reading strategies more confidently. - React critically to texts and express their opinion with adequate justification. -Gather and link information from different sources according to the purpose - Follow process writing with growing confidence. Produce relevant and coherent texts, using the appropriate conventions for both formal and informal purposes - Consolidate their use of methods of music notation and learn more elaborate methods of reading at sight **Creative Expression** -Engage in experimenting with different media, techniques, processes and genres -Show confidence in the use of relevant elements and principles for creative work -Compose more complex and longer melodies in solos or ensembles. -Express themselves more confidently in a creative, personal and original way while engaging in creative work -Understand, appreciate and respond to history, tradition and culture in the field of creative and artistic work. -Display confidence in the use of graphic design/communication. -Understand, appreciate and create simple art and craft products. -Develop proficiency in the use of a range of techniques/methods. -Make informed decisions on creative modes and perform in solos and ensembles with more confidence.	**Functional Numeracy** -Carry out projects related to numbers, percentages, rate, ratio and proportion to make informed decisions -Develop an appreciation of common international currencies (dollars, pounds, euros) and manage finance at home and business (budgeting) -Perform simple/complex daily tasks involving time measurement and management -Perform mathematical calculations to find amount/quantity required in terms of length, mass and capacity -Carry out practical projects related to length, mass and capacity; understand costing of projects -Work out real life problems using measurements -Interpret and use available graphical data to make informed decisions **Understanding Nature** -Model natural phenomena and occurrence of day and night; illustrate the place of the Earth in our solar system; recognise common celestial bodies -Develop an understanding of the natural resources of Mauritius. -Demonstrate awareness of the vulnerability of our island to various natural calamities; understand various environmental issues at local, regional and international levels -Model stages involved in purification and distribution of water to understand cost implication and conservation -Observe domestic electric wiring to understand wiring of plugs, switches and sockets; recognise devices needed for safe use of mains electricity; practise simple electric connections **The Environment** -Carry out environmental auditing and identify specific areas needing improvement -Develop ability to implement basic environmental management plan; manage sustainable use of resources in various environments. -Develop an understanding of the different dimensions of environments; recognize rights and responsibilities of individuals to preserve the natural environment.	**Personal Growth** -Develop skills to manage changes in growth processes **Interpersonal Skills** -Develop strategies to adjust to the problems of adolescence **Movement and Health** -Develop new skills, and extend their abilities in movement-related activities. -Develop an understanding of the relationship between physical activity, fitness, and health. -Set goals and plan for regular physical activity, relaxation and recreation -Demonstrate good nutritional habits **Conflict Resolution and Emotion Management** -Demonstrate an understanding of the various types of conflict resolution. -Practise the steps of emotion management and conflict-resolution. **Heritage, Values and Citizenship** -Express ways of preserving, appreciating and sharing our multiple cultural heritage with pride. -Recognize the need to live together in an atmosphere of peace and contribute to sustainable development. -Develop a sense of shared humanity. -Organize and actively participate in community-based projects. **Wellness and Self-Care:** -Develop an understanding of human circulatory and respiratory systems; list common diseases affecting them and adopt preventive measures through healthy lifestyle and food habits -Develop an understanding of the physical, psychological, social and economic implications of teenage pregnancy. -Recognize the basic criteria and conditions for good health and develop action competence to reduce vulnerability to health problems. -Identify the venues where testing and counselling for STI/HIV status can be done -Apply problem-solving strategies to find solutions to drug abuse and to reinforce self-control over behaviour -Acquire coping skills to deter behaviours and lifestyles associated with crime, drugs and violence.	**Materials in the Environment** -Compare the properties of different materials -Use materials safely and effectively to make decorative and functional items. **Tools and Equipment** -Use a wide range of hand and powered tools and equipment confidently. **Communication** -Produce drawings, illustrations and symbols to convey information. **Designing, Processing and Making** -Apply knowledge and practical skills in the design and manipulation of materials to create items for self and others **Health and Safety** -Apply safe working principles in the handling of materials, tools and equipment. -Identify hazards and discuss safety measures to prevent accidents. **Planning, Organising and Managing Resources** -Make economical use of materials -Implement planning procedures in the making of items **New Technological Practices** -Apply knowledge of the new technologies to solve problems, to create or modify products and to elaborate processes to meet human needs **Entrepreneurial Skills** -Recognise the importance of entrepreneurship and its culture in the local environment. -Plan simple budgets. -Apply basic negotiation skills to deal with others regarding ideas, situations and issues. -Develop basic techniques of horticulture, apiculture, aquaculture, aviculture/poultry, animal breeding and also milk production so as to gain a living through related activities.

Information and Communication Technology
-Examine the use of ICT in everyday life
-Use ICT equipment and software to communicate, share and exchange ideas and information in a variety of forms
-Use various software tools to organize, analyse and interpret ideas and information
-Communicate to the outside world and their peers through electronic communication.

12.9 **Pedagogical Orientation**

One of the major innovations presented in this curriculum framework relates to the pedagogical orientation propounded. In view of the profile and learning needs of the prevocational learner, it is proposed that a **Process-based and Project-based** approach be adopted. Under this approach, direct exposition to content must give precedence to pedagogical processes which are constructed around a number of core projects which are broad enough to provide the learner with opportunities to develop competencies in the various domains. Students will be required to work with teams of teachers on a common project.

The benefits of this approach in the context of Prevocational education are that:
   (i)   It provides opportunities for interdisciplinary links which, in turn, contribute to meaningful learning
   (ii)   It is based on real life and concrete problems and, hence, becomes more relevant to the reality of the prevocational learner
   (iii)   It offers enhanced opportunities for developing livelihood skills as compared to formal and compartmentalized learning of subjects.
   (iv)   It is appropriate for the tactile and kinaesthetic learner
   (v)   It affords more prospects for collaborative learning and the development of communication and life skills.

Project-based pedagogy will also offer enhanced opportunities for students to learn in authentic and collaborative contexts, in line with the orientation adopted for the secondary curriculum. Student engagement in a number of activities and projects, which center on solving real life problems or dealing with day-to-day issues in their neighbourhoods or communities will act as a motivating factor for „at risk‟ students, thereby influencing interest in school and attendance positively.

Given the multidisciplinary nature of projects, educators will have to work together to define and structure students‟ learning under a common leading theme; identify their inputs and learning outcomes in terms of knowledge and skills; provide learning support and materials and discuss the assessment process. It is expected that the project based approach will incorporate significant elements of ICT and allow students to develop competencies which cut across the various domains of learning.

It is a good starting point for teachers, at the onset, to identify together those nodal points between domains and derive a leading theme which is relevant to the context of their students and that of the schools. We are recommending that three such major projects be carried out over a year and be used as a drive to organize learning in the prevocational stream. An example of the type project to be promoted is given in the appendix.

An equally important strand in the pedagogical approach adopted within the framework relates to the focus on process rather than on content. As for the mainstream, we are advocating renewed emphasis on the generic skills necessary for lifelong learning. While the development of concepts and ideas pertaining to specific disciplines remain crucial to any learning process, teachers must construe these as a means to an end. Emphasis must be placed on the ability to think, analyse, evaluate and synthesize information from various sources and to make reasoned judgment about alternative courses of action. The added advantage of the process-based approach lies not only in its potential to make teachers and students **think about the way they think,** but also in that it offers a significant leeway for cross-disciplinary incursions. Both the project and process-based approaches are mutually reinforcing and generate learning experience in line with the demands of inclusive pedagogies. Given the wide variations in terms of learners" abilities, backgrounds and aspirations, project and process-based pedagogies are open-ended enough to allow each and every learner to make valued contributions to the class.

12.10 **Using the Project Approach**

12.10.1 General Objectives and Approaches to the Project Approach

The main objective of this example is to illustrate how teachers can start with what pupils already know before moving on to what they don't know. This gives pupils confidence, because they use what they already understand.

What educators should strive to achieve?

- Find out what they already know about the resources in their own environment.
- Plan how to extend their knowledge and engage them in thinking more deeply about the issues.
- Help students use their own lives, and the lives of their immediate families as a source of investigation.
- Help students explore different opportunities in the locality.
- Engage students in team building and mutual respect.
- Develop a supportive classroom environment where everyone is able to participate fully and where they feel that they are respected and their ideas recognized.
- Develop self-esteem in the students by teaching them how to interact among each other to share ideas and objects.
- Be sensitive to differences between pupils and work to make all pupils feel included as they build more networks.

12.10.2 Planning for Using the Project Approach: an example

Theme: My Local Community

Aim:
Planning for using the project approach to enhance learning through meaningful activities.

Note: The column indicating Record of Achievement can be used to record general observations on the class as a whole. Periodically write two to three statements for each category, stating what was achieved or not achieved and what needs to be reinforced. Although the project proposed encompasses all domains of learning, the teacher can select a limited number of specific domain competencies, given the constraints of time and resources. Below is a list that has been prepared for illustrative purpose only.

My Local Community						
Domains of Learning	**Domain Specific Objectives**	**Activities**	**Pedagogical Approach**	**Record of Achievement- (Class Profile)**		
				High	**Average**	**Low**
Task I: Discovering the Community **(Communication Skills)**	▪ Express themselves on topics of interest using simple language ▪ Discuss their roles as active citizens	▪ Students Identify physical features of the community: ▪ Eg: roads, drainage system, spots for leisure, commercial areas etc.. ▪ Students explain, through oral discussion, how they can make better use of the existing physical features; Eg: engage in sports; nature walk; exercise; use an existing sports complex and leisure facility in the community and so on	Brainstorming. • Allow students to express themselves freely on the topic • List responses on the board • Categorise responses • Help them to focus • Decide on the next step			
Task 2: What I Like about My Community **(Communications Skills and Life Skills)**	▪ Develop the skills, techniques and processes required for expressing artistic creativity	▪ Students illustrate their knowledge of the community through dance and songs popular in their environment.	▪ Work in group to decide on display			
	▪ Use mime, songs and drama to express feelings, moods and emotions	▪ Through storytelling the storyteller can create stories based on the knowledge and awareness developed so far.	▪ Find out what students already know and use this as the base for planning activities around local crafts.			
	▪ Perform in solo or in ensemble with appropriate expressions and with confidence through singing and instrumental accompaniment	▪ Students gradually develop skills in the art of writing, telling and reciting stories.				
	▪ Communicate and develop values through improvisation exercises ▪ Explore the use of different materials and medium to produce artefacts	▪ Students are allowed to experiment on different materials and decide on what and how to display information gathered- using simple texts	▪ Talk to each other and decide on most appropriate way of doing their work and displaying what they have learnt			

My Local Community						
Domains of Learning	**Domain Specific Objectives**	**Activities**	**Pedagogical Approach**	**Record of Achievement- (Class Profile)**		
				High	**Average**	**Low**
Communication skills	▪ Apply problem solving strategies in everyday life	▪ Learn about using such simple operations.	▪ Students find out about skills required by economic operators with the help of the teacher.			
	▪ Apply mathematical knowledge confidently in carrying out projects		▪ Together they try to practice simple operations and learn about the use of Mathematics.			
	▪ Use commonly available materials and techniques to make simple products	▪ Help students to develop their own craft skills using materials from the local community Eg: some pupils may be skilled in doing such things as sculptures with simple objects like soap bar, soft wood, painting and fabrics.	▪ Students share their know-how with each other.			
	▪ Appreciate and value the natural world while recognizing the importance of regulating human activity to protect it and conserve resources.	▪ Encourage students to explore, observe carefully and investigate their own environment.	▪ Peer support is encouraged by the teacher			
Task 4: Demonstrate Creativity and Engage in Production of Artefacts **(Livelihood and Trade Skills, Numeracy)**	▪ Identify, select and use the appropriate processes to transform materials	▪ Students explore the natural environment, first around the school, and later outside school. ▪ Students engage in experimentation with objects in the community				
	▪ Demonstrate the ability to estimate quantity/amount in terms of length, mass and capacity; measure functional quantities accurately using simple instruments and express measurements using appropriate numbers and units	▪ Students learn about food items generally consumed in the community ▪ They learn about traditional dishes, using products from the local community. ▪ Students are initiated into planning skills through activities in the field, lab and the kitchen	▪ Teacher emphasizes on appropriate behaviour before embarking on activities.			
		▪ Learn how to cultivate food items generally consumed in the community	▪ Find out what they already know. Allow them to share their knowledge.			

			My Local Community			
Domains of Learning	**Domain Specific Objectives**	**Activities**	**Pedagogical Approach**	**Record of Achievement- (Class Profile)**		
				High	Average	Low
		▪ Learn cooking by using products from the local community.	▪ Draw attention to proceed in an orderly manner. Decide on appropriate steps before implementing any idea.			
	▪ Show an appreciable degree of organizational and planning skills	▪ Students are initiated into planning skills through activities in the field, lab and the kitchen				
	▪ Make informed judgements about common diseases, their effects and their prevention	▪ Students find out about common diseases that they are subject to during different periods of the year; identify the causes of such diseases in the community and the ways to minimize them				
	▪ Communicate in the appropriate manner in different social contexts	▪ Encourage students to talk about the family and other social networks to which they belong and which define who they are. ▪ Write simple sentences and make charts to express their ideas on a poster.	▪ Students learn that sharing is part of life; we all need to cooperate everyday, learn how to give support to others and ask for it in return			
Task 4: Students inquire about their own values and roles as citizens **(Communication skills and Life Skills)**	▪ Discuss their values and their role as a citizen	▪ Use discussion and draw family trees to find out about family relationships.	▪ ▪ If teacher finds any fault, s/he first ask students to correct themselves, before trying to give her/his own views or expressing her/his value and preferences.			
		▪ Develop opportunity to share ideas, tasks, cooperate in team and group work as a way to make friends with each other and to encourage good social interaction	▪ Discuss. Find pictures to illustrate.			
		▪ Help students understand the concepts of physical growth and development. These include both the physical changes that will take place as they get older, and also the different things they need to	▪ Students make charts and display them in the classroom.			

My Local Community						
Domains of Learning	**Domain Specific Objectives**	**Activities**	**Pedagogical Approach**	**Record of Achievement- (Class Profile)**		
				High	**Average**	**Low**
		think about and do in order to stay healthy.				
	▪ Engage in activities at home, at school and in the wider community to conserve resources and protect the environment	▪ Identify use or misuse of resources that pollute the environment	▪ Discuss how to improve on ideas, displays etc.			
		▪ Develop awareness of negative effects of one's own activities and decisions on wildlife and crops				
	▪ Respect and value materials, resources and the man made/natural environment.	▪ Students speak about the risk of damaging the environment through the actions of some individuals in the community	▪ Always draw from student's own experience.			
		▪ Develop a sense of belonging and insight into their natural/cultural heritage.				
	Discuss about their values and their role as citizen	Introduce the idea of conflict as it might be experienced within: • the family in the home; • the school and the classroom; • the wider community.	▪ Inquire into the values; help students themselves to discover their own faults and mistakes in reasoning. ▪ Students are encouraged to explore and share ideas about themselves, their family and the community to others			
	Develop a variety of coping strategies to deal with stress and peer pressure	Together teacher and pupils think about ways to avoid conflict and negative peer pressure in the first place. Students propose solutions to their own day to day problems- in school/ at home.	▪ Start with brainstorming. Allow students to express freely. ▪ Students are encouraged to reflect upon their own behaviour and identify instances of peer pressure that may be harmful. ▪ Teach students to criticize ideas, not people			
	Appreciate the benefits of regular physical activity	This includes planning a nature trail in the local community with pupils.				

12.11 **Assessment**

12.11.1 General Orientation

In conjunction with the spirit and general pedagogical orientation embodied in the document, we are strongly advocating a demarcation from the current summative and norm referenced assessment practices. Assessment, in the case of the prevocational students, must break away from the traditional regular classroom tests in which they have, often, not been very successful. Rather, a whole variety of assessment tools focused on revealing the strengths of students should be used. Emphasis should be placed on efforts produced by students and rather than being normative, assessment must compare the performance of a given student against his/her own past performance. The attitudes of the assessors/teachers are very crucial. Here, assessment should be primarily used for improving performance and discovering areas of weakness that need to be redressed through remediation rather than serve as a passing/failing indicator.

The acquisition of competencies, attitudes, predispositions and mindsets occurs gradually and is incrementally stretched over a relatively long period of time, is dependent on the process. Therefore, assessment must be predominantly formative, continuous, and also be related to the generic and specific skills to be developed and the understandings to be acquired.

Continuous assessment should be cumulative, involving the performance of the students over the three years of the pre-vocational programme. Given that most students suffer from low self-esteem and may have developed negative attitudes towards learning, towards school and towards life in general, importance must also be given to the evaluation of the affective domain. Individual and group counselling also becomes very important here.

12.11.2   Core Aims

Any assessment system adopted for the pre-vocational stream must lead to the achievement of Overall Learning Objectives and the Domain Specific Objectives. Apart from that and, as stated earlier in this document, pre-vocational education has two other basic aims. It should:

- In the first instance, provide the opportunity to those who have the potential to upgrade their academic performance so as to reintegrate the mainstream;

- Train students to acquire the basic knowledge, skills and competencies that would enable them to successfully follow the National Trade Certificate (NTC) Foundation Course

The assessment for the Pre-Vocational sector will also have to take into account two core factors:

First, given the profile of the pre-voc students and their limited success on academically-oriented competencies, an alternative and equivalent pathway has been defined in terms of generic work/trade related competences. Each learner will, on completion of the pre-vocational cycle, exit with a **statement of the level achieved in each set of Domain Specific Competences.** We are proposing a continuum along three levels of attainment on each domain specific outcome as described in Table 1. This continuum will range from level 1, denoting the minimum acceptable performance standards for each competence.

Secondly, keeping in view the need to develop basic employable skills which are generic and cut across all trades, it is proposed that the MQA establishes an equivalence between the competences of those leaving the pre-voc stream and the basic requirements for access to further vocational training.

Diverse assessment tools should include project works, log books, portfolios, showcasing, practical work, involving hands on experiences, role play, exhibitions, teacher observations and use of performance checklists.

De facto, teachers working in this sector will need to be empowered so that they are able to effectively select and use appropriate assessment strategies, keep record, take remedial measures and monitor learning. As the framework is proposing a shift from a content to a competencies based approach, relevant measures must be taken to ensure coherence among aims, expected outcomes, pedagogy and assessment. Such an approach also strongly relies on the ability of teachers to work collaboratively within and across departments to develop observation skills, to take leadership roles and to demonstrate creativity in organizing learning experiences. The use of projects will require that teams of teachers who have collaborated on various projects devise the assessment criteria and collectively evaluate student attainment.

MOE C & HR

PART III

Curriculum Framework
Secondary

TEACHING AND LEARNING

November 2009

13 Teaching and Learning: Our Beliefs and How to Get There

Successful teaching and learning implies the creation of schools that are based on a set of beliefs that places the learners" needs at the centre. Schools must show genuine commitment to those beliefs and seek to enlist the support of all stakeholders in this endeavour.

13.1 Our Beliefs

The success of any curriculum depends on a clear philosophy for teaching and learning that helps to translate the goals of the curriculum effectively in the classroom. The goals have themselves been based on a holistic, inclusive, meaningful and integrated approach to learning.

This section lays down the beliefs that should guide the thinking of the school staff, students and parents about teaching and learning. They are geared to the wholesome development of the learner. These beliefs, which are grounded in research, form the principles that can fuel our vision of schools, enabling all schools to unite for a common purpose. The job of the school is to ensure that all students learn well and master the established curriculum standards while seeking and facilitating the active collaboration of the home.

13.1.1 Success Breeds Success

Success is not an isolated event but is rather self-reinforcing and self-perpetuating. When students succeed in school, they learn that they are capable of success and are willing, in turn, to take on additional challenges.

13.1.2 Schools Control the Conditions of Success

Students" lives and opportunities outside the school do affect their learning. Schools should be prepared and able to help all students succeed, irrespective of their home background.

13.1.3 The Bell Curve Mentality must be Abandoned

We believe that each child is capable of success and, hence, must make a decided move away from a narrow statistical interpretation of how ability is „normally" distributed among our

student population. Schools must not only acknowledge that there are multiple paths for success and fulfilment, but also actively create opportunities for each student to succeed,

13.1.4 School Must Cultivate a Culture of Respect

For schools to be fully effective there has to be mutual trust and respect among all stakeholders. A three-way partnership among teachers, students and parents need to be established.

13.1.5 Schools Must be Responsive to Their Clients

Schools must be responsive to students and their parents through a genuine attempt to be flexible, inclusive, and welcoming. Students and parents must feel that schools are organised for maximizing learning opportunities for all the students.

13.1.6 Schools Encourage Cooperation Rather than Competition

Though schools welcome competition, they must have an environment that allows mutual support, team work and the sharing of expertise. The school culture must promote cooperation and collaboration rather than competition. Students must compete against themselves primarily and must be evaluated against standards of quality, rather than against the work of their peers.

13.1.7 The School Provides Opportunity For Links Beyond its Four Walls

Schools provide the opportunity for students to engage in learning and to make connections between school learning and real life situations. Parents can play an active role in encouraging their children to learn in such ways. Learning can also be enhanced by inviting guest speakers, and visiting museums and factories. Students thus get an opportunity to see their studies applied to the „real world‟.

13.2 How to Get There

To successfully implement an outcome driven curriculum that focuses primarily on the process of learning rather than on its product, and which seeks to integrate major learning areas through overarching learning outcomes is a significant challenge for all our educators. This calls for major changes in our approach to learning and teaching. In this section, the

principles which should guide learning and teaching to meet the demands of the new curriculum are spelt out.

These principles are based on contemporary research and professional knowledge about how learning can be supported.

They are based on the belief that the responsibility for student learning is not left solely on the classroom teacher but is the concern of a number of stakeholders, including Rectors, Heads of Department, Inspectors and parents. This, therefore, calls for a shared understanding by all stakeholders of the principles elaborated below. They are meant not only to guide individual classroom practices but to assist whole-school planning as well.

The focus is on the provision of a school and classroom environment which is intellectually, emotionally, socially and physically supportive of the learning of adolescents facing a crucial and critical phase of their life.

13.3 Addressing Learning and Teaching in Schools and Classrooms

It is proposed that the following principles drive our school and classroom practices; however they should be implemented in ways appropriate to individual schools.

Students are at the centre of all teaching- learning activities and are engaged in active learning.

Schools Place Emphasis on:

- **The Process:** students get the opportunity to be actively involved in the understanding and processing of the knowledge, skills and values they are expected to acquire.

- **Construction of Knowledge:** students are continuously helped to use their existing knowledge, to connect to new learning experiences and to reconstruct their understanding in the light of the experiences gained.

- **Risk taking:** students are encouraged to take calculated risks. They understand that mistakes are acceptable and often helpful in the learning process.

- **Teachers modelling right behaviour:** students observe examples of the „process, the products, skills or values" they have to learn. For example, teachers expose students to models of good writing as well as good values. Students are encouraged to respect and care for others as both the school environment and school community at large reflect these values.

- **Practicing the right behaviour:** students get the opportunity to practise the skills they have acquired in order to improve their performance.

- **Learning rather than teaching**: the focus should be to establish the necessary intellectual, social and physical conditions that would enable students to learn optimally both in the school and within the classroom. Creating a caring, safe and secure environment where there is discipline motivates students to learn.

The success of a learner-centred process based approach depends to a large extent on student motivation. This calls for a deep understanding of the motivational strategies by the teacher and of their rational application both in classrooms and school contexts.

Teachers Strive to:

- **Involve students:** teachers strive to involve students in activities that are purposeful and meaningful. Teachers help students to see the immediate outcomes of these activities or, in case they have long term goals, they make students aware of how their efforts and learning experiences are related to these goals.

- **Provide appropriate learning experiences:** Teachers relate activities to the level of maturity and cognitive development of students.

- **Engage students in challenging tasks and help them succeed**: Tasks that are either too easy or too difficult reduce student involvement. To maximize their participation, the task must be pitched to a level which will give them the opportunities to celebrate success.

Students Should be Trained to Become Reflective, Autonomous and Life-long Learners.

The essence of a learner-centred philosophy is to train students to become reflective, skilfull, autonomous and life-long learners. This requires the implementation of a number of policies and practices both at the school and the classroom levels.

Students:

- **Assume responsibility:** Students learn how to organize and assume responsibility for their own learning and eventually become lifelong learners.

- **Understand that learning is an active process on their part:** They are offered learning experiences that allow them to carry out relevant activities, for example, doing, imitating, planning, experimenting, testing, creating, rehearsing and, more importantly, reflect on them to improve their future performance.

- **Use language** as a tool for reflection and for their own learning.

- **Work individually and collaboratively:** Working individually permits the personal grasp of concepts, processes and skills, while working in groups enables students to be challenged, clarify ideas, interpret and use appropriate language and explain an idea to others, thereby improving their own cognitive structure.

- **Reflect on their own learning**: Students are allowed some flexibility in determining how they should organize their learning, and develop self management skills.

- **Value learning:** Students recognise the importance of learning, and continuously set higher targets for themselves.

To attain the above objectives, there is a need to rethink and reorient the school day; the time table should be organized to allow ample time and opportunities for its implementation.

13.4 **Coping with Individual Difference and Inclusively**

Students come to school with a variety of experiences determined, for example, by their culture, their pattern of socialization, their abilities or disabilities, their previous education and so on. They may develop at different rates and learn new ideas at the slower or faster pace. They may have different learning styles, they may prefer to work individually or collaboratively, cautiously or adventurously, laterally or in linear fashion; they may differ as well in their types of intelligence. The curriculum must offer adequate scope to all, irrespective of their preferred learning style.

All the above points to one conclusion: *the same thing taught in the same manner over the same period of time will benefit only one group of students, those who can adjust and adapt at the expense of those who cannot.*

To provide for the diversity of learners, the following are essential:

- **Teachers provide diverse experiences to students:** Teaching is adaptive, acknowledging, respecting and accommodating the diverse experiences students bring to the classroom

- **The school and the teacher implement a differentiated pedagogy:** Schools and teachers provide   a rich variety of learning opportunities which would enable students to build on their existing experiences and personal strengths based on their learning styles.

- **Schools provide due attention to special and remedial education:** Schools cater for the needs of those requiring remedial and/or special education.

- **Teachers cope with mixed ability classes.** Teachers understand that the profile of the students will vary and prepare their lessons in a way that responds to the learning needs of every single student.

13.5 **Provision of a Supportive Learning Environment**

- **School provides necessary physical resources that enhance learning:** The school provides for the whole range of physical resources needed to enhance learning, including space and equipment, print and other materials and useful technology.

Students" learning, their level of intellectual involvement, the values and attitudes they develop towards learning, towards school life and towards the world of adults as a whole are significantly influenced by the quality of the school and the classroom environment they experience.

The learning environment within the school must provide for the intellectual, social and physical conditions that support learning. Such an environment displays the following characteristics:

- **Students are supported:** Students are helped to develop healthy attitudes such as willingness to work hard, to persevere and be consistent and honest.

- **Students are encouraged to take risks:** Students are allowed to learn through trial and error; they are encouraged to take risks and treat error as part of the normal learning process.

- **Students feel respected and cared for:** A feeling of respect and care permeates every aspect of school life. Students" views are sought and respected. Rules and regulations of the school are based on consensus.

- **Students feel protected:** The school environment is free from harassment, teasing, sarcasm or remarks that stereotype or denigrate students, their effort or their product. Teachers build positive interpersonal relationship with their students and are able to bond with them.

- **School is sensitive to inequality issues:** Everyone in the school is sensitive to and strives to eliminate discrimination based on gender, cultural differences, family background and individual differences.

- **School provides pastoral care:** The school has a pastoral care policy involving the whole school community and aims at improving the welfare of all students.

- **School is geared to reform, not retribution:** Schools put in place a system for dealing with deviance, aiming at reform rather than retribution.

- **School embraces the principle of inclusive education**: It caters for special learning needs of all students.

13.6 **Emphasising the Holistic Nature of Learning**

In spite of the fact that children"s learning is usually classified under the cognitive, affective and psychomotor domains, schools and teachers have always been overemphasizing the cognitive domain, thereby leading to a lopsided development of students. The affective domain remains largely unaddressed. The effect of a lack of attention to emotional literacy is clearly visible in society today.

Schools Must Cater for Holistic Learning. The Following Are Essential:

- **School ethos:** The school provides for the acquisition of desired values through the clear enunciation and communication of a school ethos that is visible in its daily activities and practices of all school personnel.

- **Education for emotional development**: The school is sensitive to the emotional state of its students and strives to attend to their emotional needs and development.

- **Teacher as a model:** Every teacher, through her/his interpersonal relations with the students, through her/his code of ethics and through her/his general behavior serves as a model to inspire students to behave in morally desired ways and according to values acknowledged by the society.

- **Teachers help students to integrate knowledge:** In addition to catering for all the three domains of learning, teachers strive to make connections between apparently unrelated ideas, experiences and different areas of knowledge in a meaningful manner. Teachers emphasize the interconnectedness of knowledge, skills and values, both within and across different learning areas.

13.7 Special Educational Needs: Addressing Children with Learning Difficulties

One of the guiding principles of this curriculum is the promotion of an Inclusive approach to Education while offering opportunity and fairness to everyone. Mauritius, like many countries, supports the UNESCO Salamanca Statement (1994) on Inclusive Education.

In our system, learners with severe learning difficulties generally attend Special Schools. In mainstream secondary schools, learners with Special Educational Needs are those who have moderate learning difficulties. These students will succeed when they are fully included and participate in the classroom. This curriculum aims at providing effective opportunities for all students to learn and achieve success.

In planning and teaching, educators will have the responsibility for
- Setting suitable learning challenges for all children.
- Responding to diverse learning needs of students.
- Overcoming potential barriers to learning and assessment for individual and groups of students

In planning teaching and assessing, the curriculum for students with Special Educational needs, schools will be responsible for:
- Identification of learning difficulties.
- Assessment of learners with learning difficulties.
- Provision of remedial teaching.
- Monitoring and record-keeping of students" progress.
- Working with parents and other support services.

13.7.1 Identification and Assessment

Throughout secondary schooling, assessment will be continuous, formative and diagnostic. This will enable the teacher to identify those children who experience difficulties in learning earlier on in the process and who need additional support to access the curriculum.

Assessment will include a mapping out of the strengths and needs of learners on which remedial support will build.

13.7.2 Provision

Supporting children with learning difficulties is above all „Good, explicit teaching. Basic classroom strategies can prevent general underachievement in the curriculum:

Educators

- Plan lessons well
- Tell students what they want them to achieve by the end of the lesson
- Give students an idea where learning is taking them
- Offer students a range of small tasks with clear learning targets
- Keep instructions clear and short
- Mix individual and group work
- Use praise consistently
- Use differentiation to meet diverse learning needs
- Make use of summaries
- Review what has been learnt at the end of the lesson by listening to the students

13.7.3 Additional Support

For those students who, in spite of the regular provision, are failing to progress , individual and small group remedial work may be required .This will involve setting learning priorities for each learner, differentiating the curriculum on the basis of Learning Styles , Multiple Intelligences, Specific Needs (physical, psychological, social)   while accommodating the „different„ ways, rates, and levels according to how children go about their academic and social learning in school. Teachers will thus act as mediators of learning who support students in their learning.

13.7.4 Monitoring and Record Keeping

Close monitoring of students‟ progress will be an essential component of support provided to children. Records of how the student is responding to the intervention provided will enable the teacher to review his teaching and try other strategies .

13.7.5 Working With Parents and Other Services

Collaboration with parents and other support services such as the School Psychological Service, Child Development Unit, Educational Social Workers will be enlisted whenever the need arises.

The aim is for the school curriculum to provide opportunities for all students to learn and succeed while affording them the opportunity to achieve their individual potential.

13.8 Conclusion

A new outlook is proposed. This section has spelt out ways through which good practices can be developed and become part of the normal teaching and learning activities in our schools. It drew from research and practices that already exist, to some extent, in our schools and laid down the foundation for making schools become real learning communities fully committed to the overall development of every single student.

This approach should help to make the schools a place where children feel safe and supported in their learning. It is based on the premise that new problems and issues need strategies that value the contribution of each stakeholder. The approaches proposed seek to bring change through consensus among all stakeholders, consensus that emanates from agreed policies and a shared view on the day to day functioning of our schools. If properly understood, and if schools are helped to move in the directions proposed, schools should be able to respond more positively to the reality and expectations of the new generation.

14 Integration: A Model for Learner-Centered Teaching

Children acquire varied skills naturally while growing up in their environment. They also observe life and the world around them. When imported into classrooms, their questions and queries can enrich the curriculum and make it more creative. In the context of a fast-changing world and a competitive global context, it is imperative that we respect each learner"s wisdom and imagination, and provide opportunities to cultivate each one"s creativity.

A reform that acknowledges this fact will also facilitate the practice of the widely acknowledged curricular principles of moving from „known to the unknown", from „concrete to abstract", and from „local to global".

In light of the above, it is necessary to agree on a model of teaching that incorporates the concerns and needs of the learner, as well as present knowledge as an integrated whole, rather than disjointed subjects to be learnt because the curriculum or the teacher so decides. It is also important that all teachers be well tuned with the preferred approach for teaching in a meaningful manner.

However, it is also understood that no reform can succeed without the informed support of all stakeholders. It is, therefore, proposed as a step forward, that an integrated model be gradually incorporated in the curriculum. It is proposed that schools move towards this model, though a drastic change is not envisaged in the short run.

For the sake of clarity, a practical example is provided for ways in which knowledge can be transmitted in an integrated manner.

The Pre-condition for Such a Curriculum Are:
- Teachers agree on common themes.
- Teachers plan their work so that they address common themes.
- There are clearly stated achievement targets so that the students have a clear idea of the tasks ahead, as well as how they will be assessed on such tasks.
- Teachers collaborate so as to support each other and arrive at a consensus, depending on their specific contexts and constraints.

Advantages:
- There is flexibility to engage students in individual and collaborative tasks.

- Both students and teachers have evidence of the work undertaken through a portfolio.

- Teachers can provide assessment tasks centred on the student portfolio and thus reduce the pressure for end of year examinations

- The student portfolio would also facilitate follow up by parents at home.

14.1 An Integrated Model of Teaching and Learning

Note: The starting point for planning and teaching will be the learning area indicated in Bold & Italics.

THEME	ART	LANGU-AGES	HISTORY	GEOGRA-PHY	SOCIOLOGY	BUSINESS STUDIES	MATHS	SCIENCES	TECHNOLOGY	VALUES
Ancient Egypt	*Make painting/arte-facts (mask) of ancient Egypt*	Discuss Ancient Egyptian civilization. Talk to each other about Ancient Egypt Perform a role play to depict an aspect of life in Ancient Egypt	Learn about the history of ancient Egypt	Situate Ancient Egypt and discuss (about) the river valley civilisation	Study family status and stratification system in Ancient Egypt. Discuss life in traditional societies	Initiate students to the nature of business in Ancient societies	Learn about Mathematics in Ancient Egypt	Identify materials of interest in Ancient Egypt and discuss their nature.	Discuss distinctive technology of Ancient Egyptian time	Learn to value the contribution of ancient civilisations
Beauty	*Students draw a scene of their choice*	Student label, talk about and develop writing skills with the help of the drawings. Eg: they write a	Students find examples of drawings from Ancient Egypt and discuss them	Identify a theme from the various drawings that have bearing on geograp-hy	Discuss the perception of beauty in ancient societies	Introduce children to the idea of modernizati on through themes identified in the drawings. Show how modernizati	Students use drawing to understand the concept of dimension, space, perspective and so on.	Students study colour, the colour wheel, materials used in paintings	Identify aspects of drawings such as texture, design patterns etc.	Discuss likes and preferences of students

		paragraph on different aspects of the drawing.				on is likely to affect business ethics and practice				
Settlement	Draw ancient and modern buildings	Comprehension and essay writing on settlement.	*Settlement in ancient time*	Changing nature of settlement in modern times	Changing nature of settlement and the impact on family and social life	Identify ways in which settlements create business opportunities	Use plans of ancient civilization to study mathematical concepts	Study scientific principles involved in construction works.	Identify the use of materials for construction in different times	Explain changing values affected by the nature of settlement
Food	Make drawings to display healthy eating habits and balanced diet.	Discuss and write about food habits, food across the world Explore food habits that vary widely from each other	Identify examples of eating habits in different historical periods	Explain how food habits are based on geographical factors such as climate, availability of food, etc..	Social and cultural norms expressed through food and eating habits- variations with regard to religious beliefs. . Changing norms in society today. Food habits across the world	Identify different businesses associated with food Explain implications for local and international trade	Calculate calorific values of food for various categories of people: of different ages, healthy & sick people, etc..	Discuss food chain, properties of plants and plants as living organisms.	*Nutrition Food habits*	Necessity to value each norm and value concerning food habits

MOE
C &
HR

PART IV

Curriculum Framework
Secondary

ASSESSMENT

November 2009

15 ASSESSMENT AND EVALUATION

15.1.1 Introduction

The prosperity of our country is dependent, to a large extent, on its human capital. To succeed in a rapidly changing world, individuals need to develop a lifelong learning culture. Education systems need to lay strong foundations for this by fostering appropriate knowledge and skills, and strengthening the capacity and motivation of young adults to engage in effective learning for life. Assessment has a significant role to play in ensuring that these objectives are attained. It provides a framework within which standards may be set and students" achievement and progress charted. **Owing to the backwash effect of examinations, the choice of the assessment modes to be employed should judiciously be made to sustain learning**. All the domains of education, i.e., the cognitive, affective and psychomotor, have to be assessed in order to make the teaching-learning process effective.

The assessment of the student"s performance has so far been characterised, on the one hand, by external examinations administered at three points in the educational system, namely at 11+, the Certificate of Primary Education (CPE) examinations; at 16+, the SC/CGE „O" Level examinations; at 18+, the HSC/ GCE „A" level examinations; and, on the other hand, by formal end-of-term tests and end-of-year examinations, which are school-based.

15.1.2 The Proposed Framework

The curriculum framework proposed is **outcome driven, process based** and attempts to integrate the knowledge, understanding, values and attitudes from various learning areas so as bring about holistic learning. Such an approach, which is new for the Mauritian public school, calls for a new system of assessment. This issue has been comprehensively dealt with in the Curriculum Framework proposed for the Primary level. The same philosophy and approach are adopted for the Secondary level.

15.1.3 **Assessment**

There are different methods and approaches that can be used for assessment. These methods will depend on the goals set for the programme and the subject that is being taught. Assessment can be both in the formal or informal modes. Formal assessment is a set of procedures for gathering information about the learners. They should be created with special care and closely match the competencies in the curriculum. Depending on the level, formal assessment is usually graded and recorded. A variety of techniques such as:

- Short tests
- Quizzes
- Oral examinations
- Performance assessment tasks
- Tests and examinations
- Projects
- Portfolios

Informal assessment serves to gather information about learning that teachers frequently use on the spur of the moment or casually during classroom activities. They are meant to provide useful information to help in the teaching and learning process. Informal assessment is not graded or recorded, and the ways to carry it out can include the following:

- Questioning a learner
- Observing a learner"s work
- Reviewing a learner"s homework
- Talking to a learner and listening to a learner during a recitation

Both formal and informal assessment carried out on a regular and continuous basis as forms of continuous assessment will be encouraged.

15.1.3.1 Assessment for Learning

Assessment should be driven by the curriculum and not the other way round as it is presently. The learning outcomes should be the criteria used as guidelines for assessment.

Since the curriculum highlights the process rather than the product of learning, the focus of assessment should be on assessing the multidimensional aspects of learning as it is taking place in the classroom. Formative and continuous assessment must be given more emphasis. (Annex 1)

- Formative assessment is qualitative by nature and involves a range of activities from mere informal social conversation between teachers and students to more formal classroom tests. Such activities can include concept maps, games, drawings, posters, graphic organisers, news reports, matching exercises and so on.

- Formative assessment enables the development of critical thinking skills. It enables a departure from a traditional approach to teaching and learning to an innovative pedagogy that encourages lateral thinking. [1]

- Formative assessment is based on the principle that any child is likely to make mistakes in the process of learning. Teachers must be able to identify mistakes and errors in thinking and understanding which would serve as a basis for planning future learning and target setting. It should also allow for timely remediation of learning in the classroom.

- Formative assessment offers to teachers the necessary information regarding the level and nature of competencies developed by children at the very beginning of secondary education; this should be useful in planning the objectives to be targeted for respective levels.

- Given that formative assessment can take diverse forms and is based on individual judgment, there is always the danger that the teachers" biases, perceptions and expectations may unconsciously affect the objectivity of the assessment. To overcome these shortcomings, we are proposing that provision be made for internal

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[1] Posing Questions that encourage lateral thinking: an example
Draw the beak of a Dodo. Based on the shape of the beak, explain what were the likely food habits of the Dodo. How were the wings of the Dodo?
Taking into consideration the answers to the two above questions, can you deduce why the Dodo became extinct?

moderation within the school while adhering to high ethical standards and code of conduct.

15.1.3.2 Assessment of Learning

While formative assessment is necessary in the teaching and learning process, it is recognised that students must attain a set of competencies which is publicly and objectively visible both for students and all other stakeholders. However, summative assessment should not be solely used for certification purposes since they take place at various levels before students leave school for the world of work. They can offer a large range of information regarding the level attained by individual students in one school as well as the average level of competencies of one school compared to the national average. These data should be used for both remedial actions and educational reform projects which can be implemented in everyday classroom practices, pending major national reform projects.

Summative assessment will consist mostly of formal continuous assessment which determines whether the stated outcomes for each level and each learning area are being attained. This will be multi-faceted and will use several measurement devices such as curriculum embedded tests, term wise assessment, projects (see annex). These will be school based in Forms I and II. The following structure is suggested:

> Term 1: 20%
> Term 2: 30 %
> Term 3: 50%

In Form III, learning outcomes will be assessed at school level in all learning areas for terms 1 and 2. The following weights are suggested:

> Term 1: 20%
> Term 2: 30%
> End of year: 50 %.

15.2 **National Certificate of Achievement**

In line with the National Policy Document, students at the end of Form III will be initially assessed at national level in literacy in English and French, Numeracy, ICT and Social Studies, leading to a National Certificate of Achievement. This certificate will provide a statement of the level achieved by each student in these core competencies. Each and

every child at the end of Form III will be awarded this certificate that recognizes his or her achievement, independently of the level achieved. It will not be a selective exam nor one which pits students against each other. It will provide an opportunity for students of either the pre-vocational or the main stream to switch pathways if they so wish.

In additional to the NCA, it is also proposed that the school provides each student with a statement which records his/her achievement in key competencies as enunciated in the Overarching Learning Outcomes. This statement will describe, for example her/his ability to work in a team, to solve problems, to take initiatives, to interact with peers from other cultural backgrounds or to participate in creative activities. Evidence can be available through records of various forms of activities which students engage in throughout the years. This profile can be used by prospective employers who will be able to match their skills more appropriately with the job requirements.

15.3 End of Form V Examinations.

While keeping the option of Cambridge examinations, possibility for offering alternatives to the existing examinations will also be explored; this will include the possibility for students to sit for the International Baccalaureate examinations.

15.4 Teacher and School Preparation

The success of the assessment reforms depends on the teachers" ability to bring about the concomitant changes in their practice. To empower them to achieve the desired targets, adequate emphasis must be laid on their training and continuous professional development. Notwithstanding these provisions, school based assessment also necessitates a change in the attitude and disposition of all stakeholders. Since responsibility for assessment gives more autonomy and decision making power to principals and rectors, the latter must be induced into these roles so that they develop a support system for teachers across all the schools. The proposals formulated in this document imply a transformation in the ways schools function and the ability for every single agent in the entire cogwheel of assessment to display high ethical and professional standards.
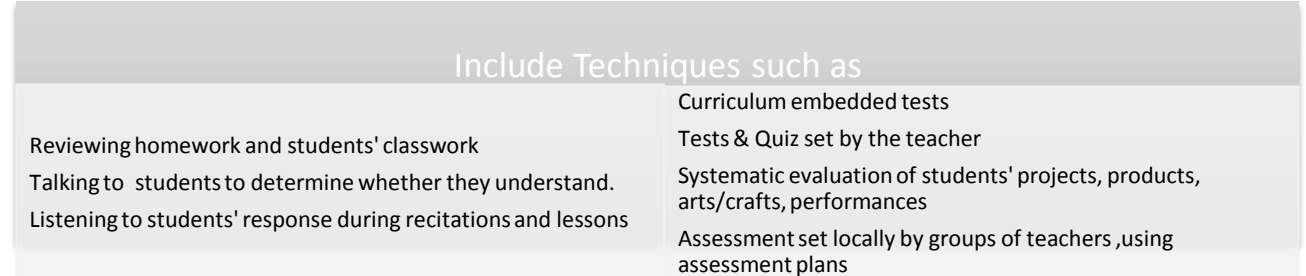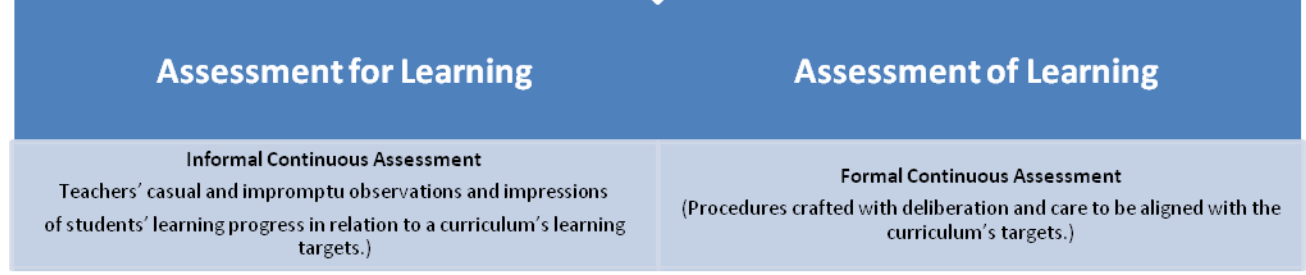
15.5 **Conclusion**

Assessment in education serves diverse purposes. However, the priority of the government and the aim of ALL reforms are to ensure that no child is left behind. The inclusion of continuous assessment in our education system is a step forward to achieve this objective. Continuous assessment, which can be complementary to the end-of-year summative assessment, must help to reduce students" anxiety about sitting for a high-stake exam at the end of the academic year which, on its own, may not reflect the aptitudes, skills and knowledge gained by the student throughout the year. The continuous assessment method should thus be designed to monitor achievement throughout the year, thus providing a means to assist teachers in taking remedial measures immediately if needs be.

It is important to ascertain that teachers have a sound understanding of continuous assessment. They will be empowered to develop the relevant skills so as to be able to effectively implement assessment in schools.

Annex1: A Framework for Curriculum Based Continuous Assessment

(continuous Assessment that is alligned with the learning outcomes stated in the official curriculum for each subject

Continuous Assessment for formative purposes

(Provides the teacher with information to guide a student's learning from day to day.)

Continuous Assessment for summative purposes

(Provides teachers, students, parents, and school officials with information they may use to draw conclusions about how well a student has attained the learning targets of the official curriculum.)

Assessment for Learning

Informal Continuous Assessment

Teachers' casual and impromptu observations and impressions of students' learning progress in relation to a curriculum's learning targets.)

Assessment of Learning

Formal Continuous Assessment

(Procedures crafted with deliberation and care to be aligned with the curriculum's targets.)

Include Techniques such as

Reviewing homework and students' classwork

Talking to students to determine whether they understand.

Listening to students' response during recitations and lessons

Curriculum embedded tests

Tests & Quiz set by the teacher

Systematic evaluation of students' projects, products, arts/crafts, performances

Assessment set locally by groups of teachers ,using assessment plans

Become the basis for

INSTRUCTIONAL CONTINUOUS ASSESSMENTS

(Formal and informal assessment results are used on an ad hoc basis for monitoring students' progress through the units of instruction)

- Identifying a student's learning problems on a daily and timely basis.
- Giving immediate feedback to a student about her/his learning. (Not used as a basis for term or year grades.) (Not recorded in a student's official records, but a teacher may wish to record these assessment results for her/his own purposes.)

OFFICIAL CONTINUOUS ASSESSMENT

(Marks are formally weighted and combined according to a prescribed formula to be used to determine one ormore summative, continuous assessment grades for a term or for the entire school year.)

- May be used in identifying students' strengths and weaknesses on a periodic basis.
- Periodically reporting to parents a student's progress over a relatively large segment of the official curriculum (i.e. report card).

- Forming the basis for term and year grades.
- Officially recording a student's progress in attaining the curriculum's major learning targets (i.e. permanent record card).
- For certification purposes, combining the summative grades with certification examination results for:
  (a) certifying students
  (b) selecting students for next level of schooling