

THE NEW 21ST CENTURY NATIONAL CURRICULUM BRUNEI DARUSSALAM

1. INTRODUCTION

The school curriculum and assessment are an integral part of any education system. The school curriculum is defined as the set of learning experiences to be provided to our students necessary for achieving the aims of education in Brunei Darussalam. It sets out a clear framework to teaching and learning as aspired by the country education vision and mission. It sets out what we want students to know and to be able to do. We want our students to be lifelong learners who are confident and creative, connected, and actively involved. It sets out values that are to be encouraged, modelled, and explored. It also determines how our students' performance will be assessed and reported. It gives teachers, students, parents, employers and the society a clear and shared understanding of the knowledge, skills and values to be gained at school. We are offering our students the most effective and engaging learning experiences possible, and supporting them to achieve to their highest potential and to be successful citizens of Brunei Darussalam in the twenty-first century.

The school curriculum and assessment will operationalise the key development and design strategies for quality education envisioned in the education document through the provision of a balanced, relevant, differentiated and dynamic curriculum. This is to be achieved through the provision of a differentiated curriculum comprising 8 key learning areas. The key learning areas provide the broad knowledge domain in the development of knowledge, skills and values.

2. PRINCIPLES, ACHIEVEMENTS AND STRENGTHS

School education in Brunei Darussalam since the country gained full independence and before, has contributed greatly to the economic and social development of the country. The products of the educational system have to a large extent met the manpower requirements of the country. Much of the social harmony, peace and tranquillity that we enjoy in the country can be attributed to the educational system that has inculcated these values.

a. Notable features of the existing school curriculum are as follows:

- i. The school curriculum has been characterized by a collection of school subjects and syllabuses produced by the Curriculum Development Department and the Syllabus and Textbook Committees. Public examinations, however, are administered by the Examination Department.
- ii. Greater attention was given to the expansion of education for all. With the expansion of education for all, the need to cater to pupils of varying abilities has become important. Hence vocational and technical education was expanded to respond to these changes.
- iii. The Curriculum Development Department meanwhile is engaged in works which respond to the needs and requirements of the Ministry of Education in providing education to all levels and groups. Improvements and adjustments were made to

existing subject curricula in response to social changes and needs. New curricula were developed for civics, history, science and mathematics. Many projects were introduced to further improve instruction and learning in schools. The RELA project for English language learning and the CoRT thinking project are examples of such projects.

b. The Issues

Although the existing school curriculum and school education has served the country well, rising expectations and global challenges of the 21st century has been exerting great pressure on the need to equip students with 21st century skills. Among issues that need to be addressed are:

- i. Societal expectation towards whole-person development.
- ii. Education in Brunei Darussalam is seen as an on-going effort towards developing the potential of the individual in a holistic manner, so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced, responsible and with high moral standards. In line with this national vision, school education should aim at developing the potential of the individual in a holistic, balanced and integrated manner so that the individual is able to cope confidently with the needs and demands of daily life in a technological and information rich society.
- iii. Learners should be equipped with the relevant 21st century skills. An issue that is of concern to educational planners and policy makers all over the world is whether the products of the school system are able to meet the manpower requirements of the country in science, mathematics and technology both in terms of quantity and quality in the coming years. The demand for highly skilled workers is accelerating rapidly.
- iv. Educational planners and policy makers see it as key subjects such as Science, Mathematics, Languages and ICT in the development of scientific and technical literacy within the work force that is essential to economic and industrial development of the country. Today these subjects have taken on added importance with the proliferation in the use of computers and the emergence of the k-economy. It has been said that in the k-economy, human capital will be more highly priced than financial capital. The well-skilled and ICT savvy individuals will gain the upper hand in such an environment and the others will be left behind. To what extent can our school education equip individuals to cope with the challenges and the requirements of the 21st century?
- v. There is a need to move away from terminal examinations to more school based assessments. In the current education system, the national curriculum is basically examination oriented. The examinations which pervade through the system are usually held either at the end of a term, mid-term and end of the year, and are conducted mainly for the purpose of familiarising and drilling students with testing skills in preparation for high stake public examinations.

3. THE NEW 21st CENTURY NATIONAL CURRICULUM FRAMEWORK AND MODEL

The curriculum will be broad, balanced, relevant and differentiated, and takes into account each individual's strengths and weaknesses whilst making provision for progression and

continuity. It is intended to be responsive to the changes in the society and the economy, and will lead students towards life-long education. SPN21 places the learner at the heart of teaching and learning based on an appreciation of the students' individual needs. Optimal opportunities will be provided to accelerate individuals who can progress faster whereas special guidance will be given to individuals who need help.

The Curriculum Framework and model presented in Figure 10 and Figure 11 act as a platform for developing the curriculum and assessment in the new education system.

Figure 1: THE CURRICULUM FRAMEWORK (SPN 21)

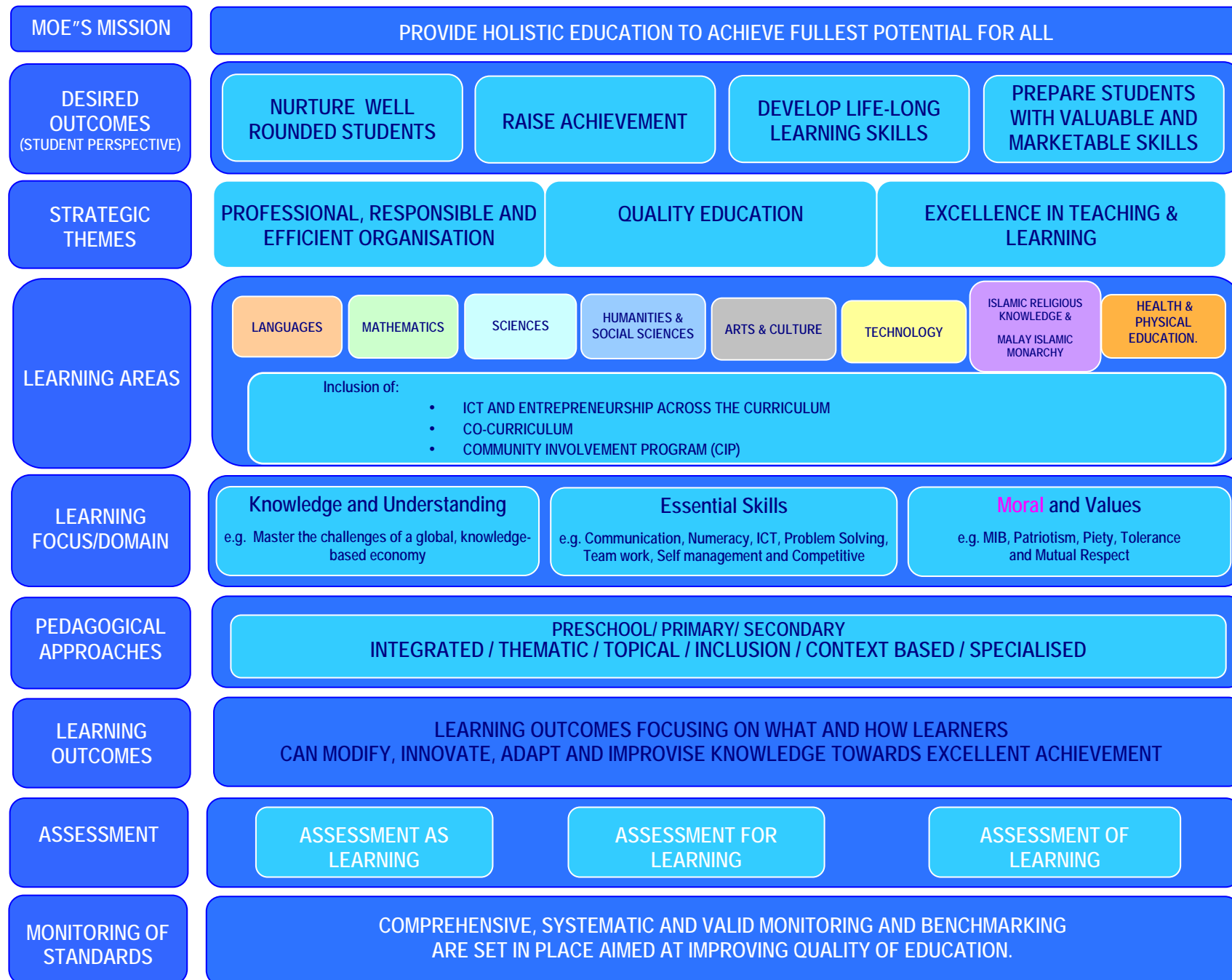
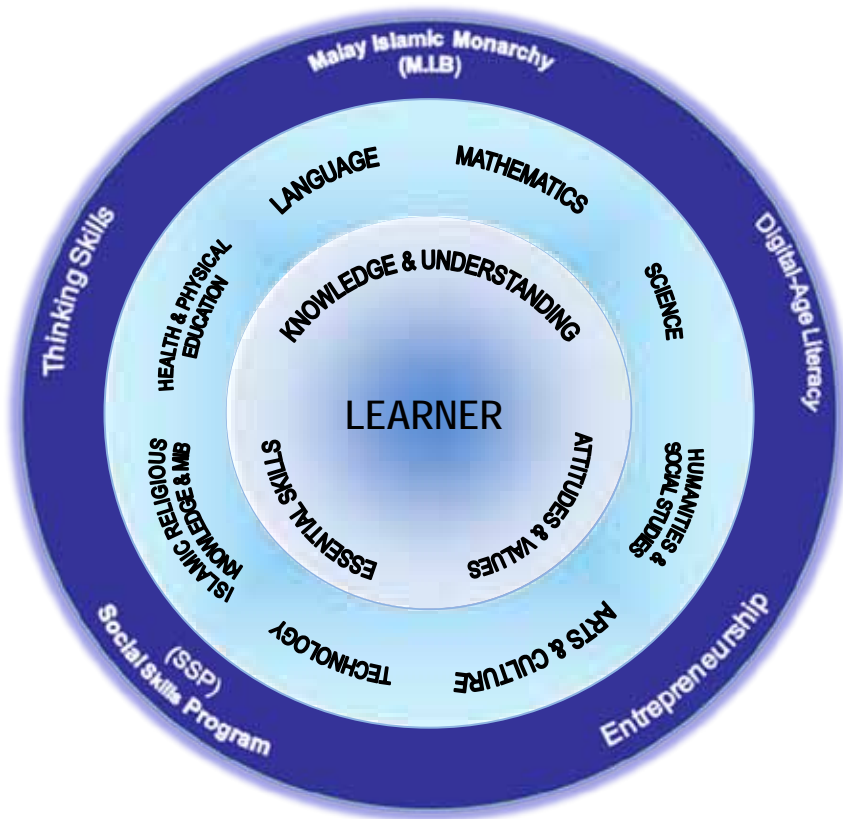


Figure 2: The National Curriculum Model



CORE CIRCLE

The core of the model is a holistic education which is the goal of the curriculum. It is based on the premise that the individual student/learner is at the centre of all teaching and learning. The curriculum model aims to provide:

- an all-round development of the individual;
- opportunities to enhance individual strengths and abilities;
- a well-balanced education which allows students to draw on a wide range of knowledge areas and learning experiences;
- Knowledge and Understanding, Essential Skills and Attitudes and Values form the main domain of the teaching and learning process.

MIDDLE CIRCLE

These Learning Areas are central in providing holistic education which stems from the SPN21 curricular aim. The teaching and learning of these subjects is to be learner-centred. This curriculum model aims to achieve the following,

- provide opportunities for all-round individual development
- provide opportunities for reinforcing and enhancing individual strengths and abilities;
- provide a balanced education, enabling learners to draw on the knowledge and learning experiences from various subjects;
- provide context in eight learning areas for the acquisition of knowledge, essential skills, attitudes and values.

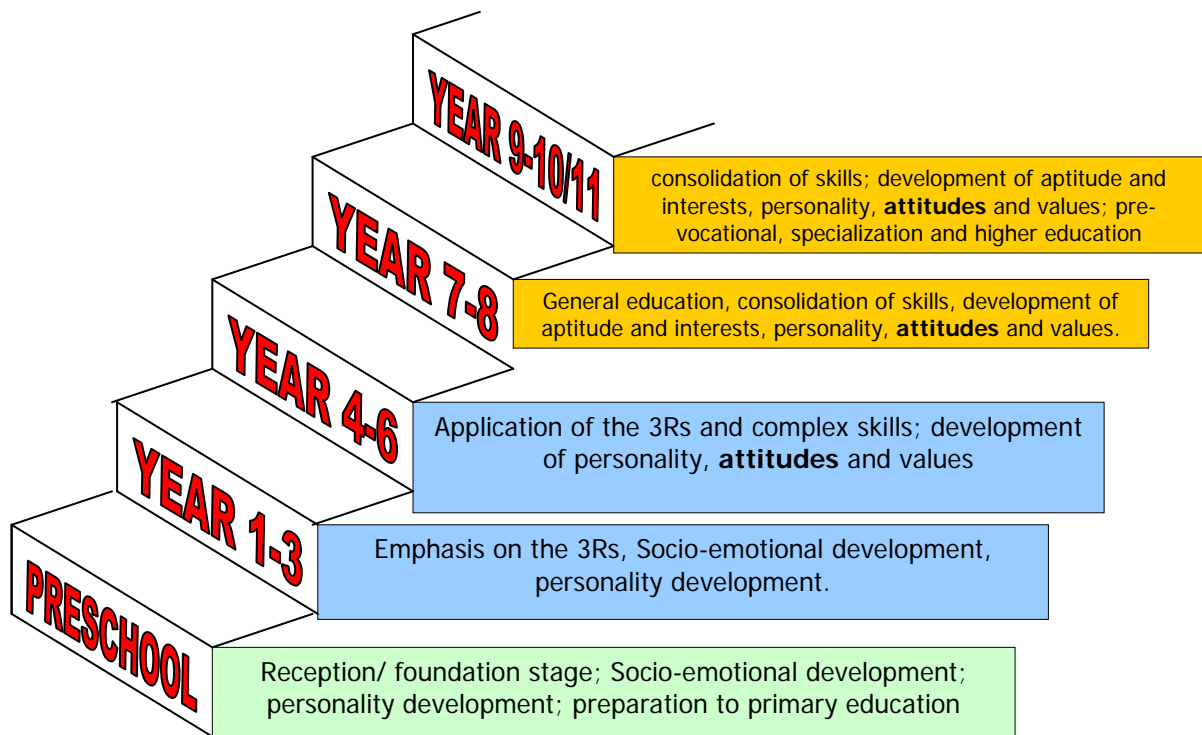
OUTER CIRCLE

This represents the infrastructure of the curriculum model. It defines five major elements which steer the student’s perspective and understanding embedded /across the curriculum involving:-

- MIB as the state philosophy;
- Social Skill Programmes (SSP) as the ability to work with others in harmony and respectfulness;
- Thinking Skills as key feature of learning;
- Digital Literacy as essential learning tools; and
- Entrepreneurship as active learning that develops transferable skills of all kinds in relation to actual business and to real life.
- Co-curriculum as an augment to a holistic education

3.1. Stages of schooling and student development

The new SPN 21 curriculum has identified the smooth transition and continuous curriculum from preschool to primary and to secondary level in a developmentally appropriate setting as shown in Figure 3.



i. **Preschool:**

Reception/ foundation stage; Socio-emotional development; personality development; preparation to primary education.

Five major aspects will be taken into account in the teaching and learning process at the preschool education stage so as to provide opportunities to children to,

- enjoy exploring things around them
- develop physically, emotionally and socially
- develop cognitively and intellectually
- develop their language skills
- express their creativity and enjoy participating in creative activities.

ii. **Year 1 to Year 3:**

Emphasis on the 3Rs, Socio-emotional development and personality development will enable learners to:

- master basic skills in reading, writing and numeracy and develop an interest in and a habit of reading
- develop social skills and cooperative attitudes, mutual respect for others, reasoning ability and problem solving skills
- be equipped with basic skills of utilizing ICT to learn

- be engaged in explaining concept, recognising objects and ideas, and in creative works.

iii. Year 4 to Year 6:

Application of the 3Rs, complex skills and knowledge, development of personality, attitudes and values aim to enable learners to:

- master basic reading and writing skills and be able to read and communicate effectively at a higher level, both orally and in writing.
- master basic understanding of scientific and mathematical concepts;
- participate actively in group life and develop emotional health and physical fitness
- develop basic learning, reasoning and problem solving skills and learn to look for various learning resources and obtain knowledge independently.
- develop positive values and attitudes, to learn to care about the society and environment and to identify themselves with their nation, and ,
- appreciate beauty and arts.

iv. Year 7 to Year 8:

General education, consolidation of skills, development of aptitude and interests, personality, **attitudes** and values aim to enable learners to:

- learn independently;
- be confident in applying ICT in learning;
- develop capability for reasoning, problem-solving, knowledge application and creativity;
- master the Malay Language and the English Language;
- experience all round development in academic, social and cultural arenas.
- master basic concepts in all key learning areas;
- develop a deep love for the country Brunei Darussalam and a good understanding for the mib philosophy
- develop health consciousness,
- develop interest in arts and aesthetic appreciation

v. Year 9 to Year 10/11:

Consolidation of skills; development of aptitude and interests, personality, **attitudes** and values; pre-vocational, specialization and higher education aim to enable learners to:

- establish a sound foundation of skills in preparation for life-long learning;
- develop a solid grounding in science, mathematics, languages and other learning areas in preparation for higher education;
- develop an understanding and a foretaste of the career to be chosen and of the job market;
- enjoy and possess the ability of aesthetic appreciation.

3.2. Key Learning Areas

The SPN 21 curriculum specifies eight key learning areas which describe in broad terms the knowledge and understanding that all students need to acquire. The eight learning areas are:

- i. Languages,
- ii. Mathematics,
- iii. Science,
- iv. Social Science and Humanities,

- v. Arts and Culture,
- vi. Technology,
- vii. Islamic Religious Knowledge and Malay Islamic Monarchy, and
- viii. Health and Physical Education.

All the key learning areas aim at nurturing learners so that they become intellectually, spiritually, emotionally and physically balanced individuals. The delineation of the key learning areas has taken into account the cultural, socio-economic and technological needs of Brunei Darussalam. Subjects are derived from these learning areas for three levels, preschool, primary and secondary. The eight key learning areas have provided the structure for organising the curriculum into several sections. They include subjects, modules, and project works that cut through the learning areas. Figures 13 to 18 show the domains of learning offered at the various levels of schooling.

Figure 4: Subjects taught in Year 1 to Year 3

Learners are required to study all core subjects and the compulsory subjects.

a. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Languages	Bahasa Melayu	Malay	160	22%
	English Language	English	160	22%
Mathematics	Mathematics	English	128	18%
Science	Science	English	64	9%

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay	48	7%
Health & Physical Education	Physical Education	Malay	64	9%
	Co-curriculum	Malay/English	32	4%
Art and Culture	Creative Art and Technology	English Malay Malay/English	64	9%
Technology	• Module 1: ICT			
	• Module 2: Art and Design			
	• Module 3: Music and Drama			

Notes:

Elements of civics, entrepreneurship and social studies will be integrated into suitable themes/topics. MIB, ICT and thinking skills will be applied across the curriculum.

Figure 5: Subjects taught in Year 4 to Year 6

Learners are required to study all core subjects and the compulsory subjects.

a. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Languages	Bahasa Melayu	Malay	128	18%
	English Language	English	128	18%
Mathematics	Mathematics	English	128	18%
Science	Science	English	80	11%

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay	48	7%
	Malay Islamic Monarchy	Malay	32	4%
Health & Physical Education	Physical Education	Malay	48	7%
	Co-curriculum	Malay/English	32	4%
Humanities and Social Science	Social Studies	English	48	7%
Art and Culture	Creative Art and Technology	English Malay Malay/English	48	7%
Technology	• Module 1: ICT			
	• Module 2: Art and Design			
	• Module 3: Music and Drama			

Notes:

Elements of entrepreneurship will be integrated into suitable themes/topics in selected subjects. MIB, ICT and thinking skills will be applied across the curriculum.

Figure 6: Subjects taught in Year 7 to Year 8

Learners are required to study all core subjects and the compulsory subjects. They are also required to choose one of the elective subjects.

a. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Languages	Bahasa Melayu	Malay	96	13%
	English Language	English	96	13%
Mathematics	Mathematics	English	96	13%
Science	Science	English	96	13%

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay	64	9%
	Malay Islamic Monarchy	Malay	32	5%
Health & Physical Education	Physical Education	Malay	64	9%
	Co-curriculum	Malay/English	32	4%
Humanities and Social Science	Social Studies	English	48	7%
Art and Culture	Business and Technology		48	7%
Technology	• Module 1: Sc & Technology (D&T, Home Economics, Agriculture)	English		
	• Module 2: ICT	English		
	• Module 3: Commercial Studies	English		
	• Module 4: Music and Art	Malay/English		

Elective Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)
Languages	Arabic	Arabic	48	7%
	French	French		
	Mandarin	Mandarin		

Notes:

Elements of entrepreneurship will be integrated into suitable themes/topics in selected subjects. MIB, ICT and thinking skills will be applied across the curriculum.

Figure 7: Subjects taught in Year 9 to Year 10/11 - General Program

Learners are required to study 4 core subjects, 3 compulsory subjects and at least 2 of the elective subjects.

a. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Languages	Bahasa Melayu	Malay	112	15%	BRUNEI CAMBRIDGE GCE 'O' LEVEL
	English Language	English	112	16%	
Mathematics	Mathematics	English	112	16%	
Sciences	Science* Physics / Chemistry /Biology/ Combined Science	English	112	16%	

*Learners must study at least one of the Science subjects offered.

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Malay Islamic Monarchy	Malay	32	4%	School-Based Assessment
Pendidikan Kesihatan & Jasmani	Physical Education	Malay	32	4%	
	Co-curriculum	Malay/English	48	7%	

32. Elective Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Languages	Malay Literature	Malay	80	11%	BRUNEI CAMBRIDGE GCE 'O' LEVEL
	English Literature	English			
	Arabic	Arab			
	French	French			
	Mandarin	Mandarin			
Mathematics	Additional Mathematics	English			
Sciences	Physics	English			
	Chemistry	English			
	Biology	English			
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay			
Humanities and Social Science	Geography	English			
	History	English			
	Economics	English			
	Principles of Accounts	English			
Art and Culture	Art & Craft	English			

	Music	English			
Technology	Design and technology	English			
	Computer Studies / ICT	English			
	Food and Nutrition	English			

Notes:

MIB, ICT and Thinking Skills are applied across the curriculum.

Figure 8: Subjects taught in Year 9 to Year 10/11 Applied Program

Learners are required to study 4 core subjects, 4 compulsory subjects and at least 2 of the elective subjects.

32. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Languages	Bahasa Melayu	Malay	96	13%	GCE O-level
	English as a Second Language (E2L)	English	96	13%	IGCSE
Mathematics	Mathematics	English	96	13%	IGCSE
Sciences	Combined Science	English	96	13%	GCE O-level

*Learners must study at least one of the Science subjects offered.

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay	64	9%	School-Based Assessment
	Malay Islamic Monarchy	Malay	32	5%	
Pendidikan Kesihatan & Jasmani	Physical Education	Malay	32	5%	
	Co-curriculum	Malay/English	48	7%	

c. Elective Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Humanities and Social Science	Geography	English	80	11%	GCE O-Level
	Travel and Tourism	English			IGCSE
	Commercial Studies	English			GCE O-Level
	Development Studies (0543)	English			IGCSE
	Commerce	English			GCE O-Level
	Accounting	English			IGCSE
	Food & Nutrition	English			IGCSE
	Business Studies	English			IGCSE
Art and Culture	Art & Design	English			IGCSE
	Art (6010)	English			GCE O-Level
	Drama	English			IGCSE

	Music	English			IGCSE
Technology	Design and technology	English			IGCSE
	Computer Studies	English			GCE O-Level
	Information Technology	English			IGCSE
	Woodwork	English			IGCSE
	Fashion and Fabrics	English			GCE O-Level
	Agriculture	English			GCE O-Level
	Health and Physical Education	Physical Education	English		

Notes:

MIB, ICT and Thinking Skills are applied across the curriculum.

Figure 9: Subjects taught in Year 9 to Year 11 Special - Applied Program

Learners are required to study 4 core subjects, 4 compulsory subjects and at least 6 modular electives within the course of three years.

a. Core Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Languages	Bahasa Melayu Skills	Malay	96	13%	GCTE - BDTVEC
	Language and Communication	English	96	13%	
Mathematics	Functional Mathematics	English	96	13%	
Sciences	Functional Science	English	96	13%	

b. Compulsory Subjects

Learning Areas	Subject	Medium of instruction	Instruction time per year (in hours)	Percentage (%)	Examination
Islamic Religious Knowledge & Malay Islamic Monarchy (IRK & MIB)	Islamic Religious Knowledge	Malay	64	9%	School-Based Assessment
	Malay Islamic Monarchy	Malay	32	5%	
Pendidikan Kesihatan & Jasmani	Physical Education	Malay	32	5%	
	Co-curriculum	Malay/English	48	7%	

Numeracy refers to "numerical literacy", which is the ability to handle numbers and other mathematical concepts.

iii) **ICT Skills**

This skill has become an integral part of the 21st Century education. This skill will be mastered by students in line with the technological advancements and globalisation that is being experienced presently, and with more rapidness in the future.

iv) **Thinking Skills and Problem Solving**

These skills consist of knowledge, dispositions, and cognitive and meta-cognitive operations. These problem solving skills which link to the process of thinking, hypothesis formation, investigating, analysing and making decision to solving problems are all necessary tools in a society characterised by rapid changes, many alternative actions, and numerous individual and collective choices and decisions.

v) **Self-Management and Competitive Skills**

Self-management is the outcome when a person systematically uses behaviour change strategies to change their own behaviour by adapting to new ideas, technologies and situations. The ability to plan, implement and evaluate the outcomes of a particular strategy are all aspects of self-management and being competitive, which are essential in developing enterprising attitude in students.

vi) **Study and Work Skills**

Effective study and work skills are essential for students to obtain good results in school, and are useful in general to improve learning throughout life, in support of career and other interests. The ability to learn independently, manage their time properly, identifying proper methods of revision and exam techniques, plan effectively, work in a team and carry out activities.

vii) **Social Skills**

These combine both the interpersonal and intrapersonal skills. By mastering these skills, students can understand themselves better and able to interact with other members of society.

viii) **Physical Skills**

Physical skills focus on improving fitness and developing various other skills that will help an individual achieve a happy and healthy life.

ix) **Aesthetic Skills**

Mastering these skills will allow students to approach a work of creative expression, either physical or human, with openness and interest and able to show their appreciation and value towards such creations sensibly.

3.4. *Attitudes And Values*

The SPN21 curriculum aims to inculcate the correct attitudes and values in students by providing them with a philosophy of living, thereby facilitating their overall growth and development so that they may integrate well into the community with purpose, respect and confidence.

To ensure a holistic development, the following values will be embedded throughout the learning area:

- o Self Confidence and Self-Esteem
- o Empathy and Appreciativeness
- o Self-Reliance and Independence
- o Tolerance and Mutual Respect
- o Caring, Concerns and Sensitivity
- o Integrity
- o National Patriotism
- o Piety
- o Competitiveness
- o Commitment

3.5. Learning Outcomes

Learning outcomes are statements that specify what learners will know or are able to do as a result of a learning activity which helps to focus on the student's behaviour that is to be changed. They also serve as guidelines for content, instruction, and evaluation to identify specifically what should be learned, unlearned or relearned. Learning outcomes convey to learners exactly what is to be accomplished.

Each subject will have specific learning outcomes. Students' progress can be observed and measures in the acquisition of the required essential skills, knowledge and understanding together with the right attitudes and values.

Lessons conducted will have specific objective to be achieved. These objectives are connected to the learning outcomes. The subject content that supports the attainment of these objectives is decided once the objectives have been clearly identified. It will be focusing more on skills to get to the objective.

a. Languages

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Gain an appropriate level of mastery over the language systems which include grammar, spelling conventions, pronunciation and intonation, and correct and appropriate use of vocabulary and structure to fulfil the purpose of the language learned whether as an official language, a second language or a foreign language;
- Develop the ability to read and understand information that is stated and implied for the purpose of gaining knowledge. Variety in reading technique is emphasized to ensure reading efficiency and the inculcation of a love for reading;
- Develop and increase writing efficiency in order to express ideas from various disciplines and subjects, as well as be able to express one's feelings;
- Expand and enhance critical and creative thinking skills through the use of language;
- Raise linguistic efficiency in understanding, interpreting, manipulating as well as responding to information heard, viewed and written in order to fulfil the requirements of daily needs, expansion of knowledge for lifelong learning and career demands;
- Develop effective communication skills among students in a number of languages so as to enable them to participate, interact and contribute actively in the global

community and culture based on an understanding of the socio-cultural, economic and political contexts;

- Build up the students' capability to master aspects of literacy which will help them develop appreciation for the beauty and intricacy of literary works so that they are motivated to produce their own creative work
- Incorporate the use of multimedia particularly information technology for the purpose of accessing/obtaining, creating/designing, processing and delivering information in various forms in order to fulfil a range of needs, situations and purposes;
- Build and cultivate an attitude of open-mindedness to diverse sources of information and evaluate and filter information that is useful.

b. Mathematics

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Develop learning skills, concepts, understanding, and attitudes to cope confidently with the mathematics of everyday life;
- Stimulate the interest of students in learning mathematics and foster good learning habits
- understand and develop mathematical thinking and reasoning through solving mathematical problems;
- Develop the student's ability to interpret and communicate clearly and precisely mathematical ideas both orally and in writing and to read and comprehend a mathematical text;
- Provide a foundation for students who may continue studies in mathematics or other disciplines where mathematical concepts are essential;
- Develop an appreciation of the nature of mathematics and mathematical processes.

c. Science

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Reason, think creatively, make logical and responsible decisions and solve problems.
- Understand the impact of science on the phenomenal technological changes that have accompanied it and its effects on medicine and to improve the quality of life, on industry and business and on the environment.
- Understand process skills (scientific enquiry, science-based skills and other accompanying generic skills such as communication skills, critical thinking skills, problem solving skills and creativity) and possess appropriate values and attitudes for personal development to participate in a world of technological change.
- Observe phenomena and events, and to carry out experiment(s).
- Know and understand things around them through stimulation and cultivation of their curiosity.

d. Humanities And Social Science

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Learn the ways in which people from different cultures, time-zone, and places make decisions, and meet their physical, social, emotional, and spiritual needs.

- Understand their rights, roles, and responsibilities as members of a family and as citizens in a society.
- Develop skills in research, critical and creative thinking, communication, and social participation.
- Learn how and why change and continuity have affected people's lives in various contexts and times.
- Examine the events, beliefs, and forces which have shaped our world.
- Know how people in different places have interacted with the environment, and understanding how they manage or mismanage resources.
- Develop an awareness of the present and future role of occupation in their lives and gain an understanding of economic activities.

e. Arts And Culture

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Develop arts skills, knowledge and values through the construction of experience, practice and increasing maturity in an active learning environment.
- Appreciate and be sensitive towards environment and cultures in contexts within and outside the country.
- Develop self esteem with regards to one's race and culture
- Observe, evaluate and analyse all forms of art processes and products rationally.

f. Technology

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Live and work in a technological society through the applications of practical or scientific knowledge;
- Develop technology literacy through the use of ICT.
- Develop knowledge and skills through multiple approaches such as design process i.e. problem solving skills through analyzing problems, gathering information, suggesting alternative solutions, making judgments and decisions, and within certain defined constraints, plan, organize, create, communicate ideas and evaluate solutions.

g. Islamic Religious Knowledge And Malay Islamic Monarchy

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Acquire the knowledge and understanding concerning the religion Islam on the aspect of revealed knowledge (Fardhu Ain) and acquired knowledge (Fardhu Kifayah) in the akidah (creed of) Ahli Sunnah Wal Jamaah.
- Practise Islam as a way of life
- Inculcate virtues and moral values through the national philosophy: Malay Islamic Monarchy (MIB).
- Love one's religion, race, monarch and country.
- Care for other members of the society and contribute positively towards building a progressive and responsible society.

h. Health And Physical Education

From this area of study, it is intended that learners will be able to achieve the following learning outcomes:

- Maintain their physical fitness (physical, mental, spiritual, social and emotional)
- Enhance their personal health during their school years and throughout life.
- Develop knowledge and skills in games & sports.

3.6. Other aspects integrated into the learning areas

A number of value-added skills will be integrated into the eight learning areas, namely:

a. MIB

As the core philosophy of Brunei Darussalam, MIB will be integrated across the whole curriculum with the aim of helping students achieve the following learning outcomes:

- Inculcate a sense of self worth and being true to one's identity as a Bruneian
menanamkan rasa jati diri dengan falsafah MIB
- Demonstrate love for the country, nation and ruler
- Uphold and practise the values of Islam
- Contribute positively towards the progress of the community, demonstrate a caring nature and become part of a responsible society

b. Thinking Skills

The development of thinking skills is key to learning. An important objective of the school curriculum is to enable learners to develop their ability to reason and solve problems both within formal school situations and daily life. The teaching of thinking skills enables students to practise and develop a variety of concepts and skills in a meaningful context and to communicate ideas they have learned meaningfully.

Integrating thinking skills on a cross-curricular basis enables the students to achieve the following learning outcomes:

- Use basic analysis such as the gathering of information by category, distinguish differences between suitable and unsuitable data, and predict the outcome of data analysis
- Suggest conceptually sound solutions to theoretical and practical problems through long term and short term formulas, resolve projects according to priority, and develop strategies to achieve targets/goals.
- Suggest conceptually sound solutions to problems in life encountered in the home, family and workplace
- Use information sources wisely as reference and to support viewpoints

c. Digital-Age Literacy

Digital age literacy serves as a tool for teaching and learning. To achieve success in the 21st century, students need to attain certain levels of mastery in the fields of science, technology and culture, as well as acquire full understanding of any information that they acquire through various means.

This aspect is aimed at enabling students to achieve the following learning outcomes:

- ICT skills for creative learning
- Obtain information
- Analyse and process information
- Present information
- Communicate electronically through the local and global network

d. Social Skills Programmes (SSP)

This is a community based initiative. These programmes engage students on social welfare and development activities such as campaigns for environmental conservation, helping the needy and workplace attachment. The activities are conducted out of school hours in the classroom, school or community where the school is located.

e. Co-curriculum

Co-curricular activities support the school curriculum to achieve holistic education. Every student in primary and secondary levels is able to participate in co-curricular activities such as (section 4.2.14):

- Sports and games
- Uniformed units
- Clubs and societies
- Arts and cultural groups/teams

f. Entrepreneurship

This aspect enables students to achieve the following learning outcomes:

- Develop positive attitudes and provide knowledge, awareness, values and skills to individuals and the society on financial planning and entrepreneurship
- Inculcate a culture of saving and practice prudence and wisdom in making use of opportunities to diversify sources of income

3.7. Pedagogical Approach

The SPN21 curriculum has identified curriculum approaches which it considers appropriate for the primary and secondary levels of schooling.

At the primary level, the curriculum will be integrated across subject areas using themes and topics that are based on understanding, experience and the surrounding environment. Students will experience connectivity across the learning areas, learning with understanding and are made aware that ideas do not exist in isolation but connected. At the secondary level, the school curriculum will be geared more towards specialisation.

At both levels, the teaching and the learning process will be student-centred with students being actively engaged in learning both individually and in group. The teacher's role will change from being transmitter of facts and information to that of facilitator of learning.

The SPN21 curriculum recognises the different learning abilities and learning styles of students. It encourages the school to create effective learning environments. The

differentiated syllabus of each learning area will consider the students' ability and capability with the content organised into: Core (Must do), Intermediate (Should do), and Extended (Could do).

A variety of appropriate teaching and delivery methods should be used such as:

- Experiential e.g. group work, pair work, simulation, interactive video, field day, game, role play, analysis of data or results
- Reinforcement e.g. poster, leaflet, magazine article, newsletter
- Integrative e.g. conference, forum, seminar

Teachers are encouraged to make full use of ICT and use a variety of seating arrangements, concrete materials, diagrams and charts, newspaper clippings and other educational/teaching resources to make lessons more interesting. Practical activities could include the use of educational games, role play, the construction and use of models and experiments to demonstrate concepts. Group discussions are encouraged to promote active students' participation and interaction.

The Preschool and Lower Primary (Year 1 to Year 3) curriculum integrates the 8 Learning Areas. Subject areas will be combined and teachers will be encouraged to teach using an integrated approach. At this level, learning will focus on laying the foundations of literacy and numeracy (3Rs), ICT and the acquisition of social and personal skills. As children move to the Upper Primary level of schooling (Year 4 to Year 6), they will learn the content areas in greater breadth and depth.

Schools will be required to conduct a "measure of proficiency" of all students annually with special emphasis on reading/language and mathematics in Year 3 to Year 6. It is recommended that schools provide easy access to high-quality reading materials that includes tutoring and family literacy programmes. The 'Fun, Play and Learn More' approach to learning should be adopted. Early intervention through individualised tutoring and reading recovery should be implemented. Classroom management such as setting up of learning corners and spaces, and parental/PTA involvement in organising activities should also be emphasized.

At secondary level the main focus will be on enhancing and reinforcing the skills acquired during the primary years of schooling. There will be a move towards a more discipline-based curriculum which among others includes basic pre vocational, work related courses and the development of values and attitudes.

3.8. Time Allocation

The SPN 21 curriculum requires flexibility in time-tabling to ensure the desired outcomes/objectives can be achieved. Time can be blocked to study a subject area in-depth and to allow intervention schemes to take place, e.g. literacy and numeracy focus, completion of project work, remedial and enrichment activities, etc. In addition to these areas, new areas of study such as music and drama, and other co-curricular activities such as library visits will also be included. Apart from these, time will also be allocated for school assembly, registration and break times.

3.9. Assessment

Assessment is an integral part of classroom practice. It focuses on how pupils learn and encourages pupils to engage in self-assessment to improve their learning through

constructive guidance. It is important to recognise the central role of classroom practice in which both the processes and products of learning are assessed by methods most suited to them.

In general, assessment is done with the following aims in mind:

- To measure progress at national levels;
- To measure the achievement of each school;
- To measure the level of achievement of each student; and
- To facilitate teaching and learning.

Educators must be sensitive and constructive in giving feedback and reporting, hence fostering students' motivation. School and teachers are empowered to conduct quality on-going assessment of students' learning outcomes.

a. Assessment Approaches

There are three different approaches to classroom assessment:

i. Assessment of Learning

Assessment of learning characterised by its "summative" nature, is a process which determines the extent to which the learning outcomes have been achieved at the end of a course of instruction. It is used primarily for assigning course grades or for certifying pupil mastery of the intended outcomes.

ii. Assessment for Learning

Assessment for learning characterised by its "formative" nature, is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there. It helps to provide information for both students and teachers to improve learning and teaching. Assessment for learning is underpinned by the belief that every student can be helped to improve from where they are at any given point in time and should be in line with the stated learning outcomes.

iii. Assessment as Learning

Assessment as learning encompasses self-assessment and peer-assessment. It emphasises the roles of the pupils, in particular their ability to assess themselves and their peers. Pupils are trained to personally monitor what they are learning and use feedback from this monitoring to make adjustments, adaptations and even major changes in what they understand.

b. Attainment Levels

Attainment levels describe the level of attainment of individual students based on particular criteria which include aspects of knowledge and understanding, skills, values and attitudes. This facilitates comprehensive reporting to students, teachers, parents and other stakeholders regarding a student's progress in the subjects taken.

c. School Based Assessment (SBA)

School-based Assessment will play an integral part in the proposed new curriculum. Whether it is formative or summative, school and teachers are empowered to conduct quality on-going assessment of pupil learning outcomes. This assessment is used for diagnostic and intervention purposes, and is an integral part of good teaching practices. Information gained can be used as a basis for the planning of teaching sequences, and the breadth and depth of learning units in subsequent lessons. Learning difficulties that pupils have encountered or misconceptions that they may have at an early stage can be identified so that immediate and effective remedial help can be given. Students with special needs will require adaptations and modifications according to their nature of their special needs.

With SBA, a greater emphasis will be placed on student-centred learning and activity oriented pedagogy. There will also be more emphasis on the process of learning (learning to learn) and less on drilling for examinations.

i. Guidelines on Student Progress Assessment (SPA) for SPN 21 Years 7 and 8

a. Introduction

The Ministry of Education is in the process of preparing and updating programmes for the implementation of the National System of Education in the 21st century (SPN 21). A major task has been the construction and development of schemes of work based on the cascading of the Cambridge GCE 'O' Level syllabus into Year 7 (the first year of secondary education) for the 4-year (Years 7-11) and 5-year (Years 7-12) programmes. The schemes of work for Years 7 and 8 have been completed and are being used from January 2008 by all students in Menengah 1 (Year 7). All students in Years 7 and 8 will do a common curriculum. This curriculum for Years 7 and 8 will be accompanied by the Student Progress Assessment (SPA), a new assessment approach. This is conveyed through the Ministry of Education circular 7/2008 (Appendix 4).

b. Aims

- Replaces the *Penilaian Menengah Bawah* (PMB)
- Shifts from a summative assessment orientation to a system of assessment characterised by the measurement of student progress and achievement
- Serves as the basis for selection to the 4-year or 5-year programme, i.e. for 2 or 3 years of study after students sit the Student Progress Examination at the end of Year 8
- Facilitates the school, student and parents' selection of subject combinations to be offered in the General Education Programme or Applied Programme

c. Objectives

- To assess student achievement through valid, reliable and meaningful means/instruments
- To prepare detailed reports on student achievement for students and parents
- To assess other dimensions of educational development (skills, knowledge, attitudes/values)

- To identify strengths and weaknesses in student learning in order to take the appropriate steps towards intervention and remediation
- To enable school administrators and teachers to conduct assessment that is not only suitable and accurate but valid and reliable
- To set national standards as benchmarks for all schools, especially for the Student Progress Examination in Year 8

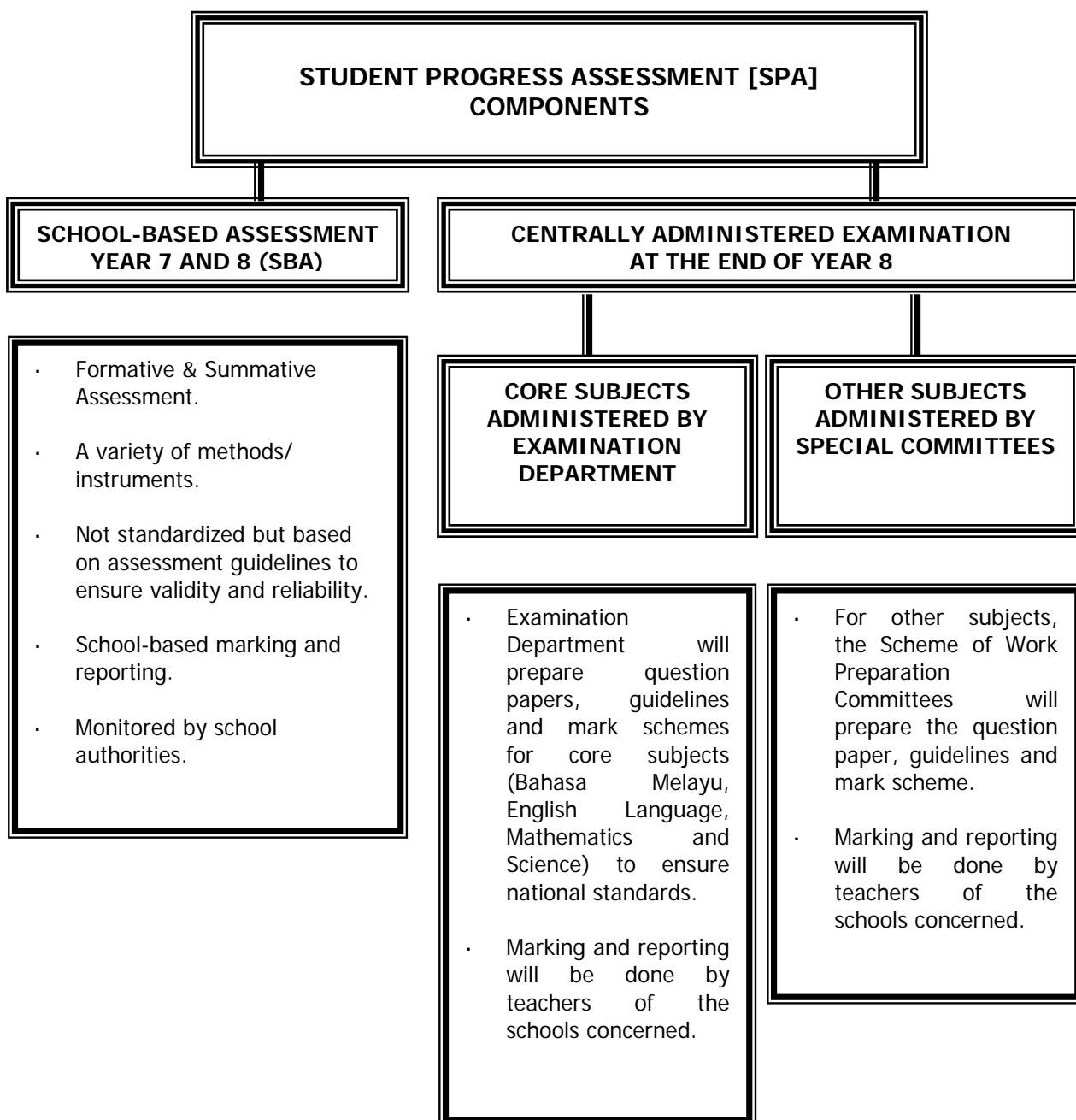
d. Scheme of Assessment for Years 7 and 8

SPA Components

The SPA comprises two components as follows (Table 1):

- **School-Based Assessment (SBA)**
This will be administered throughout Years 7 and 8
- **Student Progress Examination**
This will be administered at the end of Year 8

Table 1: Student Progress Assessment [SPA] Components



e. SPA schedule

Each academic year consists of 2 semesters (Semester 1 and 2) and each semester has 2 terms (Terms 1, 2, 3 and 4) as indicated in Table 20 below.

Table 2: SPA Schedule

SCHOOL-BASED ASSESSMENT (SBA) (Formative & Summative)					
SEMESTER 1			SEMESTER 2		
<i>(Term 1)</i>		<i>(Term 2)</i>	<i>(Term 3)</i>		<i>(Term 4)</i>
YEAR 7	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework	REPORTING	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework	REPORTING	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework
					Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework • School Examination End of Year 7
YEAR 8	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework	REPORTING	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework	REPORTING	Method Flexible and fit for purpose Examples: • Topical Tests • Homework • Class Work • Practical Work • Fieldwork • Project Work • Coursework
					STUDENT PROGRESS EXAMINATION END OF YEAR 8

f. Percentage Distribution of marks for SPA

Table 3: Distribution of Overall Student Progress Assessment (SPA) Weighting for Core Subjects

Assessment	Weighting
School-based Assessment (SBA): Years 7 & 8	30 %*
Student Progress Examination End of Year 8	70 %*
Total SPA	100 %

Note: * This percentage is subject to change based on future developments and progress

Weighting for other subjects will be determined by Special Committees.

Table 4: Distribution of Assessment Weighting for SBA and Student Progress Examination

Year	Semester	Weighting (percentage)		Final Weighting for SPA
Year 7	Semester 1	SBA		30 %
	Semester 2	SBA		
		School examination End of Year 7 (SBA)		
Year 8	Semester 3	SBA		70 %
	Semester 4	SBA		
		Student Progress Examination End of Year 8	70 %	70 %
Total SPA				100 %

g. Reporting on SPA to parents

- § Reporting will involve the use of marks and descriptions. These will provide good indications of a student's achievement to the student's parents and the student himself/herself.
- § Students and parents will receive full reports at the end of every term. All reports will indicate the student's progress in skills, knowledge and attitudes/values.
- § Reports will also indicate the student's current achievement in comparison with his/her potential and past achievement.
- § Provides the opportunity to discuss the strengths and weaknesses of students and to identify aspects that can be improved or extended/enhanced.

ii. Guidelines on Selection Criteria for channelling students into 4 year or 5 year programmes, into Pure Science streams and other programmes at the secondary level of education

a. Introduction

In the SPN 21, students in the secondary level are channelled into either the 4-year (Year 7-10) or 5-year (Year 7-11) programmes. Students in the 4-year programme will sit the *Brunei Cambridge General Certificate of Education 'O' Level* examination in Year 10 while those following the 5-year programme will sit the examination in Year 11. All the students in the two programmes will follow a common curriculum for the first two years i.e. in Years 7 and 8.

Selection of students for the next two years of study (for the 4-year programme) or the next three years of study (for the 5-year programme) will depend on the students' performance in the **Student Progress Assessment (SPA)**.

The Student Progress Assessment consists of 2 components namely **School-Based Assessment (SBA)** and the **Student Progress Examination**. Marks for the **School-Based Assessment (SBA)** will be taken from all the student assessments conducted in Years 7 and 8 whilst marks for the **Student Progress Examination** will be taken from the examination at the end of Year 8.

b. Selection Criteria for Streaming/Channelling of Students

The selection criteria for the channelling of students will be based on the **Student Progress Assessment (SPA)** which will be used for the following purposes:

- § Channelling of students to the 4-year or 5-year programmes
- § Selection of students for the Pure Science stream in either the 4-year or 5-year programmes
- § To enable school authorities to determine the criteria for channelling students to the General Education Programme or the Applied Programme, depending on the students' interest and aptitude
- § To enable the school authorities, parents and students to choose subject combinations that are suitable and relevant in the General Education Programme or the Applied Programme

c. How the Student Progress Assessment (SPA) will be put to use

The selection of students to do either the 4-year or 5-year programmes will be determined by the students' performance in the **Student Progress Assessment (SPA)** via both the **School-Based Assessment (SBA)** and the **Student Progress Examination** at the end of Year 8.

The **School-Based Assessment (SBA)** will indicate the overall percentage of marks gathered from a variety of student assessments conducted in Years 7 and 8. The **Student Progress Examination** will comprise the total percentage of marks obtained from examinations for core subjects prepared and administered by the Department of Examination and from examinations for other subjects administered by Special Committees. The distribution of percentages of marks for the **School-Based Assessment (SBA)** and the **Student Progress Examination** is as follows:

Table 5 : Weighting of Student Progress Assessment (SPA) for Core Subjects

Assessment	Weighting
School-based Assessment (SBA): Years 7 & 8	30%*
Student Progress Examination End of Year 8	70%*
Total SPA	100%

*Note: * This percentage is subject to change based on future developments and progress*

Weighting for other subjects will be determined by Special Committees.

d. Selection Criteria for 4-Year or 5-Year General Education Programme or the 5-Year Applied Programme

i. 4-Year General Education Programme

To qualify for this programme, students are required to have attained the expected average percentage of marks for relevant subjects in the **Student Progress Assessment (SPA)**. The school authorities will consult the parents of students who qualify to do the 4-year programme and seek their consent before placing their children in the programme.

Table 6 : Percentage of marks required to qualify for the 4-year General Education Programme

	Subjects	Percentage obtained from SPA
CORE SUBJECTS	Bahasa Melayu	70% and above
	English Language	70% and above
	Mathematics	70% and above
	Science	70% and above
OTHER SUBJECTS	Any 3 subjects	Average 60% and above

ii. 5-Year General Education Programme Science Stream

To qualify for this programme, students are required to have attained the expected average percentage of marks for relevant subjects in the **Student Progress Assessment (SPA)**.

Table 7 : Percentage of marks required to qualify for the 5-year General Education Programme Science Stream

	Subjects	Percentage obtained from SPA
CORE SUBJECTS	Bahasa Melayu	60 % and above
	English Language	50 % and above
	Mathematics	50 % and above
	Science	50 % and above
OTHER SUBJECTS	Any 3 subjects	Average 50% and above

iii. 5-Year General Education Programme and Applied Programme

Students who do not fulfill the conditions stipulated in 4.1 and 4.2 above are automatically channeled into the 5-year General Education Programme or the Applied Programme, at the discretion and consideration of the school.

iv. Special Applied Programme

This programme caters for students with low achievement in the **Student Progress Assessment (SPA)** who are more inclined towards hands-on learning and concrete learning. The criteria for selection of students to the **Special Applied Programme** will be based on their performance in the **Student Progress Assessment (SPA)**, as shown in Table 21c below.

Table 8 : Percentage of marks obtained for channelling to the Special Applied Programme

	Subjects	Percentage obtained from SPA
CORE SUBJECTS	Bahasa Melayu	40% and above
	Language & Communication	20% and above
	Functional Science	20% and above
	Functional Mathematics	20% and above
OTHER SUBJECTS	Any 3 subjects	Average 20% and above

3.10 Enabling The School And Teachers

The schools will have greater flexibility to develop programmes appropriate for local needs and to foster deep understanding.

Teachers' new roles will create new demands on them in managing a productive learning environment. Teachers are now being asked to be facilitators or coordinators of their classes of students who will be working independently as individuals or small collaborative groups on different projects. Technology-based tools and environments will be provided to support teachers in these new roles. Technology will also be used to facilitate teachers' understanding and evaluation of students' work.

They will have more responsibility for orchestrating a much wider array of experiences for students than in the past. Their roles will shift in response to these developing conceptualizations of core knowledge, effective curriculum, and flexible coordination of resources.

This will require developing educational infrastructure with the necessary distribution of expertise and resources.

3.11 Monitoring of Standards

A comprehensive, systematic and valid monitoring and benchmarking mechanism needs to be devised and set in place.