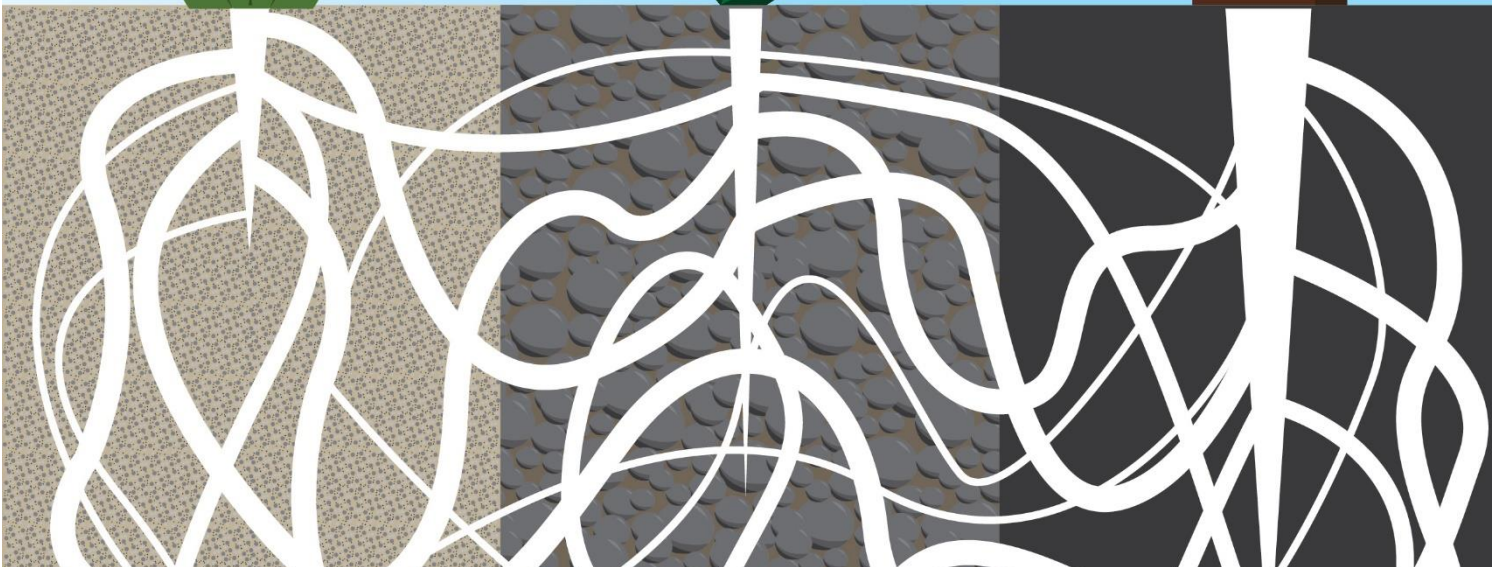
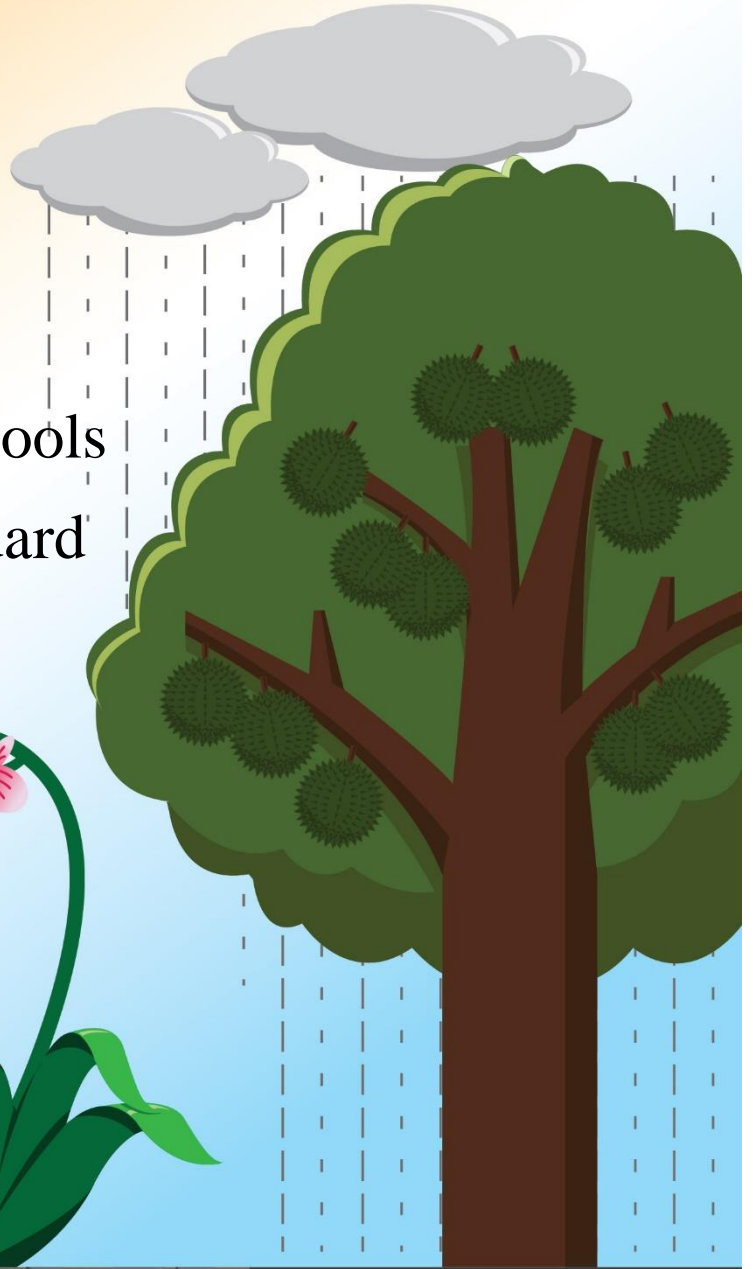




Malaysian Independent
Chinese Secondary Schools
Main Curriculum Standard

(Trial Version)



Malaysian Dong Jiao Zong MICSS Working Committee

The Unified Curriculum Committee

March, 2020

**The Malaysian Independent Chinese Secondary School Main Curriculum Standard
(Trial Version)**

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1. INTRODUCTION

The Main Curriculum Standard (Trial Version) henceforth termed as “the Main Standard” is forwarded in response to the implementation of the MICSS Education Blueprint ¹which raises many educational concepts to ensure its vision and goals of reform to be in place within six years in independent Chinese secondary schools. The Main Standard as a referential document subsumes curricular background, concepts, objectives, core competencies, curricular structure, implementation strategies and other imminent follow-up issues.

The drafting of the Main Standard had gone through a year of opinions collection from the committee members of the MICSS working committees of Dong Zong, administrators from independent Chinese secondary schools, subject leaders and teachers in general as well as the department administrators of Dong Zong. The feedbacks cover comments on curricular objectives, core competencies, interdisciplinary elements and curricular structure, among others. When the views were duly edited and redacted, the Main Standard was thus drafted. It is herewith named “Trial Version” as there are concept propagation, preparation and adjustment in terms of implementation yet to be done at later stage.

The Main Standard is intended to be used for a stretch of three years (2020-2022) as guidelines for the adjustment and further implementation of the MICSS curriculum (subject curriculum standard, learning materials, teachers, assessment, as well as tertiary studies). It is forwarded hoping to also provide both the administration of Dong Zong and pilot independent Chinese secondary schools (henceforth MICSS) a framework and action plan basis. During the trial period, fragmental modifications resulted from obtained comments will finalise the Main Standard gradually. A transparent and healthy feedback mechanism is likewise ensured; meanwhile, the leeway for research and policy adjustment is sustained and a concrete model is sought after for the cooperation and operation between Dong Zong and the pilot MICSSs. Targeting at paving the way for a long term and comprehensive foundation, the three-year trial period is anticipated for the possible preparation, adjustment, deepening works, concerted cooperation, confirmation and enhancement needed.

Cover Illustration:

Artist: TEO Hur Yaw (Subject Editor of Curriculum Department/Fine Art, Dong Zong)

Caption: The three plants in the illustration symbolise the multiple temperaments and capabilities of independent Chinese secondary school students; they exhibit individual characteristics in different living attributes. The soil of various colours indicates the multiplicity of the MICSS curriculum: each plant absorbs diverse nutrients to grow into a particular profession and also absorbs nutrients from other domains and thus the multiple constituencies of “seeking common ground while reserving differences with the existence of differences” is formed.

¹ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong).

2. BACKGROUND

The curricular development of MICSS can trace back to the “MICSS Proposals” launched in 1973. “Four education missions and six education operational strategies” which affirmed the direction of education operation and laid the foundation of curricular development for independent Chinese secondary schools were raised in the “MICSS Proposals”. Independent Chinese secondary schools adapt “becoming a decent human being before being successful in life” as its education objective while safeguarding mother tongue education and Chinese culture, including the nurture of trilinguals and western-culture-entrenched polymaths corresponding to the demands of society. Yet attributed to the evolution of the era, the advancement in trade war, Industry 4.0, artificial intelligence, global warming, etc. need to be addressed with diverse strategies and approaches. Other than this, ever since the Malaysia government had forwarded its latest secondary level curriculum in 2017, international schools mushroomed almost overnight and issues like high demand from highly educated parents and Generation Alpha² will enter secondary schools in 2023, etc. pose unprecedented challenges onto MICSS, As such, Chinese education needs to be advanced in a macro approach which responds to the era change.

The first Unified Examination for Malaysian Independent Chinese Secondary Schools (henceforth the UEC) was held by the MICSS Working Committee in 1975, and the following year the Unified Curriculum Committee was established. It was responsible for the design and compilation of unified curriculum as well as subject coursebooks. Formally, the MICSS working committee aimed to compile and redact sets of coursebooks in Chinese language which were in consonant with national needs on one hand, and preserve, including disseminate Chinese culture, let alone redacting appropriate sets of unified coursebooks for MICSS use on the other. Due to the needs, the Unified Curriculum Committee has dwelled in the writing and compilation of subject coursebooks in 1976 and continued to do so the next year. The learning materials provided by the committee has hitherto reached a total of 152 types, with some of them on their way to the fourth edition rewriting process.

1976 saw the launch of unified curriculum and compiled unified learning materials. Since then, agendas like the formulation of MICSS curriculum, compilation principles of coursebooks and unified learning materials reform has been raised; these proposals include the emphasis as well as putting in place of the medium of instruction, the positioning of the three languages and their order of sequence, the launch of vocational curriculum and the implementation of the Five Competencies (Morality, Intelligence, Physical Health, Teamwork and Aesthetics). Calling for the reform of education was first raised in 1991 during the MICSS Principals Conference. In August the following Year (1992), a forum entitled “Facing the 21st Century MICSS Curriculum Formulation Camp” was held in Fraser’s Hill by the Unified Curriculum Committee. In the camp, views and proposals from the participants on curriculum, curricular objectives of senior and junior level, streaming of subjects and formation, curricular objectives of subjects, inter alia, were collected and compiled into book. This collection, in

² The generation born between 2010 to 2024, termed as the new generation after Generation Z (1995-2009). They are the generation growing up with digital technology and marked by realistically weak, high demand in the sense of experience, high loneliness tendency and are emotionally fragile. McCrindle, Mark (2009), *The ABC of XYZ: understanding the global generations*, Australia: UNSW Press.

actual fact, had seminally inspired the design and development of MICSS unified curriculum at later stage.

In matters of MICSS education, the MICSS Working Committee raised both the “MICSS Education Reform Guidelines” and “Education Blueprint” respectively in 2005 and 2018 to push forward the reform of MICSS education as well as reinventing the vision of MICSS education. In matter of curriculum development, the “Education Blueprint” proposes the curriculum-led concept to enforce “the kind of person MICSS wants to nurture”.

Attributed to the mentioned backdrop, this Main Standard was ensued. It is thus forwarded as development reference. In response to the theme “enjoy teaching, love learning”, the proposed strategies are innovative education, management and nurture, the formation of school ethos, implementation of curriculum-led concept, reform in curricular structure, forwarding of school-based curriculum, optimisation of curriculum standards and the formation of brilliant school ethos; whereas on how to “empower children to attain achievement”, the proposed strategies include taking self-directed learning, collaborative communication, societal participation as directing concepts to nurture life-long-learning MICSS students. They are expected to dedicate and shine on all domains no matter when and where for the prosperity of the general public.

3. BASIC CONCEPTS

The mission and objectives of the Main Standard lies on the realisation of the motto “enjoy teaching, love learning” and “empower children to attain achievement” raised in the MICSS Education Blueprint. It is believed that every MICSS student will develop holistically with unique characteristics when all these are in place.

(1) Enjoy Teaching, Love learning

In the development and reform of MICSS education, the concepts of “Innovative Education”, “Management and Nurture” and “the Formation of School Ethos” are raised. They are thus forwarded to support curricular reform and advancement from the managerial aspect based on the vision “enjoy teaching, love learning”.

1. Educational Innovation³

To realise Dong Zong-led curricular design, each and every independent Chinese secondary school can develop their own curriculum in consonant with respective circumstances, unique community features and teachers’ expertise. Creativity and innovation in learning are looked forward to forming a value-added mapping for learning. Besides, in matter of optimisation of subject curriculum standard, the emphasis is on teachers’ curricular awareness and the capability to apply the learning materials. As such, teachers will be able to grasp the objectives of the subject and to flexibly organise teaching contents and apply teaching approaches and consequently enjoy teaching to the fullest while practicing individual teaching style and charisma. The MICSS curriculum corresponds to the demands of the era;

³ It integrates the curriculum reform, school-based curriculum implementation and curriculum standard optimisation in terms of curriculum development raised in the MICSS Education Blueprint.

it advances with the times and integrates technology, heads towards integrated practice knowledge, provides multiple options through the various teaching activities given to make the school a most enjoyable place as well as a paradise where students can attain achievement subsequently.

2. Management and Nurture⁴

The Main Standard aims to implement the curriculum-led education model, stressing the MICSS educational ideology of “becoming a decent human being before being successful in life”. Incorporating the MICSS vision and core competencies, the Main Standard targets on the cultivation of whole person development while facilitating and integrating the pace of subject development. Other than this, the curriculum-led education model needs to crystallise and practice based on the ethics of current scientific research and leadership. The curriculum-led education model reveals the relationship between the unified curriculum and independent Chinese secondary schools in general. On that score, the curricular views of individual independent Chinese secondary school should respond to the theme of “what kind of students to produce” and take the initiative to lead teachers and students towards its realisation and practice.

3. The Formation of School Ethos

It refers to the cultivation of ideological moral and humanistic competencies as well as mutual relationship. Each and every student in the school compound can respect oneself and tolerate others. The school atmosphere is the essential element for the expression of Chinese culture, culture of other ethnic groups and environmental education. While pursuing knowledge, students are expected to share what they have learned willingly and simultaneously interact with people surrounding proactively, including elders and teachers, parents, friends, community residents, or even friends from social media to convey positive energy and cultivate happiness.

(2) Empower Children to Attain Achievement

Under the umbrella of Chinese culture dissemination, the Main Standard lets each and every student develop holistically within the dimension of morality, intelligence, physical health, teamwork and aesthetics. It raises “Life-long Learner” as its optimal goal in cultivation supported by “Self-directed Learning”, “Collaborative Learning” and “Societal Participation” to put the vision “empower children to attain achievement” in practice eventually.

1. Self-directed Learning

It is realised through the learning process of “making students as active learners”. Learner needs to firstly be able to examine her/his experience in both learning and growing thus to create happiness, and bring about spiritual benefits such that she/he is capable of appreciating the beauty in life on one hand, and to exert positive and proactive attitude on the other. Learners likewise can command knowledge and various symbols and know how to leverage modern technology to promote their learning and tackle learning difficulties. On this foundation, learners are expected

⁴ It integrates the practice of curriculum-led implementation raised in the MICSS Education Blueprint.

to further probe into uncertain domains, exert innovation, solve daily issues and confront challenges.

2. Collaborative Learning

It is realised through the communication and collaboration of “oneself, among a group and within the general public”. For oneself, learner is expected to be able to self-adjust; in the face of controversial views, the learner is expected to assure personal value and attitude while respecting others and is able to resolve conflicts appropriately. While as a member among a group, the learner is expected to be able to lead and work collaboratively to achieve common goal together in concerted spirit. In matter of the general public, learner needs to master her/his mother tongue to disseminate the essence of Chinese culture, command Bahasa Melayu the national language to practice love for the country and nation, and know English the international language to bridge the world. In short, the learner is expected to make appropriate use of the languages learned and acquired in various contexts for the best communicative effect.

3. Societal Participation

The learner can realise societal participation in her/his recognition and awareness of “personal morality, civil awareness and sustainable development”. Learner is expected to reckon that behaviour management as well as the promotion of personal competencies is a societal responsibility. As such, it is imperative that she/he dwells in continuing learning to optimise morality while simultaneously be able to appreciate others and compassionate towards others. At the meantime, the learner is proud of her/his nationality as a Malaysian and is willing to partake in the development of community and country for the prosperity of the nation. In the face of diverse culture and tradition, the learner can realise their strengths and tolerate the deficiency in differences. Similarly, the learner cares about her/his environment, commercial and social problems. She/he personally takes part by actual efforts and does not harm the environment, others and their way of living to put the concept of sustainable development into practice and cherish the earth’s resources.



Artist: LEE Choong Wee (Subject Assistant of Curriculum Department/Art and Design, Dong Zong)—Enjoy Teaching, Love Learning.

4. CURRICULAR OBJECTIVES

1. Main Education Objectives

MICSS education is a sustainable education industry; other than the dissemination of Chinese culture, it also ensures every student in MICSS to develop holistically in terms of morality, intelligence, physical health, teamwork and aesthetics. The students are expected to sustain life-long learning and to strive unremittingly for self-improvement as well as being inquiry oriented, innovative, daring in response to unpredictable change, confident, and willing to work as a team. In this way, the students are capable of achieving their personal happiness, and willing to strive relentlessly for the harmony, prosperity, advancement, freedom and equality of their family, ethnic group, society and country to contribute successively.⁵

2. Junior Level Curricular Objectives

- 1) To build up students' foundation on morality, intelligence, physical health, teamwork and aesthetics and to develop their capabilities complying with their own personality in balance based on these basics;
- 2) To nurture and train students on the capabilities and habits of learning how to learn, read and think to prepare for self-directed learning/active learning);
- 3) To ensure students to reach the basic level in knowledge, capability and attitude and further arouse their potentials for distinctive achievements;
- 4) To build up students' proactiveness and positive value towards living and life; and
- 5) To mould an environment for students to know about the languages, cultures and religions, etc. of the ethnic groups in the country so as to lead students to respect pluralistic culture, recognise reality of the country thus to open up global eyesight.

3. Senior Level Curricular Objectives

- 1) To suitably build up students' foundation on morality, intelligence, physical health, teamwork and aesthetics to get ready for their prospective work, career, learning and living;
- 2) To establish students' foundation on self-directed learning to further build up their capabilities on learning eagerness, individual thinking, critical thinking and innovation;
- 3) To nurture students with the will to seek excellence and be altruistic thus to create the prerequisites for more happiness for oneself, community, country and humankind;
- 4) To lead students to recognise themselves comprehensively and be confident and assured in the face of their society and era change;
- 5) To nurture students' affordability towards their own family, ethnic group, society and country and respect multiple cultures as well as broadening their world view; and

⁵ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 49.

- 6) To create the opportunities for students to partake proactively in various ethnic group activities, and ensure them to be able to interact and learn in cross cultural atmosphere.

5. CORE COMPETENCIES

This main curriculum standard (Trial Version) is forwarded based on the six core competencies ⁶ (MICSS Education Blueprint), including the three supplementary core competencies in response to the curriculum development of Malaysian Independent Chinese Secondary Schools, which totals up to nine core competencies as shown in Diagram 1. Further explanation is touched on in the design of Senior Level curriculum development. The core competencies emphasise integrated elements which covers knowledge, capabilities and attitude.



Diagram 1: The Structure of Core Competencies

The core competencies emphasise on the comprehensive competencies and capabilities which include one’s learned knowledge, capability as well as attitude. Table 1 presents the core competencies and their definitions (Senior Middle Level).

⁶ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees’ Association of Malaysia (Dong Zong), 40-41.

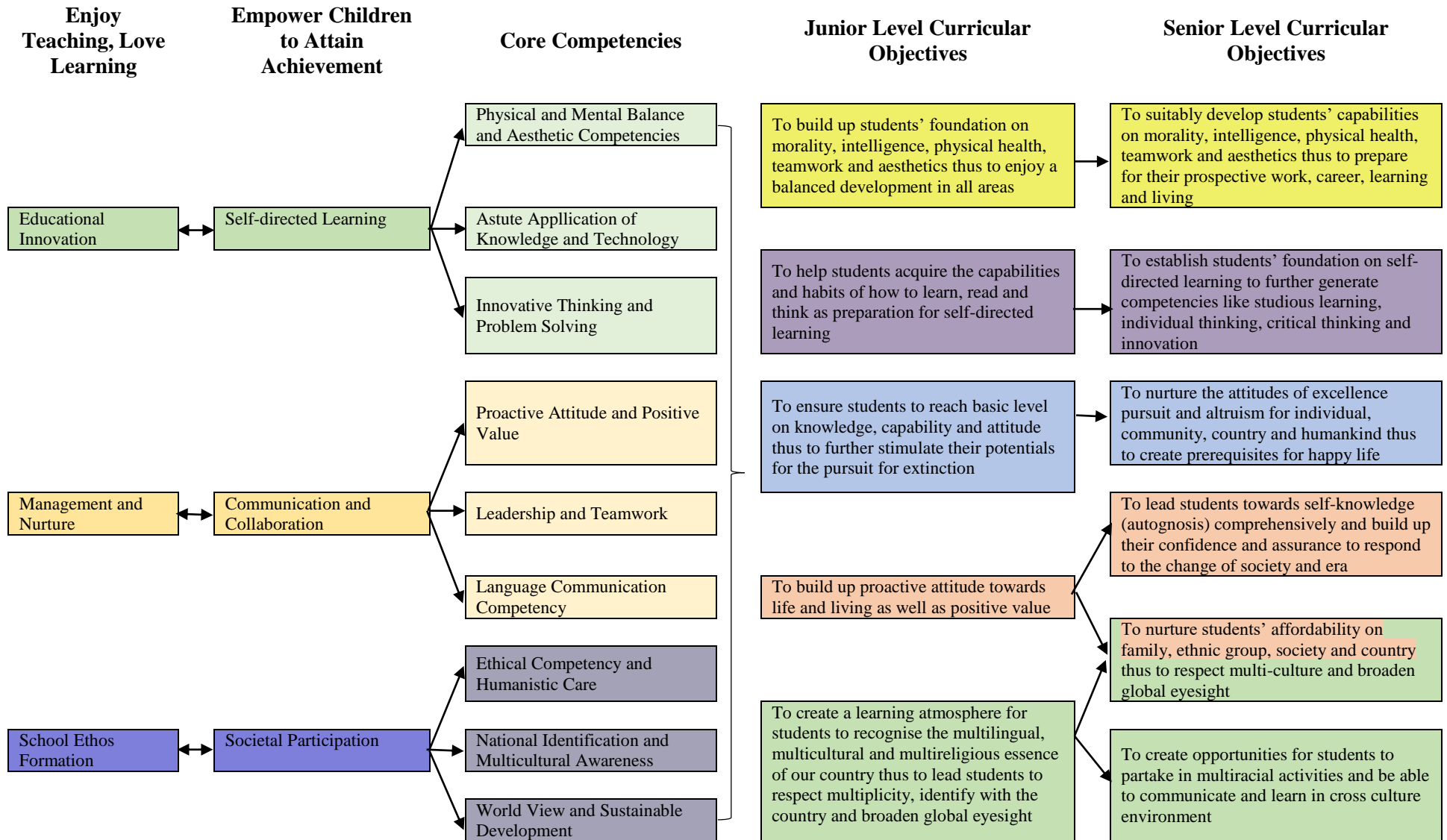
Table 1: Core Competencies and Definitions of MICSS

Concept	Core Competencies	Definition	Junior Middle Level	Senior Middle Level	Image of Learner
A. Self-directed Learning	A1. Physical and Mental Balance and Aesthetic Competencies	She/He possesses the capability to take care of personal mental and spiritual health and knows how to appreciate the best parts in life, and can reflect on her/his experience in learning and growing thus to adjust stages of pursuits in career development. This way, it not only benefits mental and spiritual growth but also exerts proactiveness in creating happiness for her/his own life.	She/He is well informed of personal mental and spiritual health, knows the uniqueness of aesthetics and can discover personal value in living to exert the richness and aesthetics thus to experience the meaning of life proactively.	She/He possesses the competency and is informed of the approaches to promote her/his physical and mental competencies; she/he knows how to appreciate the true goodness of people and entities, affirm personal value and realise professional pursuits, including how to enrich life by applying aesthetics in daily life, and relentlessly seek self-improvement to transcend herself/himself thus to create a happy personal life.	One who cares about herself/himself
	A2. Astute Application of Knowledge and Technology	She/He possesses literacy and numeracy and living skills as well as acquiring the three languages, core subjects like Mathematics and History, etc. She/He knows and learns knowledge of other domains, leverages Information Technology to communicate, interact and express for comprehensive development; meanwhile, she/he applies these in real life for better learning outcome thus to resolve difficulties in learning.	She/He possesses the fundamentals of knowledge and various symbols and commands the application of Information Technology to sense problems in daily life and is able to communicate, experience and practice in such circumstances.	She/He possesses the ability to make use of various symbols to express, and is literate in Information Technology and can focus on and deepen particular field of knowledge to exchange experience, express thoughts and values in innovative problem solving.	One who is knowledgeable
	A3. Innovative Thinking and Problem Solving	She/He possesses inquisitive, critical and inferential capabilities and can use her/his creativity to monitor her/his self-directed learning skills to tackle or solve problems in living and life thus to make decision in response to societal changes.	She/He possesses the capabilities of self-directed learning, inquiry-based learning, critical and inferential and innovative higher order thinking thus to use appropriate strategies to resolve and tackle daily life problems and issues.	She/He can consolidate inquiry-based learning, critical thinking and innovative higher order thinking, and can practise active learning as well as expressing her/his creativity to further inquire unknown realms and solve all sorts of issues and challenges in the face of daily life on this basis.	One who can solve problems

Concept	Core Competencies	Definition	Junior Middle Level	Senior Middle Level	Image of Learner
B. Communication and Collaboration	B1. Proactive Attitude and Positive Value	She/He possesses values like respect, voluntary accountability, studious and positive values to confront challenges generated in daily life and learning process. She/ He also recognises the importance of fulfilling social responsibility and has the courage to make clear and appropriate judgement when confronted with dilemmas and can learn to face discrepancy as well managing conflicts.	She/He inquires personal and environmental value and senses the discrepancies between them. She/He learns to live with discrepancies and build up respect, responsibility, studious attitude and positive value in life.	She/He deepens her/his attitudes and values thus to respect, care and appreciate others' discrepancies, and can fumble on the differences of values between oneself and the existence and learn to tackle confrontation, affirm and practise positive value and competency; she/he braves to make proper judgment in the face of difficulties and challenges.	One who cares about others
	B2. Leadership and Teamwork	She/He possesses the capability to lead and can effectively work and build up interactive relationship with others thus to develop teamwork competencies of communication, negotiation and service.	She/He possesses basic self-directed capability and good habit and is happy to interact thus to build up good collaborative relationship and can complete tasks through collaboration.	She/He possesses compassion, personal judgment, gregarious capability and attitude; meanwhile, she/he develops communicative co-operation and teamwork competency; she/he can get along well with others collaboratively, and is able to complete assignment well with advanced planning.	One who knows the importance of team work
	B3. Language and Communication Competency	She/He possesses the background knowledge of culture, tradition and religion and can make use of Chinese Mandarin learned from Chinese education, command Bahasa Melayu towards patriotism and love for community and is versed in English for international linkage. When it permits, she/he will master more languages and use these languages in different situations for optimal effect.	She/He possesses the background knowledge of culture, tradition, religion and can make use of Chinese Mandarin learned from Chinese education, the command of both Bahasa Melayu and English to make friends from different ethnic groups thus to enhance the four skills in language learning and eventually realise the importance of language as medium of cultural dissemination and communication.	She/He is well versed in Chinese Mandarin and possesses appreciative competency to enrich her/his knowledge towards local and exotic culture, life styles and religions through the learning of Bahasa Melayu and English. If it permits, she/he will equip herself/himself with more additional languages in the face of academic pursuits and professional development.	One who is skillful in communication

Concept	Core Competencies	Definition	Junior Middle Level	Senior Middle Level	Image of Learner
C. Societal Participation	C1. Ethical Competency and Humanistic Care	She/He practices good morality and can manage her/his own behaviours and understand that it is a social responsibility to promote personal competencies. She/He can appreciate, is compassionate and respect others on their freedom in speech.	She/he practices well on good morality and can suitably reflect her/his own behaviours; she/he can likewise sustain and modify her/his initiated voluntary proactiveness and is willing to listen to different views, way of expression and respect others' decision.	She/He possesses the correct attitude towards ethical and public issues and presents herself/himself as someone who treats others generously and is severe with herself/himself and expresses her/his care towards society through rational expression and care and learns to judge public issues from different aspects and angles.	One who is open minded
	C2. National Identification and Multicultural Awareness	She/He possesses the cultural identity of her/his own culture, understands and respects others' culture thus to merge herself/himself in multicultural environment, recognise history of her/his country and realise the multiplicity of the country and is proud of herself/himself as a Malaysian who has civil awareness and responsibility safeguarding the harmony of the country for national unity and integration.	She/He is well versed in her/his own culture, understands and accepts culture of other ethnic groups; she/he respects discrepancies, cares about national issues, and is proactive in community construction and is ready to be of service to others.	She/He identifies her/his cultural identity, respects and appreciates the discrepancies between cultures; she/he has civil awareness and knows her/his responsibilities; she/he safeguards national harmony and promotes the spirit of national consolidation and is proactive in the development of her/his community and country to confer benefits on society.	A patriot and one who loves her/his community
	C3. World View and Sustainable Development	She/he has the competency of caring for world issues and international relationship and also cares about environment, economics and social problems. She/He walks her/his talk in the protection of environment, her/his and others' living mode and sustains the concept of sustainable development and cherishes resources on earth.	She/He is informed of global issues and international relationship and can express herself/himself on environmental, economic and social problems. She/He cherishes the living of resources appreciation and cares about environment and social justice related issues.	She/He possesses the ability to express her/his own views on global issues and international relationship and can debate on environment, economy and social problem; She/He can keep her/his words and does not bring harm to the environment, people and life style; She/He is willing to partake charity campaign such as environment protection and social justice.	One who knows the importance of sustainable development

Diagram 2: The Relation of Vision, Core Competencies and Curricular Objectives



6. CURRICULAR STRUCTURE

This Main Standard further extends the trains of thought, principles, formulation guidelines for curriculum standard and senior level curricular category definitions⁷ in response to the proposals raised in the MICSS Education Blueprint on senior and junior level curricular structure.

(1) Curricular Design Introduction

1. It consolidates MICSS students' global competitiveness

It simply means to emphasise the teaching of the three languages (Chinese, Bahasa Melayu and English) and students' command of Chinese language needs to be on par with the standard in China, Taiwan, Hong Kong and Macau. Meanwhile, Students are expected to build up anti-stress capability for continuing learning and personal growth in between the multicultural backdrop and fair independent Chinese secondary school atmosphere. Besides, they are also expected to grasp solid fundamentals through the 'second lesson'—co-curricular activities—for the nurture of core competencies such as leadership, communication, problem solving and collaboration to measure up with the key competencies of the 21st Century.

2. It enhances MICSS students' competencies

This subsumes the enforcement of verbal expression capability of the three languages. Other than this, students need to enhance their communication with other ethnic groups to further understand one another's culture. The school can leverage community atmosphere and inter-school interactions to help students understand other ethnic groups as a curricular goal. Community service, likewise can let students learn about their living environment as it promotes civil awareness simultaneously. Apart from knowing one's country and community, it also provides opportunity for students to broaden their global eyesight. In actual fact, the new curriculum nurtures students with more self-directed and inquiry-based learning curricular design hoping to build up their logical thinking and innovative competency.

3. It bases on extant curricular and MICSS operation characteristics

The previous curriculum of MICSS provided many competitive courses correspond to the needs of the schools, students, tertiary studies and market; these courses are essentially the foundation for further extension of the new curriculum. They will be optimised and promoted in quality to meet the expectations of tertiary studies and career. Moreover, the nature of self-sponsored as a characteristic and demographical location also exert the schools' individual uniqueness and enrich their multiplicity and advantages in terms of curriculum.

4. It provides solution for development concerns of extant curriculum development

The establishment and practice of curriculum-led mechanism will ensure the quality of the MICSS curriculum. In addition, the curriculum-led system will likewise integrate the development of the curriculum to further encourage interdisciplinary cooperation for all

⁷ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 55-69.

rounding talents. Simultaneously, the time allocation for unified and school-based curriculum will be more flexible thus promote awareness and capability of the schools to partake in curriculum development. When both the curriculum development and assessment are incorporated, the Main Standard will become the sole referential document to put the curriculum-led objective in place.

5. To stress on the build-up of multiple options for senior level curriculum

Amenable to the MICSS Education Blueprint, the configuration is as follows: inquiry-based learning at senior one; streaming at senior two and deepening and broadening of knowledge at senior three (The MICSS Education Blueprint, 2018: 66). To effectively practice this proposal, credit system will be introduced at senior middle level to make curricular structure more flexible, and concurrently provides more options for students to establish the vision to “Empower Children to Attain Achievement”. Meanwhile, tertiary studies and career consultation will become more important as they help students realise their own traits and can confirm their prospective undertakings.

(2) Curricular Design Principles

The Main Standard has proposed five principles as the referential and adherent guidelines:

1. Mission of MICSS

The curricular development must not go astray from the four missions and six education operational strategies of the “MICSS Proposals”.

2. Competency Orientation

The curriculum development needs to put the nine core competencies in place, namely, mental and spiritual balance and aesthetics, optimisation of knowledge and the application of modern technology, innovative mindset and problem solving, proactive attitude and positive value, leadership and teamwork, command of languages and communicative expression, moral and humanistic care, country identification and multi-culture, global world view and sustainable development.

3. Cohesion and Integration

The development of curriculum needs to incorporate both their horizontal and longitudinal contents. For horizontal linkage, emphasis is on the holistic development of morality, intelligence, physical health, teamwork and aesthetics, learning and related relationship of living, and the linkage and integration of different subjects. Longitudinally, emphasis is on the connection of contents learned from different stages as well as the conformity of order on mental and spiritual development thus to avoid repetition.

4. Multiple Suitability

The development of curriculum provides students with multiple choices. The establishment of unified and school-based, required/optional, deepened and broadened curriculum, including pluralistic assessment model, etc. help students to develop suitably.

5. Package Collaboration

The development of curriculum demands holistic consideration to be in concert with teacher education, assessment, students’ tertiary studies and career consultation to push forward comprehensively. Besides, at school level, it also matches with the size of the school and

their unique characteristics aiming to integrate both internal and external resources for optimal effect.

(3) Notes to Subject Curriculum Standard Design

The following should be taken into consideration while designing and writing subject curriculum standard:

1. The objectives of the curriculum have to follow the senior and junior level curricular objectives proposed by the Main Standard.
2. The core competencies of the subject curriculum must comply with the nine core competencies proposed by the Main Standard to conform with the competencies responsive to the particular subject.
3. The contents selection of the subject curriculum must take the time allocation proposed by the Main Standard into account as well as considering reality (time, space) and the connection between the subjects horizontally to avoid repetition and excessive burden on the students.
4. The subject curricular content must be categorised based on their required contents, optional contents and referential contents to meet the objectives of suitable teaching and diverse learning. The required content is proposed to be at least 70 percent relevant to the questions in the unified assessment, while the optional content can be the optional questions of the unified assessment and be categorised in accordance with the multiple-choice questions. Students can be taught in compliance with the optional contents. Further, the referential contents of the subject curriculum can be extended reading materials and they are proposed to emphasise on the broadening of eyesight, be applicable to daily life and have linkage with interdisciplinary/domain issues.
5. Apart from the consideration on the scope and depth of the knowledge, the treatment of the curricular contents should increase inquiry-based and hands-on elements, including daily life related and pragmatic elements.
6. The teaching of the subjects needs to be interesting, suitable and pluralistic in contents to arouse students' participation aiming to meet the objective of learner-centered learning.
7. The teaching should be effective learning strategy oriented which incorporates higher order thinking and activities and nurtures self-directed learning capability through reading, data integration and summarisation.
8. In the learning outcome assessment, the Learning Standard of the students must be listed clearly, including Performance Standard for teachers to conduct "Assessment for Learning" thus to promote students' learning effectiveness as formative assessment. It is to further assist students to grow and complete themselves (Assessment as Learning) for the promotion of students' self-assessment of their learning (Assessment of Learning) as summative assessment.

(4) Junior Level Curricular Structure

Responding to the proposals raised by the MICSS Education Blueprint⁸, and the needs of the Junior level curriculum development comprehensively, the Main Standard proposes the curricular structure as follows:



Diagram 3: The Curricular Structure of Junior Level Learning Domains

⁸ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 61.

Table 2: Time Distribution of Junior Level Learning Domain Periods

Types	Learning Domains	Subjects	Junior One Periods		Junior Two Periods		Junior Three Periods		Total Weekly Periods in Hours
Dong Zong Curriculum (Required)	Language	Chinese	5	15	5	15	5	15	3 hours 20 minutes
		Bahasa Melayu	5		5		5		3 hours 20 minutes
		English	5		5		5		3 hours 20 minutes
Dong Zong Curriculum (Required)	Mathematics	Mathematics	6	6	6	6	6	6	4 hours
Dong Zong Curriculum (Required)	Natural Science	Natural Science	5-6	5-6	5-6	5-6	5-6	5-6	3 hours 20 minutes to 4 hours
Dong Zong Curriculum (Required)	Social Science	Social Science	5-6	5-6	5-6	5-6	5-6	5-6	3 hours 20 minutes to 4 hours
Dong Zong Curriculum (Required)	Arts	Fine Arts	2	3-4	2	3-4	2	3-4	1 hour 20 minutes
Dong Zong Curriculum (Required)		Music	1		1		1		40 minutes
Dong Zong Curriculum (Optional)		Performing Arts and Living	1		1		1		40 minutes
Dong Zong Curriculum (Required)	Physical Education and Health	Physical Education and Health	2	2	2		2	2	1 hour 20 minutes
Dong Zong Curriculum (Required)	Technology and Living	Technology and Living	2-3	2-3	2-3	2-3	2-3	2-3	1 hour 20 minutes to 2 hours
Dong Zong Curriculum (Required)	Integrated Practice	Inquiry-based Learning Activities/Societal Practice and Service	1	5	1	5	1	5	40 minutes
School-based Curriculum (Required/Optional required)		Co-curricular Activities	2		2		2		1 hour 20 minutes
		School-based Curriculum	1		1		1		40 minutes
School Education Measures		Class Meeting/Weekly Assembly	1		1		1		40 minutes
Total			43-47						28 hours 40 minutes to 31 hours 20 minutes

Introduction of Junior Level Curriculum Design:

1. Nature of Learning Domain⁹

- a. Language: Chinese is the major medium for MICSS students to understand, grasp, think about, broaden, communicate and express knowledge, promote emotional level and internalise living and value. The command of Bahasa Melayu and English can let students absorb extensively and cope with relevant messages, enrich mindset and imagination readily thus to be more confident and braver in expression. This way, they can also recognise the culture, tradition, religion background of relevant language for the promotion of cross racial understanding and tolerance.
- b. Mathematics: Students pick up the fundamentals and basic skills of Mathematics to lay the foundation for senior level Mathematics. Simultaneously, they realise the application value of Mathematics thus to acquire the capability to solve problems like quantity, amount and number, etc. Moreover, through mathematical evaluation, scientific attitude is nurtured and logical thinking is formed, let alone abilities like curiosity, mathematical evaluation, observation of regular pattern, inference and expression. Students can also use digital technology for inquiry-based activities to develop their cognition and innovation.
- c. Natural Science: Students will come to know about the scientific knowledge of the surrounding entities and apply the knowledge in daily life thus to gradually form scientific behaviour and living habits. Through learning, students can understand the process and methodology of scientific research thus to try on inquiry-based scientific activities and gradually learn to see, think about and solve problems from scientific aspect. Concurrently, they sustain and develop curiosity and enthusiasm for learning towards their surroundings as well as forming imaginative, innovative and scientific attitude and a respect for evidence.
- d. Social Science: This learning domain stresses on treating human as the core, through self-recognition to understand further the relationship between oneself and the evolution of politics, society, economics and culture thus to care about how environmental change affects personal life. Students are trained to excel in the observation of social phenomenon, analyse and conclude disparate social issues as well as thinking critically and raising constructive recommendations through the training of social science methodology. Through this learning domain, students develop attitudes such as self-acceptance, respect for others and patriotism; they also are innovative and ready to make changes while respecting tradition.
- e. Arts: The contents of this learning domain stress on the construction of healthy development mentally and spiritually for the students thus to promote aesthetic and facilitative competencies. That said, students will be able to practice positive attitude in life and develop the habit of aesthetic experience and creativity.
- f. Physical Education and Health: It aims to promote students' cognition on physical exercise and health care. It further helps students to behave healthily, form habit and improve skill level through systematic educational activities to exercise their body thus to improve physical fitness. Simultaneously, students will have a comprehensive understanding of mental and spiritual health and can wittingly improve their personal and living conditions to avoid common illnesses and prevent being harmed from accidents.
- g. Technology and Living: Students are exposed to technology advancement, informed of the relationship between technology and other domains and the ways to optimise technology for better living in this learning domain. Through this domain, students can command the operation of modern technology (e.g. programming, computer, robot, 3D printer and mobile

⁹ Dong Zong (2018), *Malaysian Independent Chinese Secondary Schools Education Blueprint*. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 60.

phone) and know their operational principles. Students can also use these technologies to solve daily problems thus to improve living quality. This learning domain likewise nurtures the competencies of technology and intelligence to eventually achieve the ultimate goal of digital technology application.

- h. **Integrated Practice:** This domain emphasises on the adaptation of interdisciplinary/domain knowledge through inquiry and practice in the Integrated Practice to solve problems arisen from learning, interpersonal relationship, living and group activities. Students in this domain will be trained in leadership, communication, resilience and at the meantime it aims to enhance their sense of responsibility, accountability and train them to be open to criticism and be able to put concepts into practice and not afraid of failure.

2. Curricular Design

- a. **Educational System and Class Periods:** The educational system for MICSS Junior level is three academic years. There are 52 periods in an academic year. The duration of teaching is 40 weeks, viz., 20 weeks in each semester. Each period is 40 minutes in duration.
- b. **Weekly Periods:** Not more than 45 periods are recommended; each period lasts 40 minutes. It is based on the consideration of not exceeding 9 periods per day (not exceeding 6 hours of class hour, exclusive of recess time), to correspond with the option of 5-day school implementation.
- c. **Dong Zong Curriculum (Required):** The curriculum designed by Dong Zong and inevitably the required curriculum for all MICSS students.
- d. **School-based Curriculum (Required):** The curriculum designed by individual school and inevitably the required curriculum for all students in that particular school.
- e. **School-based Curriculum (Optional Required):** The curriculum designed by individual school and interested students can opt to take, but the school can decide the total hours of optional required subjects to be taken by students.

3. Recommended Curricular Assessment

- a. **The Unified Examination for Independent Chinese Secondary Schools (The UEC):** Other than Mathematics which accords merely the UEC in terms of assessment, subjects in other domains such as language, natural science and social science are concurrently tested in the UEC and school-based assessment proportionally (maximum school-based assessment weightage is 30 percent¹⁰).
- b. **School-based Assessment:** The four learning domains, namely, Arts, Technology and Living, Physical Exercise and Health and Integrated Practice are appraised merely by school-based assessment.

(5) Senior Level Curricular Structure

In response to the proposals raised by the MICSS Education Blueprint¹¹, and the needs of the Senior level curriculum development comprehensively, the Main Standard proposes the curricular structure as follows:

¹⁰Dong Zong (2018), Malaysian Independent Chinese Secondary Schools Education Blueprint. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 119.

¹¹ Dong Zong (2018), Malaysian Independent Chinese Secondary Schools Education Blueprint. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 68.

Table 3: Credit Distribution of Senior Level Basic Knowledge Category (Core Subjects)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Required)	Basic Knowledge (Core Subjects) ¹²	Chinese	10		10		6		26
		Bahasa Melayu	10		10		6		26
		English	10		10		6		26
		Senior Mathematics (Arts/Commerce/Vocational)	10		10		10		30
		Advanced Mathematics (Science)	14		14		10		38
		Liberal Studies	4		4		4		12

Note: Basic Knowledge subjects for all stream students: 120-128 credits.

Table 4: Credit Distribution of Senior Level Professional Category (Science/Commerce Required)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Optional Required)	Professional Knowledge (Science) ¹³	Physics	4		44-66				56-78
		Biology	4		(Choose from any two subjects: senior two 10 credits each; senior three 12 credits each)				
		Chemistry	4						
	Professional Knowledge (Arts/Commerce Required)	Senior Science	4		4		4		12

Note: 1. Professional Knowledge subjects for Science stream students: 56 credits, on which senior one students must take Biology, Physics and Chemistry; senior two and three students can take any two of them.

2. Science subjects for Arts, Commerce and Arts plus Commerce stream students: 12 credits.

¹² It aims for the nurture of capability to command and use the languages, to possess logical thinking and civic awareness thus to inspire and develop students eventually.

¹³ It carries the objective of suitably development aiming to let students infer their personal interests and aptitude thus to prepare for further studies and career as well as acquiring basic knowledge and skills.

Table 5: Credit Distribution of Senior Level Professional Category (Arts)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Optional Required)	Professional Knowledge (Arts)	History	4*		6-8		6-8		16-20
		Geography	4*		6-8		6-8		16-20

Note: 1. Professional Knowledge subjects for Arts stream students: 16 credits.

2. If it permits, the taken subject for this 4*credits can be considered as non-Arts stream optional credits.

Table 6: Credit Distribution of Senior Level Professional Category (Commerce)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Optional Required)	Professional Knowledge (Commerce)	Business Studies	4*		6		6		16
		Accounting	6*		10		10		26
		Economics	4*		6		6		16

Note: 1. Professional Knowledge subjects for Commerce stream students: 32 credits.

2. If it permits, the taken subjects for this 4*(Business Studies or Economics)/6* (Accounting) can be considered as senior two students' optional credits.

Table 7: Credit Distribution of Senior Level Professional Category (Vocational)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Optional Required)	Professional Knowledge (Vocational)	Electrical Engineering 1 ¹⁴	6*		10		10		26
		Electrical Engineering 2	6*		10		10		26
		Car Repair and Maintenance 1	6*		10		10		26
		Car Repair and Maintenance 2	6*		10		10		26
		Art and Graphic Design 1	6*		10		10		26
		Art and Graphic Design 2	6*		10		10		26
		Food and Beverage Management 1	6*		10		10		26
		Food and Beverage Management 2	6*		10		10		26

Note: 1. Professional knowledge subjects (Vocational) for Vocational stream students: 52 credits.

2. If it permits, the taken subjects for this 6*credits can be considered as senior two students' optional credits.

Table 8: Credit Distribution of Senior Level Arts Category (Fine Arts/Music/Computer and Information Technology)

Types	Subject Categories	Subjects	Senior One		Senior One		Senior One		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Optional Required)	Arts Knowledge ¹⁵	Fine Arts	4		4		4		12
		Music	2		2		2		6
		Computer and Information Technology	4		4		4		12

Note: 1. Arts Knowledge category subjects (Fine Arts, Music, Computer and Information Technology) for all stream students: 14 credits.

2. Arts Knowledge category subjects are required for all senior one students: 10 credits.

¹⁴ The existing four subjects for Electrical Engineering are integrated into two subjects.

¹⁵ Its contents aim for the development of arts knowledge and skills thus to build up students' mental and spiritual growth. At living level, they can own a healthy body, love and know how to live and possess the competencies in the face of technology advancement; at spiritual level, they own aesthetical capability, make the appreciation of beauty and creativity a habit to practice positive and proactive attitude in life.

Table 9: Credit Distribution of Senior Level Arts Category (Physical Exercise and Health)

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Required)	Arts Knowledge	Physical Education and Health	4		4		4		12

Note: 1. Arts Knowledge category subjects (Physical Exercise and Health) for all stream students: 12 credits.

Table 10: Credit Distribution of Senior Level Integrated Practice Category

Types	Subject Categories	Subjects	Senior One		Senior Two		Senior Three		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong Curriculum (Required)	Integrated Practice ¹⁶	Inquiry-based Learning Activities	2		2		2		6
		Societal Practice and Community Service	2		2		2		6
School-based Curriculum (Required/Optional required)		School-based Curriculum	4		4		4		12
		Co-curricular Activities	4		4		4		12
School Education Measures		Class Meeting/Weekly Assembly							

Note: Integrated Practice subjects for all stream students: 36 credits.

¹⁶ Its contents nurture the organisation of activities and tasks from living context as well as making the students to voluntarily participate, inquire and incorporate all the knowledge learned to rediscover personal potentials and promote soft skills.

Table 11: Credit Distribution of Senior Level Deepened and Broadened Subjects Category

Types	Subject Categories	Subjects (Examples)	Senior One		Senior One		Senior One		Total Credits
			1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	1 st Semester	2 nd Semester	
Dong Zong/School-based Curriculum (Optional Required)	Deepened and Broadened Knowledge ¹⁷	Chinese Literature					4		4
		Genetics					4		4
		Business English Conversation					4		4
		Accounting Software					4		4

Note: Cooperation with universities can be sought for credit transferrable or certificate-awarded recognised courses. Deepened and broadened subjects for all stream students: 8 credits.

¹⁷ Its contents aim to extend basic knowledge, the basic knowledge for professional and arts subjects; It aims to deepen and broaden their contents for interested students to choose from as well as preparing them for prospective tertiary studies and career.

Table 12: Credit Distribution of Overall Senior Level Curriculum

	Senior One				Senior Two				Senior Three			
	Arts	Commerce	Science	Vocational	Arts	Commerce	Science	Vocational	Arts	Commerce	Science	Vocational
Basic Knowledge	44	44	48	44	44	44	48	44	32	32	32	32
Professional Knowledge	4-8	8-14	12	12	6-16	12-22	20-30	20	6-16	12-22	24-36	20
Professional Knowledge (Cross Stream) ¹⁸	4	4			4	4			4	4		
Arts	14				6-8				6-8			
Integrated Practice	12				12				12			
Deepened and Broadened Knowledge									8			
Academic Year Required Subject Credit	78	82	86	82	72	78	86	82	68	74	82	78
Maximum Academic Year Optional Subject Credit	12	8	4	8	18	12	4	8	22	16	8	12
Weekly Fixed Periods	39	41	43	41	36	39	43	41	34	37	41	39
Maximum Weekly Flexible periods	6	4	2	4	9	6	2	4	11	8	4	6

^{18 19}Arts/Commerce stream students must take 4 credits of senior Science subjects.

Introduction of Senior Level Curriculum Design

1. Subject Categories¹⁹

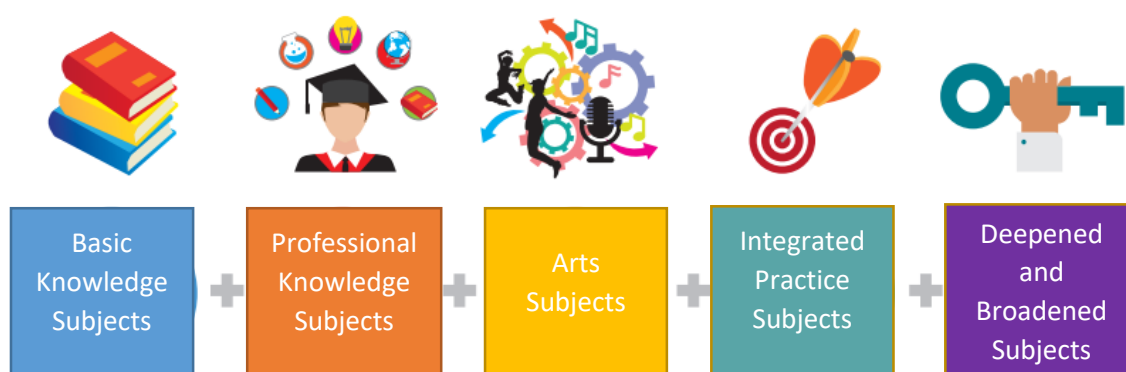


Diagram 4: The Curricular Structure of Senior Level Curriculum

a. Basic Knowledge Category Subjects

Their contents cover the use of languages, the possession of logical thinking and civic awareness aiming to enlighten and develop learning power. This category subsumes five subjects, namely, Chinese, Bahasa Melayu, English, Mathematics (Senior Mathematics/Advanced Mathematics)²⁰ and Liberal Studies. These five are required subjects; in average, five periods are allocated to the three languages and Advanced Mathematics. The Period Allocation for Advanced Mathematics is “7/7/5”. General Knowledge (recommended to add in the list) is a 2-period required subject which covers Civic Education, Moral Education, Science, Democracy and Legal System, etc.

b. Professional Knowledge Category Subjects

Its objective is to help students develop suitably and let them discover their aptitude and interest through inquiry-based learning. It also helps them build up professional foundation and skills thus to eventually prepare for tertiary studies and career. This category consists subjects in science, arts, commerce and vocational stream (inclusive of Electrical Engineering, Art and Graphic Design, Car Maintenance, Food and Beverage Management and Fashion Design, etc.). With the principle of postponement in streaming, it allows students to discover their aptitude and interest in senior one, meaning, to take four subjects in this category; or, when students have found their interested field, they can take at least two subjects at this level. Basically, at senior two level, students must decide whether to head for science, arts, commerce or vocational stream. But the school can decide whether to allow them to take non-required subjects in this category only the maximum is four subjects. Take for instance, a science stream student takes two science subjects at senior two, if the

¹⁹ Dong Zong (2018), Malaysian Independent Chinese Secondary Schools Education Blueprint. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 66-67.

²⁰ Science stream students can only take Advanced Mathematics but not Senior Mathematics.

credit allows, she/he is allowed to take one or two subjects in the arts/commerce stream. Under this new curricular configuration, the extant vocational stream contents need to be gradually promoted to senior level for the purpose of tertiary admission.

c. Arts Category Subjects

Its contents stress on the development of students' artistic skills for a holistic growth both mentally and spiritually. At living level, students are expected to own a healthy body, love and know how to live, including the digital capabilities needed for their future life; at spiritual level, they own aesthetic capability thus to form innovative, beauty appreciative, proactive and positive attitude. This category includes Fine Arts, Music, Physical Education and Health as well as Computer and Information Technology. Students at senior one level must take these four subjects whereas at senior two, all other subjects are optional except Physical Exercise and Health.

d. Integrated Practice Subjects

Its contents prompt students to organise activities and tasks in real life context and allows them to partake voluntarily, enjoy inquiry-based learning, make use of all knowledge learned integrally to discover personal potentials and promote soft skills. The subjects in this category include Integrated Practice Activities, Social Practice or Social Service, school-based curriculum subjects and co-curricular activities. The school-based curriculum and co-curricular activities are designed by the schools respectively and the curriculum needs to concentrate on the nurture of students' integrated practice capability. The Integrated Practice category is allocated 6 periods for all levels.

e. Deepened and Broadened Category Subjects

This category is the extension of Basic Knowledge, Professional Knowledge and Arts Knowledge category. It aims to broaden and deepen their contents for interested students to choose from and it also better prepares students for tertiary studies and career. The examples are like Malay Literature in the Basic Knowledge category, Accounting and Bookkeeping software in Professional Knowledge category and Art Appreciation in the Arts Knowledge category. They are forwarded mainly for senior three students to choose from thus to enhance their competencies in Professional Knowledge category subjects. Affordable schools can develop their own Deepened and Broadened Knowledge category subjects but must negotiate with Dong Zong beforehand for suitability. Moreover, the schools can likewise co-organise credit-transferrable or certificate-awarded professional courses with universities. The subjects in this category can enrich MICSS senior three curriculum and promote its value. Four periods are recommended for this category.

2. Curriculum Design

- a. Educational System and Class Periods: The educational system of MICSS senior level is designed to be in a stretch of three academic years. Each academic year has 52 weeks. There are 40 weeks of teaching in an academic year, meaning, each semester has 20 weeks of school. Each period lasts for 40 minutes, one credit is earned in a duration of one semester or a total of 20 periods learning.
- b. Weekly Periods: It is recommended not to exceed 45 periods per week, and the duration of each period is 40 minutes. It is so designed in consonant with the consideration that not more than nine periods are scheduled daily for the 5-day school implementation option to be in place.

- c. Dong Zong Curriculum (Required): It is the Dong Zong designed curriculum as well as the required curriculum for all MICSS students.
- d. Dong Zong Curriculum (Optional Required): It is the Dong Zong designed curriculum but students can take the subjects in accordance with their respective stream. As such, certain subjects are required in relevant stream.
- e. Dong Zong Curriculum (Optional): It is the Dong Zong designed curriculum, the schools can decide whether to run depending on affordability before they encourage interested students to take.
- f. School-based Curriculum (Required): It is school-based designed curriculum as well as the required curriculum for all students.
- g. School-based Curriculum (Optional Required): It is school-based designed curriculum, interested students can opt to take and the school can decide the total number of credits required for students.

3. Recommendation for Curricular Assessment

- a. Credit Earning: As long as the students have completed the class hours for a particular subject and passed the examination held by the school, credits will be earned.
- b. Graduation Credits: For Arts stream, 218 credits; Commerce stream, 234 credits; Science stream, 254 credits and 242 credits for vocational stream.
- c. Referral tests or term break classes will be scheduled to help those who fail to complete their graduation credits. If any one student still cannot earn the relevant credits in the remedy measure, the school can consider letting them promote but she/he must retake the unearned credits. Under circumstance where students are seriously lagging behind in all their studies, the school can allow students to redo the entire level only they do not have to retake the credit-earned courses so that they can concentrate merely on the failed subjects.
- d. Article 'c' is non-applicable to graduating classes in junior and senior three levels. The school can issue graduation certificate based on students' performance in Junior and Senior UEC.
- e. The Unified Examination for MICSS (The UEC): Other than Mathematics which accords merely the UEC in terms of assessment, subjects in Basic Knowledge and Professional Knowledge categories are concurrently tested in the UEC and school-based assessment proportionally (maximum school-based assessment weightage is 20 percent²¹).
- f. The Senior UEC is recommended to be reviewed in terms of approach, viz., to split the Senior UEC into two stages, the assessment for Basic Knowledge (Mathematics exclusive) is scheduled in senior two so that senior three students can concentrate only on Professional Knowledge subjects to disperse their examination stress. Students who

²¹ Dong Zong (2018), Malaysian Independent Chinese Secondary Schools Education Blueprint. Kajang: United Chinese School Committees' Association of Malaysia (Dong Zong), 119.

failed their Basic Knowledge subjects at senior two level can be given re-sit opportunity but must attain official consent on paper from MICSS Working Committee.

- g. School-based Assessment: Arts, Integrated Practice and Deepened and Broadened Knowledge categories are assessed by School-based Assessment.

7. IMPLEMENTATION STRATEGIES

(1) Cross Systematic Integration and Collaboration

The system here refers to the administration system besides MICSS curriculum which includes teacher education as well as examination and assessment systems in Dong Zong or other systems out of Dong Zong like school administrators and Board of Directors, etc.

1. Dong Zong's Internal System Integration and Collaboration

- Relevant administrators must study the MICSS Education Blueprint/the Main Standard closely to ensure thorough understanding for better internal collaboration.
- Teacher Education needs to be enhanced to accord with the Main Standard.
- The Curriculum Department and Examination Department need to collaborate intimately to put the curricular objectives and core competences in place.
- Examination assessment should be reviewed and adjusted in accordance with the Main Standard.

2. Dong Zong's Integration and Collaboration with External Systems

- Dong Zong needs to appoint relevant officials to MICSSs to help map their own vision.
- Dong Zong needs to appoint relevant officials to MICSSs to help design their own school-based curriculum.
- Dong Zong can appraise the implementation strategies of the MICSS Blueprint/Main Standard through platform like Principals/Directors Conference.

3. MICSSs' System Integration and Collaboration

- All units (departments) in schools can integrate and collaborate organically to ensure the implementation to be in place.
- The schools need to enforce integration and collaboration with communities and leverage community resources to design school-based curriculum.
- The schools need to organise the teacher resource properly to enhance the measures of Professional Learning Community and collaborative lesson preparation thus to ensure teachers to promote teaching quality when the curriculum is simplified and time released.

(2) Learning Support

The reform in curriculum or education is equivalent to a social reform, and a learning revolution. It demands mobilisation from all walks of life to achieve the final reform vision.

1. At Dong Zong Level

- It needs to organise subject curriculum standard seminars for all subjects.
- It needs to establish "School-based Curriculum Committee" to formulate and publish the "School-based Curriculum Guidelines" and "School-based Curriculum Manual".

- It needs to hold training camps for school administrators and teachers to push forward the concepts of curriculum reform.
 - It needs to optimise the Small-scale Schools support mechanism to help them design distinctive school-based curriculum.
 - It needs to establish the ‘Cloud’ Education platform benefiting all students and supporting teaching.
 - It needs to forward teaching devices/facilities and resource recommendations for schools’ reference.
2. At School Level
- It needs to outline its school-based image based on its mission and vision and forward its unique mapping in learning.
 - It needs to conduct school-based teacher education to consolidate teachers’ curricular view.
 - It needs to reorganise the existing teachers or enhance the functions of the academic department to optimise the curriculum-led function thus to design and develop distinctive curriculum.
 - It needs to understand the aptitude and learning needs of the students to correspond with suitable teaching models and strategies thus to arouse learning motivation.
3. At Parents/Community Level
- Parents and alumni with professional knowledge are invited to hold seminars for teachers and students regularly.
 - Interactive opportunities are provided to parents, for instance, teacher-parent conference, to let them understand the direction of the educational implementation.
 - To attune with the education reform, parents need to be reeducated in terms of concepts thus to support their children’s learning.
 - Financial resource needs to be provided for school development.

(3) Schools and Communities

- a. Constituents: The relevance between MICSS and its community (parents, alumni, members of public) is a mutually beneficially and win-win relationship. If the community resources are leveraged, the hard and soft devices of the school can be promoted and the community culture/features and learning ethos/style can also be further improved.
- b. The community can supply supports: These supports include money, space (e.g. activity center or playing-field), professional knowledge and experience.
- c. The strategy of using MICSS as an education center to support the community:
- The school is recommended to open facilities (e.g. hall, library, stadium/courts) in the campus to the community and mobilise students as tour guides to enhance their communicative and expressive capabilities.
 - The school is recommended to regularly organise learning outcome exhibition in concert with senior and junior case study curriculum on which community members are invited to participate.
 - The school is recommended to organise activities in concert with senior and junior Community Service curriculum and community associations (folks associations, clan associations and non-governmental organisations) on special issues or festivals.

- The school is recommended to organise Alma Mater Feedback Day for alumni to partake in the construction of hardware and software in the school.
- The school is recommended to incorporate community characteristics to develop school-based curriculum.
- The school is recommended to establish a continuing learning center to offer evening classes for the community members.

8. ANNEXES—HIGHLY CONCERNED ISSUES

1. The International Recognition of the MICSS Curriculum

The ultimate goal of MICSS curriculum must ensure that the students it produced can get admission from universities all over the world thus to continue their studies in colleges or universities pursuing their dreams. What the curriculum designers most concerned about is how the UEC holders use the results obtained to broaden tertiary channels.

- a. In what way the MICSS curriculum must incorporate with the world to further attain international recognition;
- b. In what way the MICSS can correspond to the diverse requirements and standards of universities globally in terms of tertiary admission; and
- c. Challenge: certain local universities require prior UEC recognition from the government before admitting UEC holders.

2. Learner-centered Multivariate Pedagogy

No matter how good the curriculum design is, the success lies in its practice, that is, whether teachers can effectively impart the contents in their daily teaching practices thus to “enjoy teaching, love learning” and “empower children to attain achievement”. How teachers can command diverse pedagogical approach and spirit to reach the goal of successful learning is also the concerns of a curriculum designer. Herewith some approaches are listed for reference:

1. Collaborative Learning
2. Field Trip Learning
3. Theme-based Learning
4. Project-based Learning
5. Inquiry-based Learning
6. Situated Learning
7. Activity-based Learning
8. Multimedia Learning
9. Experiment-based Learning
10. E-learning
11. Differentiated Instruction
12. Book Club
13. Interschool Teaching (Teachers as ‘Teacher YouTubers’)
14. Collaborative Teaching (Double Teacher System, two teachers teaching one unit or topic)

3. Time Allocation of Curricular Implementation

The educational background of the MICSS is in sequence the lead of the UEC followed by coursebooks compilation and redaction to meet the needs. Simultaneously, most MICSS teachers are teaching their own major and thus they tend to be subject-centered and lack of macro consideration in terms of curriculum development. Attributed to this pretext, when the curriculum reaches the juncture where a panoramic view demands as well as involving the concepts of inter-discipline, domains and subject integration, its development faces grave challenge, particularly in time allocation. In view of this, when the draft of the Main Standard was completed, subject editors from Dong Zong raised the following views addressing the challenge of period time distribution.

1. Group discussion based on each subject category;
2. Reference to period time distribution globally;
3. Definition of contents and attributes for each subject category;
4. Discussion of period time distribution based on subject categories and time allocation proposed in the MICSS Education Blueprint;
5. Decision on period time distribution in accordance with the nature of subjects;
6. Decision on period time distribution in accordance with different streams; and
7. The Main Standard needs to ensure teaching quality when the time allocation for any one subject is decreased, the increase in workload in terms of classes for teachers must not occur.