

Curriculum Guidelines of 12-Year Basic Education

General Guidelines

Ministry of Education

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Curriculum Guidelines of 12-Year Basic Education

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I. Background of Revisions

The Republic of China established its national curriculum standard in 1929. Since then, the guidelines for elementary school and secondary school have been revised multiple times to ensure that they are in line with the global community. In 1968, the Nine-Year Compulsory Education was implemented to educate Taiwanese citizens, establishing an excellent foundation for cultivating talented individuals in Taiwan. However, identifying methods for alleviating students' academic pressure to further their education and providing whole-person education based on the concept of the *five ways of life* (moral, intellectual, physical, group, and aesthetic education) remain a critical issue to be addressed by various sectors of Taiwan. In addition, various issues of significance have emerged in recent years. These include the low birth rate, population aging, diversified interactions between ethnic groups, rapid development of the Internet and information science, emergence of new job types, increasing democratic participation, growing awareness of social justice, attention to ecologically sustainable development, and transformations brought about by globalization and internationalization. The aforementioned issues present numerous challenges to education, and more importantly, they have demonstrated that education must keep pace with the changing social needs and global trends.

Article 11 of the Educational Fundamental Act promulgated in 1999 stipulates that the “number of years of basic national education shall be extended to meet the needs of society as it develops.” In September 2003, the National Educational Development Conference reached a consensus on the phased implementation of a 12-Year Basic Education curriculum. This extends the number of years of basic national education by integrating high school, vocational senior high school, and the first three years of 5-year junior college programs, thereby improving core competencies among citizens to ensure Taiwan's global competitiveness. In June 2004, the drafting and implementation of an elementary and secondary school curriculum was incorporated by the Ministry of Education (MOE) as one of its major administrative goals. In 2006, the MOE established a special assignment office, which completed 12 subprojects and offered 22 proposals, including a curriculum reference guide for elementary schools and secondary schools to revise their curriculum guidelines. In 2007, the MOE began a project to revise special education curriculum guidelines; these revisions were made to ensure alignment with regular elementary and secondary school curricula for trial use starting August 1, 2011.

The consensus of the Eighth National Education Conference in 2010 asserted that the MOE, following the experience of educational development in advanced nations and incorporating the principles of prevalence, voluntariness, quality assurance, and social justice, should take the initiative in implementing a 12-Year Basic Education program. In the New Year's address of 2011,

President Ma Ying-Jiyou pledged to implement 12-Year Basic Education, and in September of the same year, the Executive Yuan approved the 12-Year Basic Education Implementation Plan, stipulating that the plan be implemented in full swing starting August 1, 2014.

Subsequently, the National Academy for Educational Research and the Department of Technological and Vocational Education (of the MOE) were assigned responsibility for developing the 12-Year Basic Education curriculum general guidelines. The 12-Year Basic Education Curriculum Research and Development Committee (of the National Academy for Educational Research) evaluated the drafting of the curriculum, while the 12-Year Basic Education Curriculum Review Committee was responsible for reviewing the drafted curriculum. The General Guidelines has been promulgated in November 2014. To demonstrate the ideal that all national languages shall be equal and comply with Paragraph 2 of Article 9 of the Development of National Languages Act, which stipulates that “The central supervisory agency for education shall implement national languages as MOE-mandated curriculum at all stages of 12-Year Basic Education,” the National Academy for Educational Research initiated the amendment of guidelines for relevant curricula of 12-Year Basic Education in 2019 to realize the substance and spirit of the Development of National Languages Act.

In addition to critically evaluating the outcomes of current curriculum implementation or the course of national development, each stage of curriculum revision not only follows strictly the educational goals specified in the Constitution, taking into account social changes, globalization trends, and the future demand for talent, but also stresses the coherence and integration of elementary and secondary school curricula to implement competency-based instruction and assessment. The ultimate goal intends to cultivate modern citizens with quality education that aligns with students’ aptitudes, maximizes their talent, and helps them develop lifelong learning abilities, social compassion, and an international outlook.

II. Fundamental Beliefs

The Curriculum Guidelines of the 12-Year Basic Education was developed based on the spirit of holistic education, adopting the concepts of *taking the initiative*, *engaging in interaction*, and *seeking the common good* to encourage students to become spontaneous and motivated learners. The curriculum also urges that schools be active in encouraging students to become motivated and passionate learners, leading students to appropriately develop the ability to interact with themselves, others, society, and nature. Schools should assist students in applying their learned knowledge, experiencing the meaning of life, and developing the willingness to become engaged in sustainable development of society, nature, and culture, facilitating the attainment of reciprocity and the common good.

According to the aforementioned principles, the curriculum guidelines introduced herein adopt the vision of *developing talent in every student—nurture by nature, and promoting life-long learning*. In addition, the guidelines cater to the specific needs of all individuals, take into account the diverse cultures and differences between ethnic groups, and pay attention to socially vulnerable groups. The goal is to provide adequate education that elicits students' enjoyment and confidence in learning. This facilitates raising students' thirst for learning and courage to innovate creation, prompting them to fulfill their civic responsibilities and develop the wisdom for symbioses, and helping them engage in lifelong learning and develop excellent social adaptability. Accordingly, the vision of a more prosperous society with higher quality of life among individuals can be achieved.

III. Curriculum Goals

Based on the aforementioned fundamental beliefs, four curriculum goals were established to help students learn and develop their potential.

1. Inspire Students to Unleash Their Full Potential

This goal aims to elicit students' learning motivation; develop their inquisitiveness and ability to explore, think, judge, and act; and help them develop a willing and active attitude to explore and learn. In this manner, students can experience the joy of learning and increase their perceived personal worth. Furthermore, students can unleash their hidden potential, leading to their balanced and healthy development.

2. Enrich Students' Knowledge about Life

This goal aims to develop students' basic knowledge in various aspects of life, allowing them to integrate distinct methods and use their hands and brain to solve problems. Furthermore, it is essential to develop students' communication ability in expressing their opinions, in addition to emphasizing interpersonal tolerance, teamwork, and social interaction. This enables students to adapt to social life, take the initiative to innovate, possess competencies in technology use, and appreciate aesthetics in everyday life.

3. Promote Students' Career Development

This goal aims to assist students in developing their careers based on their aptitudes, fully utilizing their talent, and identifying methods for effective learning. In addition, the goal is to develop students' ability and willingness to engage in lifelong learning, inspire their motivation to conduct innovation and self-improvement, and develop fundamental ability in performing academic research or professional tasks. Moreover, the concept of *decent work* is introduced to develop students' courage, knowledge, and ability to face career challenges and global co-opetition, allowing them to adapt to social changes and global trends as well as cultivate the courage to initiate a new trend or fashion.

4. Inculcate Students' Civic Responsibility

This goal aims to enrich students' democratic literacy, legal awareness, human rights, morality and courage, social and tribal consciousness, international understanding and national identity, and self-responsibility. Accordingly, students can learn to respect cultural and ethnical diversity, pursue social justice, internalize the concept global citizens, appreciate the nature, cherish life, develop a caring and active attitude toward resource preservation, endeavor toward ecological sustainability and cultural development, and strive for the common good.

The aforementioned curriculum goals entail the development of core competencies. The characteristics of each learning stage must also be considered to fully realize the fundamental concepts of taking the initiative, engaging in interaction, and seeking the common good stressed in 12-Year Basic Education to strive for the ideal of holistic education.

IV. Core Competency

1. Meaning

To implement the ideas and goals of 12-Year Basic Education, core competencies are used as the basis of curriculum development to ensure continuity between educational stages, bridging between domains, and integration between subjects. Core competencies are primarily adopted in the general domains and subjects of elementary school, junior high school, and upper secondary school. In vocational, comprehensive, and specialized senior high school, core competencies are integrated or adopted in a flexible manner according to the professional features and clusters of such school.

Core competency encompasses all information, ability, and attitude that a person should possess to equip him or her for daily life and for tackling future challenges. The concept of core competency emphasizes that learning should not be limited to the knowledge and ability taught in school. Instead, learning should consider real-life scenarios and emphasize holistic development through action and self-development.

2. Three Dimensions and Nine Items of Core Competencies

The concept of core competencies in 12-Year Basic Education emphasizes lifelong learning. These competences are divided into three broad dimensions, namely, autonomous action, communication and interaction, and social participation. Each dimension involves three items. Specifically, spontaneity entails physical and mental wellness and self-advancement; logical thinking and problem solving; and planning, execution, innovation and adaptation. Communication and interaction entails semiotics and expression; information and technology literacy and media literacy; and artistic appreciation and aesthetic literacy. Finally, social participation entails moral praxis and citizenship; interpersonal relationships and teamwork; and cultural and global understanding. Figure 1 illustrates the main concept of the core competencies stressed in 12-Year Basic Education.

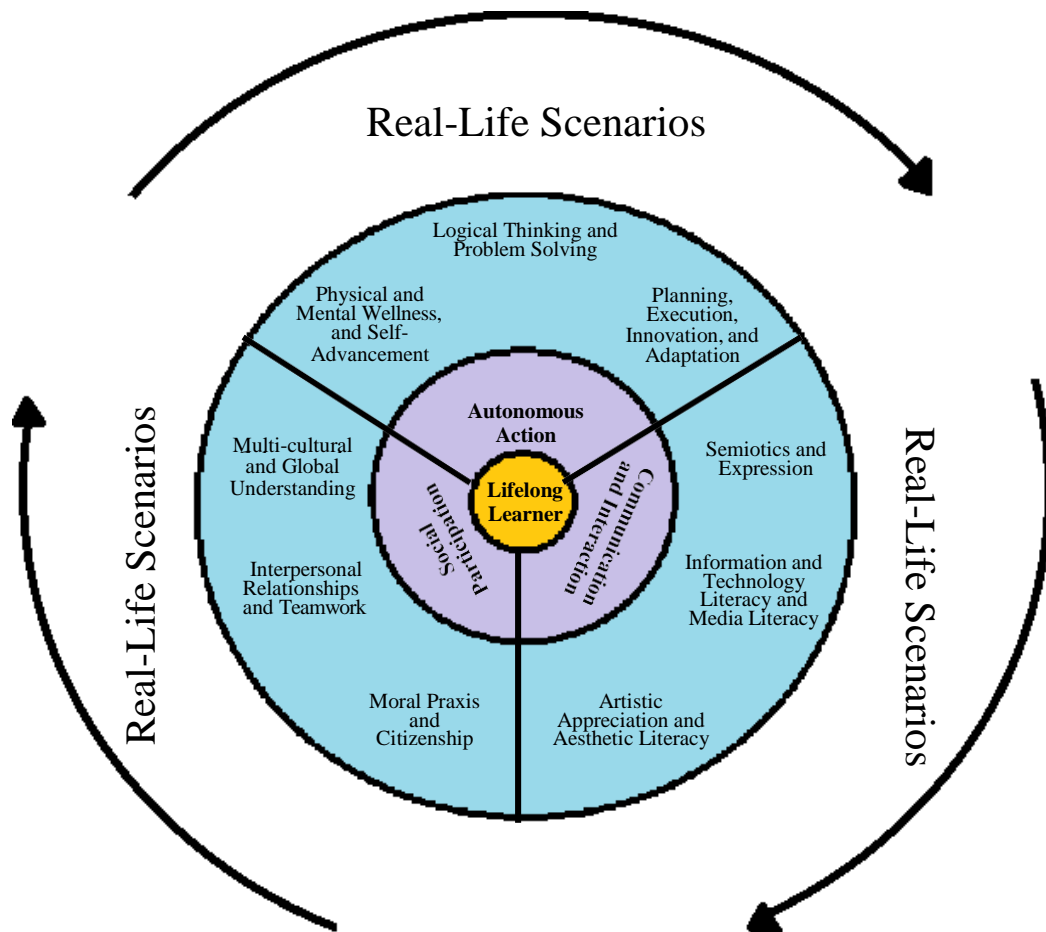


Figure 1. Wheel-in-action diagram of core competencies

- (1) **Autonomous Action:** This dimension emphasizes that each individual is an autonomous agent, and that a learner should determine his or her most appropriate method of learning, conduct systematic thinking to solve problems, and possess creativity and initiative. Learners in a social context should be capable of self-management and taking adequate actions to improve their bodies and minds, thereby achieving personal growth.
- (2) **Communication and Interaction:** This dimension stresses that learners can use a variety of physical and sociocultural tools to interact effectively with others and the surrounding environment. Such physical tools include artificial objects (e.g., teaching aids, study tools, stationery, toys, and vehicles), technology (e.g., auxiliary technology), and information; whereas sociocultural tools include language (e.g., oral and sign languages), textual characters, and mathematical symbols. In contrast to passive media, these tools serve as active channels that facilitate interactions between people and with the environment. Art is another crucial tool for communication. Citizens should possess competencies in creating arts and appreciating aesthetics in everyday life.
- (3) **Social Participation:** In the current era of a tightly connected global village, social participation emphasizes that students should learn to accept diversity in society in order to adequately cooperate and interact with individuals of different backgrounds. Each individual must develop his or her ability to interact with others in a group setting, thereby improving the

overall quality of life of all humans. Thus, social participation entails not merely social competency but also citizen awareness.

3. Content of Core Competencies in Each Educational Stage

In accordance with the varying mental and physical development conditions of students, each educational stage involves different sets of core competencies. Table 1 lists the core competencies of the three education stages, namely elementary school, junior high school, and upper secondary school. The goal is for students to develop gradually along the dimensions of spontaneity, communication and interaction, and social participation and become well-rounded contemporary citizens.

Table 1. Content of core competencies for each educational stage

Key Element	Core Competency Dimension	Core Competency Item	Item Description	Content of Core Competencies		
				Elementary School	Junior High School	Upper Secondary School
Lifelong Learner	A Autonomous Action	A1 Physical and Mental Wellness and Self-Advancement	Possess the ability to conduct sound physical and mental developments, and maintain an appropriate view of humans and self. Through decision-making, analyses, and knowledge acquisition, students can effectively plan their career paths, search for meaning in life, and continually strive for personal growth.	E-A1 Possess favorable living habits, promote sound physical and mental development, identify one's aptitudes, and develop potential talents.	J-A1 Possess favorable attitude and knowledge of physical and mental development, unleash potential talents, examine human nature, explore self-worth and meaning in life, and actively realize one's goals.	U-A1 Improve all aspects of sound physical and mental development, develop potential talents, explore one's own perspective, define self-worth, conduct effective career planning, and seek perfection and happiness in life through personal growth.
		A2 Logical Thinking and Problem Solving	Possess competency in systematic thinking to understand problems, engage in analyses, think critically, and endeavor in meta-thoughts, with the ability to reflect and conduct actions, to effectively tackle and solve problems in daily life.	E-A2 Possess the contemplative ability to explore problems, and through experience and practice, solve problems in daily life.	J-A2 Possess the ability to understand the entirety of a situation as well as the knowledge and ability to conduct independent thinking an analysis, and employ appropriate strategies in tackling and solving problems in daily life.	U-A2 Possess the abilities for systematic thinking, in-depth analysis, and exploration, deepen meta-thinking, and actively face challenges to solve problems in daily life.
		A3 Planning, Execution, Innovation, and Adaptation	Possess the ability to devise and execute plans, as well as the ability to explore and develop a variety of professional knowledge; enrich life experience and fully utilize creativity to improve one's adaptability to social change.	E-A3 Possess the ability to devise and execute plans, handling various daily life scenarios through creative thinking.	J-A3 Possess the ability to use resources to devise plans, effectively execute them, and fully utilize the competencies of independent learning and creativity to respond to change.	U-A3 Possess competencies in planning, implementation, and self-reflection and criticism, and adopt a creative attitude toward new situations and problems.
	B Communication and Interaction	B1 Semiotics and Expression	Possess the ability to understand and use various types of symbols, including languages, characters, mathematics and science, bodily postures, and arts to communicate and interact with others, and understand and feel empathy for others. Be able to make use of these abilities in daily life or at the workplace.	E-B1 Possess the basic language competencies (i.e., listening, speaking, reading, writing, and composition) and knowledge of using basic mathematical, scientific, body, and art symbols necessary in everyday life. Be empathetic for others during interpersonal communication.	J-B1 Possess the ability to use symbols of all types to express one's feelings and ideas; feel empathy for and interact with others; and understand mathematical science, aesthetics, and other basic concepts that can be used in daily life.	U-B1 Possess the ability to use symbols of all types to express oneself in the form of experiences, thoughts, values, and affection, feel empathy and compassion for others, and possess the ability to communicate with others and solve problems collaboratively.
		B2 Information and Technology Literacy and Media Literacy	Possess the ability to effectively use technology, information, and media of all types, develop competencies related to ethics and media literacy, and develop the ability to analyze, speculate about, and criticize humans' relationships with technology, information, and media.	E-B2 Possess the basic competency of using technology and information, and understand the meaning and impact of media content.	J-B2 Possess the competency of effectively using technology, information, and media to enhance learning, and perceive and speculate about humans' interactions and relationships with technology, information, and media.	U-B2 Possess the competency of appropriately using technology, information, and media to interpret and criticize media information, and be able to reflect on ethical topics related to technology, information, and media.

		B3 Artistic Appreciation and Aesthetic Literacy	Possess the abilities of art awareness, creation, and appreciation, experience artistic culture through reflection on arts in daily life, enrich artistic experiences, and develop the ability to appreciate, create, and share arts.	E-B3 Possess the basic competencies of artistic creation and appreciation, promote multisensory development, and cultivate aesthetic experiences in daily life.	J-B3 Possess general knowledge and competency in preparing and demonstrating artistic performance. Appreciate and value all artistic styles and understand the characteristics, intension, and expression of aesthetics to enhance the richness of life and aesthetic experiences.	U-B3 Possess the ability to perceive, appreciate, create, and critique arts. Understand the relationship of art creation with society, history, and culture. Appreciate, create, and share arts through aesthetic appreciation.
	C Social Participation	C1 Moral Praxis and Citizenship	Possess competency in putting morality in practice from the personal sphere to the social sphere, and gradually develop a sense of social responsibility and civic consciousness; take initiative in concern for public topics and actively participate in community events; pay attention to the sustainable development of humanity and the natural environment; and exhibit the qualities of moral character to recognize, appreciate, and practice good deeds.	E-C1 Possess the ability of upholding moral character, distinguishing right from wrong, understanding and respecting the moral rules of society, developing civic consciousness, and being concerned for the environment.	J-C1 Possess the ability to practice and speculate about morality; demonstrate democratic literacy, legal awareness, and environmental awareness; demonstrate the impetus to voluntarily participate in group activities to promote public interests; and show concern for ethical topics and those related to the ecological environment.	U-C1 Possess competency regarding critical reflection and discussion of moral and public topics, develop favorable moral character, civic awareness and social responsibility, and be able to voluntarily participate in environmental protection and public social affairs.
		C2 Interpersonal Relationships and Teamwork	Possess the competency in exhibiting friendly interpersonal feelings and the ability to establish strong interactive relationships; establish communication channels with others, tolerate outsiders, and participate and serve in social activities and other activities requiring teamwork.	E-C2 Possess the ability to understand the feelings of others and show willingness to interact with others and cooperate with group members.	J-C2 Possess altruistic knowledge and attitude, and demonstrate the ability to develop mutual cooperation and harmonious interaction with others.	U-C2 Develop effective and appropriate interpersonal relationships, display tolerance toward outsiders, and exhibit the ability in coordination, communication, and teamwork.
		C3 Multi-cultural and Global Understanding	Stick to one's own cultural identity, respect and appreciate multiculturalism, show active concern for global issues and international situations, demonstrate the ability to adapt to the contemporary world and to social needs, develop international understanding and a multicultural value system, and strive for world peace.	E-C3 Possess the competency to understand and care about local and international affairs, and recognize and tolerate diversity among cultures.	J-C3 Demonstrate sensitivity toward and acceptance of multiculturalism, show concerns about local and international affairs, and respect and appreciate diversity among cultures.	U-C3 Maintain one's cultural identity and values, possess the ability to respect and appreciate different cultures, possess a global perspective, actively show concern about global issues and international events, and possess global mobility.

Note: In Table 1, Rows A, B, and C represent all dimensions of core competencies (i.e., spontaneity, communication and interaction, and social participation) for elementary school, junior high school, and upper secondary school. According the characteristics of each educational stage, the core competencies expected therein is further defined and coded, where E represents elementary school, J represents junior high school, and U represents upper secondary school education.

The aforementioned core competencies are considered when devising various curricula, administering learning programs, and conducting relevant assessments throughout each educational stage. The revisions of curriculum guidelines for all domains and subjects, which consider concepts and goals for the respective domains and subjects and integrate the core competencies stated herein, must adhere to the Curriculum Development Guidelines for 12-Year Basic Education reviewed and approved by the MOE. Accordingly, core competencies and essential learning focuses for each domain and subject are developed and established.

V. Learning Stages

The 12-Year Basic Education Curriculum is divided into three educational stages, incorporating 6 years of elementary school, 3 years of junior high school, and 3 years of upper secondary school. In accordance with the physical and mental developments of students, the educational stages are further divided into five learning stages, which are described as follows. Stage I is the first and second years of elementary school. Stage II is the third and fourth years of elementary school. Stage III is the fifth and sixth years of elementary school. Stage IV is the seventh, eighth, and ninth years of junior high school. Stage V is the tenth, eleventh, and twelfth years of upper secondary school.

The domains, clusters, programs, and subjects adopted by schools of all levels and types must match the learning focuses in their respective learning stage. In addition, related courses are planned in a coherent and integrative manner to comply with the goals of inspiring students to unleash their full potential, developing students' knowledge about life, promoting students' career development, and inculcating students' civic responsibility. The learning focus of each learning stage is organized and described as follows.

1. Elementary School

- (1) Stage I lays the foundation for students' learning ability, with an emphasis on competencies related to establishing favorable living habits and moral character. This stage aids students to conduct active learning in daily life and practice, and introduces basic usage of language and symbols.
- (2) Stage II continues to fortify students' ability, advancing basic knowledge and social ability, developing multiple intelligences, cultivating a myriad of interests, and aiding students in addressing problems in life through experience and practice.
- (3) Stage III deepens students' learning, encourages self-exploration, elevates confidence, increases the ability to distinguish right from wrong, develops the concepts of community and national consciousness, enhances democratic values and legal awareness, and demonstrates the spirit of collaboration and teamwork.

2. Junior High School

Stage IV is a period of rapid development in students' bodies and minds and a crucial period for the development of self-exploration and interpersonal relationships. In this stage, progression in the development of core competencies should be sustained to facilitate holistic development in students, with an emphasis on establishing an appropriate sense of self to discover and explore their natural aptitudes, and to consolidate knowledge and skills required by society. At the same time, this learning stage encourages self-directed learning, collaborative study with peers, and teamwork, as well as emphasizes understanding and concern for community, social, national, international, and global issues.

3. Upper secondary school

Stage V follows on from the preceding 9 years of basic education, with particular emphasis on bridging different learning topics, physical and mental developments, career path determination, career preparation, and independence and autonomy. Core competencies, specific knowledge, and professional skills are continually developed to cultivate citizens with excellent capability and balanced development. This learning stage subsumes four types of upper secondary school. The

respective learning focuses of each school type are described as follows.

- (1) General senior high school provides courses on general subjects; aids students in discovering and exploring their aptitudes for a variety of subjects; emphasizes the development of general knowledge and common skills, humanistic care, and social participation; and prepares students for colleges or universities.
- (2) Vocational senior high school provides general subjects, vocational subjects, and practicum courses; aids students in cultivating professional practical skills; inculcates professional ethics; increases proficiency in humanities and technology; enables students to think critically and creatively and adapt to social changes; establishes a solid foundation for their career paths; and improves practical skills to enhance employability.
- (3) Comprehensive senior high school provides courses for general and specialized subjects; aids students to develop knowledge and interests for entry to the academia or industry; and facilitates students' self-understanding and career exploration, allowing students to develop according to their aptitudes.
- (4) Specialized senior high school provides a specific learning domain as the main program; aids students with clear learning aptitudes to develop their potential; and establishes and elaborates on the foundation of specific knowledge.

VI. Curriculum Framework

1. Curriculum Types and Classification of Domains and Subjects

(1) Curriculum Types

The 12-Year Basic Education Curriculum is classified into two types: MOE-mandated curriculum and school-developed curriculum, as shown in Table 2.

Table 2. Curriculum types for each educational stage

Educational stages		Curriculum type	
		MOE-mandated curriculum	School-developed curriculum
Elementary school		Domain-specific learning curriculum	Alternative curriculum
Junior high school			
Upper secondary school	General senior high school	General subjects	School-developed required courses Elective courses Group activity period Alternative learning period
	Vocational senior high school		
	Comprehensive senior high school	Vocational subjects	
	Specialized senior high school	Hands-on courses	

- ① MOE-mandated curriculum: This type of curriculum is planned by the government to develop students' basic learning ability and establish a development foundation according to students' aptitudes.
- A. In elementary school and junior high school, the curriculum includes domain-specific courses that develop students' fundamental knowledge and skills and facilitate balanced development in all domains of learning.
 - B. MOE-mandated courses in upper secondary schools may include general subject courses needed by students to establish a learning foundation for various domains, and vocational subject courses and hands-on courses oriented toward their professional development and aptitudes.
- ② School-developed curriculum: This type of curriculum is designed and offered by each school to highlight the school's vision of education and facilitate students' development according to their aptitudes.
- A. Elementary and junior high schools offer alternative curricula, which include cross-curricular and integrative courses with theme-, project-, and issue-based inquiry, club activities and professional courses, and special needs domain courses. In addition, courses including service learning, outdoor education, interclass and interscholastic exchange, student-directed activities, homeroom guidance, self-directed learning, and domain-specific remedial instruction.
 - B. Upper secondary schools offer school-developed required courses, elective courses, group activity periods (including homeroom activities, club activities, student-directed activities, service learning, and weekly assemblies or lectures), and alternative learning periods (including self-directed learning, athlete training, enrichment courses or remedial courses,

and school-distinctive activities). Some of the elective courses are to be designed and revised by teams responsible for domain-specific curriculum guideline revisions before these courses can serve as a reference for schools to design their curricula.

(2) Classification of domains and subjects

The 12-Year Basic Education Curriculum was developed based on the concept of holistic education in accordance with knowledge structures and attributes, social changes, knowledge innovation, and learning psychology. The scope of learning is divided into eight major domains to provide students with fundamental, inclusive learning content that bridges different domains, leading to an integrative learning experience. The program facilitates the development of core competencies expected in contemporary citizens and lifelong learners.

Based on the respective knowledge structures and attributes, some learning domains contain a variety of subjects, but emphases should still be placed on learning domain-specific content. For elementary school, domain-specific learning is the primary focus. In junior high school, a domain-specific framework is adopted, in which subject-specific or domain-specific education can be administered in a flexible manner according to the actual conditions of school. In addition, appropriate curriculum designs and classroom activities are arranged to strengthen the integration of domain-specific courses and students' knowledge application. In upper secondary school, a domain-specific framework is employed with subject-specific teaching as the basis, and cross-curricular special topic courses, hands-on courses, and experiential courses are offered to strengthen the integration and application of cross-curricular courses.

(3) The framework of common domain-specific courses in the 12-Year Basic Education Curriculum is presented in Table 3.

Table 3: Domain-specific curriculum framework for each learning stage

		Educational stage		Elementary school education						Junior high school education			Upper secondary school education		
		Learning stage		Stage I		Stage II		Stage III		Stage IV			Stage IV (general subjects)		
		Year		1	2	3	4	5	6	7	8	9	10	11	12
Domains															
MOE-mandated curriculum	Language Arts	Mandarin		Mandarin		Mandarin		Mandarin			Mandarin				
		Native Languages ¹ / Taiwanese Sign Language/ Native Languages of New Immigrants		Native Languages/ Taiwanese Sign Language/ Native Languages of New Immigrants		Native Languages/ Taiwanese Sign Language/ Native Languages of New Immigrants		Native Languages/ Taiwanese Sign Language			Native Languages/ Taiwanese Sign Language				
				English		English		English			English				
											Second Foreign Languages (elective)				
	Mathematics	Mathematics		Mathematics		Mathematics		Mathematics			Mathematics				
	Social studies	Life Curriculum		Social Studies		Social Studies		Social Studies			Social Studies				
	Natural Sciences			Natural Sciences		Natural Sciences		Natural Sciences			Natural Sciences				
	Arts			Arts		Arts		Arts			Arts				
	Integrative Activities			Integrative Activities		Integrative Activities		Integrative Activities			Integrative Activities				
	Technology							Technology			Technology				
	Health and Physical Education	Health and Physical Education		Health and Physical Education		Health and Physical Education		Health and Physical Education			Health and Physical Education				
										National Defense Education					
School-developed curriculum	Alternative learning Required courses/elective courses/group activities		Alternative curriculum						Required courses Elective courses Group activity period Alternative learning period						

¹ According to Article 3 of the Development of National Languages Act, national languages are defined as to include Mandarin, Native Languages, and Taiwanese Sign Language listed in this curriculum.

2. Curriculum Planning and Explanations

(1) Elementary School and Junior High School

① Curriculum Planning

MOE-mandated and school-developed curriculum planning for elementary and junior high school is presented in Table 4.

Table 4: Curriculum planning for elementary and junior high school.

Unit: No. of periods per week

Educational stage		Elementary school						Junior high school education			
		Stage I		Stage II		Stage III		Stage IV			
		1	2	3	4	5	6	7	8	9	
MOE-mandated curriculum	Domain-specific Learning curriculum	Language Arts	Mandarin (6)		Mandarin (5)		Mandarin (5)		Mandarin (5)		
			Native Languages/ Taiwanese Sign Language/ Native Languages of New Immigrants(1)		Native Languages/ Taiwanese Sign Language/ Native Languages of New Immigrants(1)		Native Languages / Taiwanese Sign Language / Native Languages of New Immigrants(1)		Native Languages/ Taiwanese Sign Language(1)		
					English (1)		English (2)		English (3)		
		Mathematics	Mathematics (4)		Mathematics (4)		Mathematics (4)		Mathematics (4)		
		Social Studies	Life Curriculum (6)		Social Studies (3)		Social Studies (3)		Social Studies (3) (History, Geography, Civics and Society)		
		Natural Sciences			Natural Sciences (3)		Natural Sciences (3)		Natural Sciences (3) (Physics/Chemistry, Biology, Earth Sciences)		
		Arts			Arts (3)		Arts (3)		Arts (3) (Music, Visual arts, Performing arts)		
		Integrative Activities			Integrative activities (2)		Integrative activities (2)		Integrative activities (3) (Home Economics, Scouting, Guidance)		
		Technology							Technology (2) (Information Technology, Living Technology)		
		Health and Physical Education	Health and Physical Education (3)		Health and Physical Education (3)		Health and Physical Education (3)		Health and Physical Education (3) (Health Education, Physical Education)		
Number of periods in learning domain		20		25		26		30		29	
School-developed curriculum	Alternative curriculum	Integrative theme-, project-, and issue-based inquiry courses	2-4		3-6		4-7		3-5		3-6
		Club activities and professional courses									
		Special needs domain courses									
		Other types of courses									
Total number of periods			22-24		28-31		30-33		33-35		

② Curriculum Planning and Explanations

A. Domain-specific learning curriculum

- a. Schools must adhere to Table 4 (e.g., domain type and number of periods held for alternative learning) when planning their curricula. Each teaching period spans 40 minutes for elementary school and 45 minutes for junior high school. However, each school may change the duration of each period, modify the grade levels in which certain courses are offered, and arrange joint courses according to the status of curriculum implementation and students' learning progress, given that the changes are approved by the school's curriculum development committee.
- b. Under related regulations stipulated by the MOE and relevant principles governing the number of teaching periods held for various domains, each school may adjust the scheduling of MOE-mandated curriculum or reorganize the course content to integrate and offer cross-curricular courses. The teaching periods held for integrative cross-curricular courses may account for at most 20% of the total teaching periods held for domain-specific courses, and each period is counted toward the total periods of the respective domains integrated in the cross-curricular courses; collaborative teaching may be adopted.
- c. Courses of Native Languages, Taiwanese Sign Language, and Native Languages of New Immigrants are planned as follows:
 - (a) Native languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.
 - (b) Native Languages of New Immigrants courses should focus on languages spoken by new immigrants from the Southeast Asian region.
 - (c) Native Languages, Taiwanese Sign Language, and Native Languages of New Immigrants courses in elementary schools are MOE-mandated courses with 1 period per week. Students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly.
 - (d) Native Languages and Taiwanese Sign Language courses in junior high schools are MOE-mandated curriculum with 1 period per week in Grades 7 and 8. Students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly.
- d. Courses with only 1 period per week (e.g., English/Native Languages/Taiwanese Sign Language /Native Languages of New Immigrants offered in Stage II) may be offered in the form of 2 periods every two weeks, or they may be offered every other semester on a rotating basis (with two class periods per week), given that such changes are approved by the school curriculum development committee.
- e. The English course held once per week in Stage II may be integrated with the English course in Stage III to compromise difficulty in class scheduling, given that the integration does not increase the total number of teaching periods held in Stage II and Stage III, and that the approval is granted by the school curriculum development committee. To implement the aforementioned integration, the alternative curriculum is increased by 1 period in Stage II, and decreased by 1 period in Stage III.

- f. Domains in Stage IV, such as Natural Sciences, Social Studies, Arts, Integrative Activities, and Health and Physical Education, include multiple subjects. After the approval of the school curriculum development committee, subject-specific teaching may be implemented in different grade levels; and in a flexible manner, students are allowed to learn different subjects at different grade levels. This enables reducing the number of subjects learned in each semester; however, the total number of teaching periods for the respective domains must be retained.
- g. If teachers undertake cross-curricular collaborative teaching in domain-specific learning or alternative curricula, the number of cross-curricular periods taught by the teachers is counted toward their total number of teaching periods, given that their course plans have been approved by the school curriculum development committee. Relevant regulations are stipulated by related competent authorities.
- h. Domain-specific learning curriculum guidelines may be planned to include cross-curricular, exploratory, or practical content to develop students' competency in applying knowledge in the real-life context.

B. Alternative curriculum

- a. Campus-wide, grade-wide, or class-wide alternative curricula are planned and executed by each school to spark students' learning interest, encourage students' development according to their aptitudes, and implement school-based and special courses. According to the characteristics of each school and students at each learning stage, courses including integrated theme-, project-, and issue-based inquiry courses, club activities, professional courses, domain-specific courses for students with special needs, and other types of courses may be planned. The curricula are implemented upon the approval from the schools' curriculum development committee.
- b. Alternative curricula may address cross-curricular content or integrate various topics, developing course content with theme-, project-, and issue-based inquiry and strengthen students' knowledge integration and application in the real-life context.
- c. Club activities may involve cross-curricular and subject-specific learning activities for students to participate in elective courses according to their preferences and abilities, allowing them to study with students from other homeroom classes.
- d. Professional courses are designed for students to improve their sensory coordination, foster practical skills necessary in everyday life, develop the concept of decent work, and explore the relationships between humans, technology, and the working environment. Courses may be offered for topics including crop cultivation and creative design that involves the use of machinery, materials, and data. Professional courses may be arranged to bridge cluster, domain-specific, and hands-on courses in vocational senior high schools, thereby allowing students to select classes on the basis of their interests and aptitudes.
- e. Special needs domain courses refer to courses arranged for students with special needs or special talent students:
 - (a) Students with special needs (including gifted students and students with physical and mental disabilities), following professional evaluations, are provided with domain-specific courses that address topics including life management, social skills, learning strategies, vocational education, communication, braille, orientation and mobility, functional movement, auxiliary technology use,

creativity, leadership capacity, affective development, independent study, and other expertise domains.

- (b) Special talent students (including those in sport talent and art talent classes) are provided with courses that cater to the needs to develop their talent.
- f. Other types of courses include Native Languages/Taiwanese Sign Language/ Native Languages of New Immigrants, service learning, outdoor education, interclass or interscholastic exchange, student- directed activities, homeroom guidance, self-directed learning, and domain-specific remedial classes. Junior high schools may include courses of second foreign languages other than English.
- g. For the alternative curriculum, junior high schools may utilize available internal and external resources to offer elective courses such as Native Languages/Taiwanese Sign Language/ Native Languages of New Immigrants and Second Foreign Language other than English. The educational content and learning materials of these classes should be arranged by each school.
- h. In order to respect multiculturalism and enhance ethnic relations, junior high schools should investigate students' willingness. The Native Languages of New Immigrants in alternative learning curriculum can be offered if students have the learning motivation.
- i. To promote the revival and transmission of Native Languages and Taiwanese Sign Language, schools may offer, in addition to MOE-mandated courses, Native Languages and Taiwanese Sign Language courses in the alternative curriculum on the basis of their resources, conditions, or regulations, and implement cross- curricular and integrative courses with theme-based inquiries in conjunction with other domains. Furthermore, to ensure students' continuous learning of Native Languages and Taiwanese Sign Language, Native Languages and Taiwanese Sign Language courses in Grade 9 should be offered in accordance with the following specifications:
 - (a) Schools should conduct a survey on students' intention to enroll in these courses, and if students express their intention to learn, such courses should be offered in ninth-grade alternative curriculum.
 - (b) To safeguard the rights of indigenous students to ethnic education, an Indigenous Languages course should be offered at least 1 period per week in ninth-grade alternative curriculum.
- j. In offering Native Languages, Taiwanese Sign Language, and Native Languages of New Immigrants courses that are not MOE-mandated in the alternative curriculum, schools may flexibly adjust the time and implementation of the courses taking into account factors such as teacher recruitment and scheduling, or for providing students with a diversified learning experience. Relevant regulations shall be determined by the competent authorities.
- k. When offering alternative curricula, elementary and junior high schools should ensure that they have teachers with related expertise; the alternative learning periods taught by these teachers is counted toward their total number of periods taught.
- l. The school curriculum development committee is responsible for planning the alternative curriculum according to the needs of the school; the curriculum should be supervised by the relevant competent authorities.

(2) Upper Secondary School

① Curriculum Planning

Curriculum planning for upper secondary school is presented in Table 5.

Table 5. Curriculum planning for each type of upper secondary school

Course type		School type	General senior high school	Vocational senior high school	Comprehensive senior high school	Specialized senior high school
		MOE-mandated required courses	General courses (including 34 credits for common core learning in upper secondary schools)	120 credits	68–78 credits	50 credits
Specialized and hands-on courses	—		45–60 credits	—	—	
No. of credits	120 credits		113–138 credits	50 credits	50 credits	
School-required and elective courses	General courses / Specialized courses / Professional courses / Hands-on courses	School-developed required courses	42–79 credits (each school should offer project-based hands-on courses as school-developed required courses, totaling 2–6 credits)	School-developed required courses		
		4–8 credits		4–12 credits General subjects	45–60 credits Core subjects	
		Elective courses		School-developed elective courses	Elective courses	
		54–58 credits		120–128 credits	72–87 credits	
	No. of credits	62	42–79	132	132	
Total credits needed (periods per week)		182 credits (30–32 periods)	180–192 credits (30–32 periods)	182 credits (30–32 periods)	182 credits (30–32 periods)	
Group activity periods per week		2–3 periods (12–17 periods)	2–3 periods (12–18 periods)	2–3 periods (12–17 periods)	2–3 periods (12–17 periods)	
Alternative learning periods per week* (Alternative learning periods per week for six semesters)		1–3 periods (11–16 periods)	0–2 periods (4–12 periods)	1–3 periods (11–16 periods)	1–3 periods (11–16 periods)	
Total periods per week		35 periods	35 periods	35 periods	35 periods	

* Table 5 Alternative learning periods per week (total periods per week for six semesters) in curriculum planning for each type of upper secondary school:

1. Please refer to Table 6 for the number of weekly group activity periods and weekly alternative learning periods in the curriculum planning for general senior high school. The total number of weekly group activity

periods for three years should not exceed 17 periods, while the total number of weekly alternative learning periods for three years should be at least 11 periods.

2. Please refer to Table 8 for the number of weekly group activity periods and weekly alternative learning periods in the curriculum planning for vocational senior high school.
3. Please refer to Table 9 for the number of weekly group activity periods and weekly alternative learning periods in the curriculum planning for comprehensive senior high school. The total number of weekly group activity periods for three years should not exceed 17 periods, while the total number of weekly alternative learning periods for three years should be at least 11 periods.
4. Please refer to Table 10 for the number of weekly group activity periods and weekly alternative learning periods in the curriculum planning for specialized senior high school. The total number of weekly group activity periods for three years should not exceed 17 periods, while the total number of weekly alternative learning periods for three years should be at least 11 periods.

② Curriculum Planning and Explanations

- A. Credit-based system: This system is applicable to upper secondary school. One teaching period is offered per week for each semester, and each period spans 50 minutes. 1 credit is awarded if the student attends all periods during the semester or if the total number of periods attended reaches 18.
- B. Total credits and prerequisites for graduation: During the 3 years of upper secondary school, students must attend periods worth 180–192 credits. Students in general senior high schools and specialized senior high schools must pass at least 150 credits to graduate; whereas students in vocational and comprehensive senior high schools must pass at least 160 credits to graduate.
- C. Course periods per week: Each student attends 35 periods per week; these periods include group activities and alternative learning periods.
- D. Group activity periods include homeroom activities, club activities, student-directed activities, service learning, lectures, and weekly assemblies.
 - a. General senior high school: Homeroom activities, club activities, student-directed activities, service learning, lectures, and weekly assemblies should total 2–3 periods per week.
 - b. Vocational senior high school: Homeroom activities should total 1 period per week; club activities, student-directed activities, service learning, lectures, and weekly assemblies should total 1–2 periods per week.
 - c. Comprehensive senior high school: Homeroom activities should total 1 period per week; club activities, student-directed activities, service learning, lectures, and weekly assemblies should total 1–2 periods per week.
 - d. Specialized senior high school: Homeroom activities should total 1 period per week; club activities, student-directed activities, service learning, lectures, and weekly assemblies should total 1–2 periods per week.
 - e. Club activities for all upper secondary school types must be at least 24 periods per academic year.
- E. Alternative learning period: According to school conditions and student needs, alternative learning periods may be arranged for self-directed learning, athlete training, enrichment education, remedial education, or school-distinctive activities. Enrichment education and remedial education are provided throughout each semester and must not exceed 1 period per week for Grades 10 and 11.
 - a. General senior high school and specialized senior high school: 1–3 periods per week.
 - b. Vocational senior high school: 0–2 periods per week, totaling 4–12 periods per week for six semesters.
 - c. Comprehensive senior high school: 1–3 periods per week.

(2)-1 General Senior High School

① Curriculum planning

Table 6 shows the curriculum plan of a general senior high school and details the number of credit offered by each domain/subject as well as course arrangement by year and credit allocation.

Table 6. Academic credits and domains/subjects of general senior high schools

Unit: credits

Categories	Domains/subjects and no. of academic credits			Course arrangement by year and credit allocation						Remarks
	Name	No. of credits	First academic year		Second academic year		Third academic year			
			1	2	1	2	1	2		
MOE-mandated required courses	Language Arts	Mandarin	20	16				4		<ol style="list-style-type: none"> The academic years and credit allocations for each domain or subject proceed according to the domain guidelines and are implemented after approval by the school curriculum development committee. MOE-mandated Mandarin courses include 2 credits for Fundamental Readings in Chinese Culture. Two types of courses for MOE-mandated Mathematics are offered for students in the second academic year. Students should select one of two classes according to their developmental needs. At least 2 credits of each subject of the natural sciences domain must be obtained. At least 2 credits of each subject of the arts domain must be obtained.
		Native Languages/ Taiwanese Sign Language	2	2						
		English	18	16				2		
	Mathematics	Mathematics	16	8		8 (categorized courses)				
	Social Studies	History	18	6						
		Geography		6						
		Civics and Society		6						
	Natural Sciences	Physics	12	2-4						
		Chemistry		2-4						
		Biology		2-4						
		Earth Sciences		2-4						
	Arts	Music	10	2-6						
		Fine Arts		2-6						
		Arts and Life		2-6						
	Integrative Activities	Life Education	4	1						
Career Planning		1								
Home Economics		2								
Technology	Living Technology	4	2							
	Information Technology		2							
Health and Physical Education	Health and Nursing	14	2							
	Physical Education		12							
	National Defense Education	2	2							
	Subtotal	120								
School-developed required courses	General courses								<ol style="list-style-type: none"> School-developed required courses are planned by the school curriculum development committee according to the vision and special characteristics of the school. School-developed required courses extend to the learning of all domains/subjects and focus on the integration of general subjects, 	

Categories	Domains/subjects and no. of academic credits		Course arrangement by year and credit allocation						Remarks
	Name	No. of credits	First academic year		Second academic year		Third academic year		
			1	2	1	2	1	2	
									project-based or cross-curricular project-based courses, practicum (experiments), and experiential courses or courses designed for students with special needs.
	Subtotal	4-8							
Electives	General courses	Mandarin							<p>1. Elective courses include enrichment, expanded, and remedial courses; for information related to implementation and explanation of these courses, please refer to the curriculum planning and explanations section.</p> <p>2. Career exploration is provided for students to explore their career opportunities and may be included under elective courses or integrated into the design of courses in various domains and subjects.</p> <p>3. Please refer to the implementation directions for details on special needs domain courses.</p>
		Native language/ Taiwanese Sign Language							
		English							
		Second Foreign Language other than English							
		Mathematics							
		Social Studies							
		Natural Sciences							
		Arts							
		Integrative Activities							
		Technology							
		Health and Physical Education							
		Cross-curricular project-based courses							
		Practicum (experiments) and experiential courses							
		Career exploration							
		Special education domains							
	Subtotal of elective class credits	54-58	2-10					Elective courses in the first year of high school must total 2-10 credits.	
Maximum number of school-required and elective course credits		62							

Categories	Domains/subjects and no. of academic credits		Course arrangement by year and credit allocation						Remarks
	Name	No. of credits	First academic year		Second academic year		Third academic year		
			1	2	1	2	1	2	
Total credits needed (periods per week)		182 (30-32)	30- 32 (30-32)	30- 32 (30-32)	30- 32 (30-32)	30- 32 (30-32)	30- 32 (30-32)	30- 32 (30-32)	<p>1.The maximum number of credits from MOE-mandated courses and school-required and elective courses is 182</p> <p>2.At least 24 credits are needed for MOE-mandated and elective Mandarin courses (including Fundamental Readings in Chinese Culture).</p> <p>3.At least 24 credits are needed for MOE-mandated and elective English courses and other foreign language courses.</p> <p>4.At least 4 credits are needed for cross-curricular project- based courses, practicum (experiments), or experiential courses. If a student enrolls in school-developed required courses with similar content, the obtained credits can be approved jointly.</p>
Group activity periods per week	12-17		2-3	2-3	2-3	2-3	2-3	2-3	12–17 periods per week for six semesters
Alternative learning periods per week	11-16		1-3	1-3	1-3	1-3	1-3	1-3	11–16 periods per week for six semesters
Total periods per week		210	35	35	35	35	35	35	

② Curriculum planning and explanations

A. Course types: Courses in general senior high schools include MOE-mandated courses, school-required and elective courses, group activity periods, and alternative learning periods. Group activity periods involve 2–3 periods per week. Alternative learning periods involve 1–3 periods per week.

a. MOE-mandated courses

- (a) MOE-mandated courses are developed based on the concept of holistic education to develop students' core competencies, basic learning ability, and general education knowledge. Required courses are courses that students must attend, and the present curriculum guidelines established by the MOE stipulate the minimum credits needed.
- (b) The design of MOE-mandated courses should reinforce the alignment with elementary and junior high school courses. Each domain may involve cross-curricular, experiential, or practical (experiment) courses to enhance students' ability to apply common knowledge for general use.
- (c) For Native Languages and Taiwanese Sign Language courses, students should choose one of these language courses to enroll in, and the school should conduct a survey on the actual needs and intention of students and offer courses accordingly. Native Languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.
- (d) Native Languages and Taiwanese Sign Language are incorporated as MOE-mandated courses, with each worth two credits. Schools may adjust the number of credits and periods within the limits of the total number of credits and periods of the school-developed courses, group activity periods, and alternative learning periods. However, the total number of periods for three years should not exceed 210.

b. School-developed required courses

- (a) School-developed required courses are organized based on the vision and characteristics of each school.
- (b) School-developed required courses extend to the learning of all domains and subjects, primarily incorporating project-based, cross-curricular integrative, practical (experiment), and experiential courses, as well as special education courses. These courses are employed to strengthen students' ability to integrate and apply knowledge in real-life scenarios. Examples of these courses include English writing, second foreign languages, natural science experiments, community service learning, experiential courses in outdoor settings, civic practice, learning strategies, small-scale thesis research, native languages/ Taiwanese Sign Language, project-based exploration, and special needs domain courses.

c. School-developed elective courses

Elective courses include a variety of courses, including enrichment, expanded and remedial courses.

- (a) Enrichment and expanded elective courses provide students with informative course content that aligns with various subjects of tertiary education. The course names, credits, and curriculum guidelines are determined by the MOE. Table 7 lists the credits for each plannable elective course. Students can select elective courses autonomously according to their career paths and interests, with the exception of specially stipulated courses such as Mandarin, English, and Second Foreign Languages.

Table 7. Credits for enrichment and expanded elective courses in each domain and subject

Domain/subject	Plannable MOE-required courses (credits)	Student-related regulations
Mandarin	8	At least 4 credits.
Native Languages/ Taiwanese Sign Language	4	Students may voluntarily enroll in subjects according to their career paths and interests.
English	6	Either subject or total at least 6 credits.
Second Foreign Languages	6	
Mathematics	8	Elective courses selected autonomously according to students' career paths and interests.
Social studies	24	
Natural sciences	32	
Arts	6	
Integrative activities	6	
Technology	8	
Health and physical education	6	

- (b) Remedial elective courses improve the basic learning ability of students with different learning habits and needs to supplement for their unfavorable performance in MOE-mandated courses.
- (c) Diversified elective courses are to be established according to students' interests, aptitudes, abilities, and needs. Each school should provide elective courses totaling at least 6 credits. These courses include Native Languages/ Taiwanese Sign Language, Foreign Languages (including Native Languages of New Immigrants), National Defense Education, general education courses, project-based cross-curricular courses, hands-on courses (experiment) and experiential courses, advanced placement courses, and career exploration courses.
- (d) Special needs domain courses refer to courses arranged for students with special needs or special talent students.
 - Ⓐ Students with special needs (including gifted students and students with physical and mental disabilities), following professional evaluations, are provided with domain-specific courses that address topics including life management, social skills, learning strategies, vocational education, communication, braille, orientation and mobility, functional movement, auxiliary technology use, creativity, leadership capacity, affective development, independent study, and other expertise domains.
 - Ⓑ Special talent students (including those in sport talent, art talent, and science talent classes) are provided with courses that cater to the needs to develop their talent.

B. General principles for curriculum planning

a. MOE-mandated course

- (a) MOE-mandated courses are offered in accordance with the curriculum guidelines announced by the MOE.
- (b) For MOE-mandated courses, each school must consider its current status and refer to information on course arrangement by year and semester or number of classes per week to offer these courses in a flexible manner and reduce the number of subjects learned by students in each semester. In general, the number of MOE-mandated courses offered in Grade 10 or 11 should not exceed 12 (not including Native Languages or Taiwan Sign Language).
- (c) MOE-mandated courses should be designed by relevant curriculum guideline development

teams and consider differences in student aptitudes and needs. Teaching periods may be increased to provide adaptive teaching, the required funds and regulations of which should be determined by relevant competent authorities.

b. School-developed required courses

- (a) School-developed required courses are designed by each school according to its features and development goals. Some courses such as native languages, second languages, practicum (experiments), and issue-based inquiry courses may be organized by curriculum guideline development teams, general senior high school education centers, professional education groups, or interscholastic faculty communities. School-developed required courses may be offered freely by each school after approval by relevant competent authorities or the school curriculum development committee.
- (b) In general, school-developed required courses are based on general education, knowledge application, or school-based courses. These required courses must not repeat or reinforce content from MOE-mandated courses; instead, they must be taught according to each school development characteristics, faculty structure, and relevant conditions.

c. Elective courses

- (a) Elective courses may be developed by the MOE or designated professional education groups (e.g., universities, academic organizations, or general senior high school subject centers). Each school may also develop its own course plan for these courses. Upon the approval by the school curriculum development committee, elective courses may be incorporated into the school's overall curriculum plan. The plan is sent to relevant competent authorities for record keeping and referencing.
- (b) Schools should offer cross-class elective courses. The total credits of elective courses available should be 1.2–1.5 times the elective credits needed by students.
- (c) In principle, an elective course must be enrolled by at least 12 students. Under specific conditions or insufficient funds, the minimum number of enrolled students may decrease to 10, and interscholastic enrollment should be allowed. The number of students required to enroll in Native Languages and Taiwanese Sign Language courses should be determined by the respective competent authorities.

d. Project-based and cross-curricular courses

- (a) When schools offer project-based cross-curricular courses, relevant regulations specifying the number of students in each project group and fund allocation for assigning teachers to each group are determined by relevant competent authorities.
- (b) If a teacher engages in collaborative teaching for integrative cross-curricular courses, the number of periods taught for these courses is counted toward his or her total number of teaching periods after approval from the school curriculum development committee. Related regulations and fund allocation are determined by relevant competent authorities.

e. Course selection guidance

- (a) Development of course handbooks: To allow students to select courses based on their aptitudes, curriculum guideline development teams should develop course handbooks that align with relevant curriculum guidelines to establish a complete course structure as well as clarify the relationships between education advancement and career paths. The handbooks should be provided for use by teachers and students as course selection guidance and for colleges and universities to screen student applicants.
- (b) Reinforcement of course selection guidance: Students should participate in course selection and career guidance to select elective courses suggested by aptitude and interest testing or those

recommended by colleges and universities. Students should participate in course selection consultation with the assigned teacher every semester; each student's consultation record should be listed in his or her academic portfolios. If a teacher assumes the responsibility of course counselor, his or her number of required teaching periods is reduced accordingly. Regulations for teacher certification and teaching period reduction are to be stipulated by relevant competent authorities.

- (c) Credit waivers: Students under special conditions may apply for exemptions in required and elective courses. Exemption rules are determined by each school in accordance with relevant regulations. Students who are determined to satisfy the exemption requirements are awarded the corresponding credits. Opportunity should be provided to students with credit waivers to participate in cross-curricular courses in other grade levels, and guidance should be provided to them in selecting suitable courses.

C. Group activity period

For the course planning and matter needing attention of group activity periods, please refer to Appendix 2.

D. Alternative learning period

- a. According to student needs and school conditions, alternative learning periods may be allocated for self-directed learning, contestant training, enrichment education, remedial education, or school-distinctive activities. Teachers may provide teaching or guidance during alternative learning time; the number of periods taught is counted toward the teacher's total number of teaching periods (if the periods are taught throughout the entire semester) or paid in accordance with the hourly rate (if the periods only span a specific period of the semester).
- b. School-distinctive activities are routine or special events held according to each school's background and current situation, students' interests and developments, parental expectations, and available community resources. Examples of these events include educational tours, media literacy, learning outcome demonstration, festival celebrations, health-related fitness events, international exchange, social events, interscholastic events, graduation events, parenting education events, and other creative events.
- c. To encourage students to take the initiative to plan their learning content, the implantation of self-directed learning by each school should be examined during annual curriculum plan filing and school evaluation.
- d. Common courses and activities arranged for the entire school should be held during group activity periods if possible.

E. Graduation credit requirements

Students must attend periods worth 182 credits and pass 150 credits to graduate. At least 102 passing credits must be obtained from MOE-mandated and school-developed required courses, and at least 40 passing credits must be obtained from elective courses.

(2)-2 Vocational Senior High School

① Curriculum Planning

Table 8 shows the curriculum plan of a vocational senior high school and details the number of credit offered by each domain/subject as well as course arrangement by year and credit allocation.

Table 8. Academic credits and domains/subjects of vocational senior high school Unit: credits

Categories	Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks	
			First academic year		Second academic year		Third academic year			
	Name	No. of credits	1	2	1	2	1	2		
MOE-mandated courses	Language Arts	Mandarin	16							
		Native Languages/ Taiwanese Sign Language	2							
		English	12							
	Mathematics	Mathematics	4–8							According to its clusters, student career development, and school development, each school may reduce the required credits of Mathematics by at most 4, yielding a total of 4–8 credits.
	Social Studies	History	6–10							1. Social Studies consists of History, Geography, and Civics and Society. Each school may offer these courses in a flexible manner according to the clusters, issue integration, student career development, school development, and faculty allocation. The courses in this domain should total 6–10 credits. Each student must select at least two subjects. 2. Required courses from Natural Sciences and Arts may be offered as integrative, experiential, or practical cross-curricular courses, which each course worth 2 credits.
		Geography								
		Civics and Society								
	Natural Sciences	Physics	4–6							1. Natural Sciences consists of Physics, Chemistry, and Biology. Each school may offer these courses in a flexible manner according to the clusters, issue integration, student career development, school development, and faculty allocation. The courses in this domain should total 6–10 credits. Each student must select at least two subjects. 2. Required courses from Natural Sciences and Arts may be offered as integrative, experiential, or practical cross-curricular courses, which each course worth 2 credits.
		Chemistry								
		Biology								

Categories	Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks	
			First academic year		Second academic year		Third academic year			
	Name	No. of credits	1	2	1	2	1	2		
	Arts	Music								1. Arts consists of Music, Fine Arts, and Arts and Life. Each school selects two subjects for a total of 4 credits. 2. Required courses from Natural Sciences and Arts may be offered as integrative, experiential, or practical cross-curricular courses, which each course worth 2 credits.
		Fine Arts								
		Arts and Life								
	Integrative Activities	Life Education	4							Integrative Activities consists of five subjects, namely, Life Education, Career Planning, Home Economics, Law and Life, and Introduction to Environmental Science. Technology consists of two subjects, namely Living Technology and Information Technology. Each school selects two subjects from these domains for a total 4 credits.
		Career Planning								
		Home Economics								
		Law and Life								
	Technology	Introduction to Environmental Science								
		Living Technology								
	Health and Physical education	Information Technology								
		Health and Nursing	2							
		Physical Education	12							
		National Defense Education	2							
Subtotal		68–78							Each cluster may be planned differently according to its characteristics.	
Professional courses									Common professional courses for all departments corresponding to the same cluster should total ○○ credits.	
									Applicable to the ○○ skill of ○○ domain.	
Practicum courses									Common practicum courses for all departments corresponding to the same cluster should total ○○ credits..	
	○○ skill domain								Applicable to the ○○ department and ○○ department	
	○○ skill domain								Applicable to the ○○ department and ○○ department	
Subtotal		45–60								
Total of MOE-mandated course credits		113–138								

Categories	Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks	
			First academic year		Second academic year		Third academic year			
	Name	No. of credits	1	2	1	2	1	2		
School-developed courses	Required courses	Project-based practicum courses	2-6							Each school plans the required courses according to students' needs; special needs domain courses must be included.
		Subtotal								
	Elective courses									The total credits of elective courses available should be 1.2 1.5 times the elective credits needed by students to graduate.
		Subtotal								
Maximum number of school-required and elective course credits		42–79								
Maximum total credits (periods per week)		180–192 (30–32)	30–32 (30–32)	30–32 (30–32)	30–32 (30–32)	30–32 (30–32)	30–32 (30–32)	30–32 (30–32)	The maximum credits obtainable from MOE-mandated courses, school-required courses and elective courses.	
Group activity periods per week		12–18	2–3	2–3	2–3	2–3	2–3	2–3	12–18 periods per week for six semesters	
Alternative learning periods per week		4-12	0-2	0-2	0-2	0-2	0-2	0-2	4–12 periods per week for six semesters	
Total periods per week		210	35	35	35	35	35	35		

② Curriculum Planning and Explanations

A. Subjects and credits

- The arrangement of domains and subjects by year and their respective credits are detailed in the curriculum guidelines of clusters for schools to arrange their course schedules.
- The content and credits of professional courses and practicum courses (including experiments and practicum) are designed according to relevant regulations.
- Practicum courses (including experiments and practice) should implement small group teaching according to the characteristics of clusters.

B. MOE-mandated courses

- The arrangement of courses by year and semester and the corresponding credits may be adjusted if necessary. However, for courses that serve as prerequisites of other courses, the order of which these courses are offered must not be altered.
- A skill domain extracts common basic skills from subjects of similar attributes in an cluster. The goal is to develop students' basic cross-curricular skills and ability.
- MOE-mandated courses in the domains Mathematics, Social Studies, and Natural Sciences aim to develop students' fundamental knowledge with an emphasis on general education and concern for humanities, life, and nature, thereby enhancing students' ability and intention to engage in lifelong learning.
- Required courses in each domain may be offered as integrative, experiential, or practical cross-

curricular courses.

- e. According to the recommended subjects, each school should offer practicum courses for all skill domains from each cluster. However, the MOE-mandated professional courses and practicum courses should not exceed 60 credits.
- f. For Native Languages and Taiwanese Sign Language courses, students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly. Native Languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.
- g. Native Languages and Taiwanese Sign Language are incorporated as MOE-mandated courses, with each worth two credits. Schools may adjust the number of credits and periods within the limits of the total number of credits and periods of the school's developed courses, group activity periods, and alternative learning periods. However, the total number of periods for three years should not exceed 210.

C. School-developed required courses and elective courses

- a. In principle, school-developed courses in each subject should provide 2–4 credits per semester. In particular, required courses should be planned at the second semester Grade 11 or project-based practicum course be offered at Grade 12 for at least 2 credits.
- b. The range of credits from school-developed courses is calculated based on the maximum obtainable credit of 192.

D. Principles for planning school-developed courses

- a. Planning organizations and procedures
 - (a) To develop school-based courses, each school must establish a teaching and research committee for general subjects (or domains) as well as those for other subjects; these committees consist of full-time teachers responsible for teaching the subjects. If school-based courses involve subjects from two or more clusters, a cluster curriculum research and development committee should be established and should include full-time teachers responsible for teaching the subjects. The supervising leader of each cluster should each appoint a candidate to decide on a convener, who is responsible for managing and integrating the subjects in question and available educational resources.
 - (b) The planning of school-based courses should be examined in sequence by the teaching and research committees, cluster curriculum research and development committees, and school curriculum development committees. This procedure can be repeated to ensure complete execution of the planning procedures and reach a consensus among relevant staff members. Future course implementation should consider the varying learning needs of each student. Course content should be adjusted and revised in a punctual manner to ensure alignment with industry development and develop students' practical ability, thereby enhancing their employability.
 - (c) When planning school-based courses, which include MOE-mandated and school-developed courses, each school should place addition emphasis on planning school-developed courses. School-developed courses are divided into required and elective courses, which include general courses, professional courses, and practicum courses. According to the present curriculum guidelines, each school should consider its development vision, student performance, faculty structure, as well as the community's

needs, industry's current status, and parents' expectations. Under the principal's leadership, teachers, parents, industrial personnel, experts, and scholars should cooperate to design school-based courses that align with students' career development and practical needs.

b. Notes on the planning of school-developed courses

- (a) The planning of school-required and elective courses must be based on the respective cluster curriculum guidelines and the content of MOE-mandated required courses, in order to reflect the school's educational characteristics.
- (b) For school-developed elective courses, each school should allow students to freely select cross-class courses. The total credits of elective courses available should be 1.2–1.5 times the elective credits needed by students. The total available credits may be reduced by 10% given that this change has been reported to and approved by relevant competent authorities. The change in the total available credits should also be noted in the overall curriculum plan.
- (c) School-developed courses should not repeat identical content. Relevant competent authorities should review the overall course plan submitted by each school, which serves as an important reference when evaluating the school or allocating funds and subsidies to the school.
- (d) School-developed English courses for each cluster can be offered for students to improve their English proficiency in professional usage.
- (e) In principle, an elective course must be enrolled by at least 12 students. Under specific conditions or insufficient funds, the minimum number of enrolled students may decrease to 10, and interscholastic enrollment should be allowed. The number of students required to enroll in Native Languages and Taiwanese Sign Language courses should be determined by the respective competent authorities.
- (f) Special needs domain courses refer to courses arranged for students with special needs or special talent students:
 - ① Students with special needs (including gifted students and students with physical and mental disabilities), following professional evaluations, are provided with domain-specific courses that address topics including life management, social skills, learning strategies, vocational education, communication, braille, orientation and mobility, functional movement, auxiliary technology use, creativity, leadership capacity, affective development, independent study, and other expertise domains.
 - ② Special talent students (including those in sport talent and art talent classes) are provided with courses that cater to the needs to develop their talent.
- (g) To improve the learning outcomes of students in school-developed project-based practicum courses, the following educational guidelines are specified.
 - ① Course idea
The planning of these courses should adhere closely to the educational goals of the respective clusters and ensure students' practical ability, thereby achieving favorable learning outcomes in cluster and skill domain courses.
 - ② Teaching objectives
 - Strengthen students' learning and integration ability
 - Develop students' teamwork ability
 - Develop students' ability in document processing, outcome demonstrations, oral presentations, verbal expression
 - Enhance students' ability in problem-solving, group innovation, and practical integration.

© Teaching implementation

- Collaborative teaching or small group teaching should be implemented, with 3–5 students in each group to conduct collaborative learning.
- The lessons should include a course introduction, followed by student grouping, theme determination, literature collection, data collection, product creation, demonstrations of finished products or services, composition and presentation of written reports, and oral presentation.
- In each stage of the course, students may demonstrate their progress through a Gantt chart or progress chart.

④ Student assessments

- Multifaceted assessments should be conducted according to the characteristics of the respective clusters.
- Assessment content may include students' hands-on performance, demonstrations of finished products or services, written reports, and oral reports.
- A balance between formative and summative assessments should be emphasized to cover the dimensions of knowledge, ability, and affect.
- Peer and self-evaluations may be conducted to demonstrate students' multifaceted performance.

E. Alternative learning period

- a. According to student needs and school conditions, alternative learning periods may be allocated for self-directed learning, contestant training, enrichment education, remedial education, or school-distinctive activities. Teachers may provide teaching or guidance during alternative learning time; the number of periods taught is counted toward the teacher's total number of teaching periods (if the periods are taught throughout the entire semester) or paid in accordance with the hourly rate (if the periods only span a specific period of the semester).
- b. Alternative learning periods involve multifaceted learning activities, remedial education, and supplementary education to expand students' learning dimensions, reduce learning gaps between students, and promote student development according to their aptitudes.
- c. Alternative learning period may be arranged by each school to host school-distinctive activities or offer elective courses, including enrichment education, service learning, remedial education, and self-directed learning. The credits for these courses are assigned according to the relevant regulations.
- d. School-distinctive activities are routine or unique activities hosted by each school according to students' interests and developments, campus background and current conditions, parents' expectations, and available community resources.
- e. Each school should formulate its relevant regulations for alternative learning periods, in order to ensure that students can conduct learning in an adequate and self-directed manner.

F. Graduation Requirements for the Credit-Based System

- a. Students must attend periods worth 180–192 credits, and pass at least 160 credits.
- b. Students must attend all MOE-mandated courses (113–138 credits) listed in Table 8 and pass at least 85% of the credits.
- c. Students must take at least 80 credits from professional courses and practicum courses, and pass at least 60 credits, 45 credits of which must come from practicum courses (including experiments and practice).

3. Classifications of occupational categories, clusters, and departments

Vocational senior high schools in Taiwan are established according to the country's economic environment, industry conditions, and career development needs of students. In general, vocational schools should be established based on different technological and vocational categories; when necessary, such schools may be established to incorporate multiple categories. Clusters are further defined under each category, and a cluster is not designated if it contains only a single department. Please refer to related curriculum guidelines for each cluster.

(2)-3 Comprehensive Senior High School

① Curriculum Planning

Table 9 shows the curriculum plan of a comprehensive senior high school and details the number of credit offered by each domain/subject as well as course arrangement by year and credit allocation.

Table 9. Academic credits and domains/subjects of comprehensive senior high schools Unit: credits

Categories	Domain/subject and no. of academic credits			Course arrangement by year and credit allocation						Remarks
				First academic year		Second academic year		Third academic year		
	Name		No. of credits	1	2	1	2	1	2	
MOE-mandated required courses	Languages Arts	Mandarin	8	4	4					
		Native Languages/ Taiwanese Sign Language	2	2						
		English	8	4	4					
	Mathematics	Mathematics	8	4	4					
	Social Studies	History	4		(2)					1. Select 4 credits each from Social Studies, Natural Sciences, and Arts. 2. At least 2 credits should be selected for each subject in Natural Sciences and Arts.
		Geography		(2)						
		Civics and Society			(2)					
	Natural Sciences	Physics	4		(2)					
		Chemistry			(2)					
		Biology		(2)						
		Earth Sciences			(2)					
	Arts	Music	4		(2)					
		Fine Arts		(2)						
		Arts and Life			(2)					
	Integrative Activities	Life Education	4		(2)					Career Planning is a required subject for first-year students. From the remaining subjects, select one subject for 2 credits, yielding 4 credits in total.
		Career Planning		2						
		Home Economics		(2)						
Law and Life				(2)						
Introduction to Environmental Science		(2)								
Technology	Living Technology			(2)						
	Information Technology			(2)						
Health and Physical Education	Health and Nursing	6	1	1						
	Physical Education		2	2						
	National Defense Education	2	1	1						
Total of MOE-mandated class credits			50	24-26	24-26					

Categories		Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks
				First academic year		Second academic year		Third academic year		
		Name	No. of credits	1	2	1	2	1	2	
School-developed required courses	General courses									Each school offers 4–12 credits of school-developed required courses according to its vision and students’ learning needs; special needs domain courses must be included.
		Subtotal	4–12							
School-developed elective courses	General and specialist courses									<ol style="list-style-type: none"> General subjects may be planned as school-developed elective courses according to the needs of each school. Academic program must proceed according to the stipulations of the Curriculum Guidelines for General Senior High School, and project-based hands-on course should be planned to offer at least 2 credits for the appropriate grade levels. Vocational program must proceed according to the stipulations of the Curriculum Guidelines for Clusters in Vocational Senior High School, and project-based hands-on course should be planned to offer at least 2 credits for the appropriate grade levels. Each curriculum should offer a minimum of 60 credits for specialized subjects. Students must obtain at least 4 credits in total from project-based cross-curricular courses or from practical and experiential courses.
				Subtotal	120–128					
Total credits needed (periods per week)			132							
Maximum total credits (periods per week)			182 (30-32)	(30-32)	(30-32)	(30-32)	(30-32)	(30-32)	(30-32)	The maximum credits obtainable from MOE-mandated courses, school-required courses and elective courses.
Group activity periods per week			12–17	2–3	2–3	2–3	2–3	2–3	2–3	12–17 periods per week for six semesters
Alternative learning periods per week			11–16	1–3	1–3	1–3	1–3	1-3	1-3	11–16 periods per week for six semesters
Total periods per week			210	35	35	35	35	35	35	

② Curriculum Planning and Explanations

A. General subjects

- a. Except for MOE-mandated courses in Table 9, each school may offer school-required or elective courses according to student needs.
- b. Each domain may be offered as integrative, experiential, or hands-on courses.

B. Specialized subjects

- a. Specialized courses are elective courses offered starting from Grade 11. These courses fall into either the academic or vocational program. Courses in each program should be further planned to prepare students for educational advancement or future employment.
- b. Each school should consider students' needs for college and university preparation when planning courses in the academic program; the courses may be designed independently by the school or offered through cooperation with other institutions.
- c. Each school should consider students' career development, available community resources, faculty structure, and hardware and software equipment to develop courses on its own or through cooperation with other institutions.
- d. The vocational program should be planned as a series of courses, allowing students to gain abilities for educational advancement or future employment.
- e. The vocational program should be designed according to the content of the respective clusters. Excessive diversification of the program is not encouraged. Students should expect to complete the program within 2 years, and the courses should cultivate students' vocational knowledge and workplace attitude, with an emphasis on gaining internship experiences and acquiring relevant certifications.
- f. At least 60 credits of specialized courses must be offered by each program, 26–30 credits of which must be obtained from core subjects and at least 2 credits from project-based hands-on courses.
- g. The total credits of elective courses available should be 1.2–1.5 times the elective credits needed by students. In addition, students should be allowed to enroll in the courses of other programs in a flexible manner.
- h. Core subjects are courses that students should learn to develop their core competencies for a program. These courses fall under the scope of school-developed elective courses.
- i. The planning of specialized courses in the academic program should refer to the content of MOE-mandated courses in the Curriculum Guidelines for General Senior High School. The characteristics of Social Studies and Natural Science courses should be noted to ensure that the ratios of credits offered for different courses reflect the nature of the program.
- j. The planning of the vocational program and specialized courses (including core subjects) must refer to MOE-mandated professional courses and practicum courses in the Curriculum Guidelines for Clusters in Vocational Senior High School.

C. Principles for offering required courses

- a. MOE-mandated courses are generally offered during Grade 10.
- b. School-developed required courses are mostly offered as general courses to students in Grades 10 and 11.
- c. Each course should generally be worth 2–4 credits per semester. Native Languages and Taiwanese Sign Language courses may be offered for 1 credit respectively in each of the first and second semesters.
- d. For required courses where students have great discrepancy in ability, schools should offer periods of varying difficulty levels to accommodate students' abilities.
- e. According to course requirements, each school may flexibly arrange the semester in which

courses are offered while taking into account the logical sequence of the courses.

- f. Special needs domain courses refer to courses arranged for students with special needs or special talent students.
 - (a) Students with special needs (including gifted students and students with physical and mental disabilities), following professional evaluations, are provided with domain-specific courses that address topics including life management, social skills, learning strategies, vocational education, communication, braille, orientation and mobility, functional movement, auxiliary technology use, creativity, leadership capacity, affective development, independent study, and other expertise domains.
 - (b) Special talent students (including those in sport talent and art talent classes) are provided with courses that cater to the needs to develop their talent.
- g. For Native Languages and Taiwanese Sign Language courses, students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly. Native Languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.
- h. Native Languages and Taiwanese Sign Language are incorporated as MOE-mandated courses, with each worth two credits. Schools may adjust the number of credits and periods within the limits of the total number of credits and periods of the school's developed courses, group activity periods, and alternative learning periods. However, the total number of periods for three years should not exceed 210.

D. Principles for offering elective courses

- a. Schools should offer cross-class elective courses. The total credits of elective courses available should be 1.2–1.5 times the elective credits needed by students.
- b. Each course should generally be worth 2–4 credits per semester.
- c. In principle, an elective course must be enrolled by at least 12 students. Under specific conditions or insufficient funds, the minimum number of enrolled students may decrease to 10, and interscholastic enrollment should be allowed. The number of students required to enroll in Native Languages and Taiwanese Sign Language courses should be determined by the respective competent authorities.
- d. Based on the principle of holistic education, a variety of courses should be offered to provide students with the opportunity to learn different subjects.
- e. To meet the needs of students' future career development, schools may offer career exploration courses in Grade 10 that focus on cultivating core abilities related to various clusters and programs. The goals are for students to explore their aptitudes, interests, and capabilities to help them select differentiated elective courses.
- f. Elective courses should be arranged during elective periods for students to select cross-class courses. Schools should advise students on appropriate course selection and provide them with opportunities to select cross-class, cross-program, and mixed-grade courses.
- g. The offering of elective courses should thoroughly account for students' flexibility to develop according to their aptitudes and their subsequent articulation of differentiated courses.
- h. Each school should emphasize the appropriate development of students by providing them with elective courses of different programs and difficulty levels based on their interests, aptitudes, and capabilities. The school may also offer advanced placement courses or

cooperate with the industrial sector or training institutions to offer joint courses.

E. Alternative learning period

- a. According to student needs and school conditions, alternative learning periods may be allocated for self-directed learning, contestant training, enrichment education, remedial education, or school-distinctive activities. Teachers may provide teaching or guidance during alternative learning time; the number of periods taught is counted toward the teacher's total number of teaching periods (if the periods are taught throughout the entire semester) or paid in accordance with the hourly rate (if the periods only span a specific period of the semester).
- b. School-distinctive activities are routine or special events held according to each school's background and current situation, students' interests and developments, parental expectations, and available community resources. Examples of these events include educational tours, media literacy, learning outcome demonstration, festival celebrations, health-related fitness events, international exchange, social events, interscholastic events, graduation events, parenting education events, and other creative events.
- c. To encourage students to take the initiative to plan their learning content, the implantation of self-directed learning by each school should be examined during annual curriculum plan filing and school evaluation.
- d. Common courses and activities arranged for the entire school should be held during group activity periods if possible.

F. Principles for planning school-based curriculum

- a. To develop school-based courses, each school must establish a teaching and research committee for general subjects (or domains) as well as those for specialized subjects; these committees consist of full-time teachers responsible for teaching the subjects. If a cluster involves two or more programs, a cluster curriculum research and development committee should be established and should include full-time teachers responsible for teaching the subjects. The supervising leader of each cluster should each appoint a candidate to decide on a convener, who is responsible for managing and integrating the subjects in question and available educational resources.
- b. Each school should form a curriculum development committee to develop its course plans, which are revised in due course. Developments and revisions of the course plans are executed using a bottom-up approach, where they are first reviewed by the teaching and research committees, followed by cluster curriculum research and development committees and school curriculum development committees. This procedure can be repeated to ensure complete execution of the planning procedures and reach a consensus among relevant staff members.
- c. Plans for school-required and elective courses should be included as key items during annual curriculum plan filing and school evaluations.
- d. Establishment and revisions of programs should comply with the regulations stipulated in the Guidelines for Establishing, Revising, and Discontinuing Programs in Upper Secondary School.

G. Graduation requirements for the Credit-Based System

- a. Students must attend all MOE-mandated and school-developed required courses and pass at least 160 credits to graduate.
- b. Students who have earned 40 credits in specific vocational programs and passed all core subjects and project-based hands-on courses may indicate on the graduation certificate their completion of these courses.

H. Course selection guidance

- a. To offer guidance to students based on their career planning and aptitudes, each school should develop course handbooks, establish comprehensive curriculum frameworks, and clarify course selection choices according to students' career planning, providing a reference for students to select adequate courses.
- b. To strengthen course selection guidance, each school should provide students with appropriate consultations in each semester, including aptitude and interest tests as well as elective course selection recommendations according to students' career planning. All guidance records should be listed in each student's portfolios. If a teacher assumes the responsibility of course counselor, his or her number of required teaching periods is reduced accordingly. Regulations for teacher certification and teaching period reduction are to be stipulated by relevant competent authorities.

(2)-4 Specialized Senior High School

① Curriculum planning

Table 10 shows the curriculum plan of a specialized senior high school and details the number of credit offered by each domain/subject as well as course arrangement by year and credit allocation.

Table 10. Academic credits and domains/subjects of specialized senior high school

Unit: credits

Categories	Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks	
			First academic year		Second academic year		Third academic year			
	Name	No. of credits	1	2	1	2	1	2		
MOE-mandated required courses	Languages Arts	Mandarin	8	8						
		Native Languages/ Taiwanese Sign Language	2	2						
		English	8	8						
	Mathematics	Mathematics	8	8						
	Social Studies	History	4	4						
		Geography		4						
		Civic and Society		4						
	Natural Sciences	Physics	4	4						
		Chemistry		4						
		Biology		4						
		Earth Sciences		4						
	Arts	Music	4	4						
		Fine arts		4						
		Arts and Life		4						
	Integrative Activities	Life Education	4	4						
		Career Planning		4						
		Home Economics		4						
Law and Life		4								
Introduction to Environmental Science		4								
Technology	Living Technology	4	4							
	Information Technology		4							
Health and Physical Education	Health and Nursing	6	6							
	Physical Education		6							
	National Defense Education	2	2							
	Subtotal	50								
School-developed required courses	General and professional courses								1. General or professional courses are arranged based on specific core domains to expand and advance students' knowledge and skills in specific academic disciplines. 2. Each school may plan special needs domain courses according student needs.	
		Subtotal	45-60							

Categories		Domain/subject and no. of academic credits		Course arrangement by year and credit allocation						Remarks
				First academic year		Second academic year		Third academic year		
		Name	No. of credits	1	2	1	2	1	2	
Elective courses	General and professional courses									1. General or vocational elective courses are arranged according to the courses offered in senior or vocational senior high schools. 2. For cross-curricular project-based, practical, and experiential courses, each student must earn 4 credits in total. If a student enrolls in school-developed required courses with similar content, the obtained credits can be approved jointly.
		Subtotal	72–87							
Maximum number of school-required and elective course credits		132								
Maximum total credits (Number of classes per week)		182 (30-32)	30-32 (30-32)	30-32 (30-32)	30-32 (30-32)	30-32 (30-32)	30-32 (30-32)	30-32 (30-32)	The maximum obtainable credits are 182.	
Group activity periods per week		12–17	2–3	2–3	2–3	2–3	2–3	2–3	12–17 periods per week for six semesters	
Alternative learning periods per week		11–16	1–3	1–3	1–3	1–3	1–3	1–3	11–16 periods per week for six semesters	
Total periods per week		210	35	35	35	35	35	35		

② Curriculum Planning and Explanations

A. Applicability: The applicability of the curriculum plans discussed herein to each type of upper secondary school is determined by relevant competent authorities.

B. Course types: The curriculum framework of specialized senior high school includes MOE-mandated courses, school-required and elective courses, and group activity periods and alternative learning periods. In particular, group activity periods and alternative learning periods each entail 2–3 periods per week.

a. MOE-mandated courses

(a) MOE-mandated courses are arranged based on the concept of holistic education to develop students' core competencies, basic capabilities, and general education knowledge. Required courses are courses that students must attend, and the present curriculum guidelines established by the MOE stipulate the minimum credits needed for these courses.

(b) The design of MOE-mandated courses should reinforce the alignment with elementary and junior high school courses. Each domain may involve cross-curricular, experiential, or practical (experiment) courses to enhance students' ability to apply common knowledge for general use.

(c) For Native Languages and Taiwanese Sign Language courses, students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly. Native languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.

(d) Native Languages and Taiwanese Sign Language are listed as MOE-mandated courses, with each worth two credits. School may adjust the number of credits and periods within the limits of the total number of credits and periods of the school's developed courses, group activity periods, and alternative learning periods. However, the total number of periods for three years should not exceed 210.

b. School-developed required courses

(a) School-developed required courses are organized based on the vision and characteristics of each school.

(b) General or professional courses are arranged based on specific core domains to expand and advance students' knowledge and skills in specific academic disciplines.

(c) Each school may plan special needs domain courses according student needs.

c. Elective courses

(a) Elective courses emphasize students' development according to their aptitudes. Each school provides enrichment and expanded courses or individualized and differentiated courses according to students' interests, aptitudes, and abilities, catering to their needs for multifaceted learning.

(b) Schools can offer general or vocational elective courses by referencing the courses offered in senior or vocational senior high schools.

C. General Principles for Curriculum Planning

A. MOE-mandated courses

a. MOE-mandated courses are offered according to the curriculum guidelines announced by the MOE.

b. To reduce the number of subjects learned by students in each semester, each school may offer

MOE-mandated courses in a flexible manner by adjusting the year or semester of which they are offered or by changing the course durations (weeks). The number of MOE-mandated courses offered in Grades 10 and 11 should not exceed 12 (not including Native Languages or Taiwanese Sign Language).

- c. MOE-mandated courses should be designed by relevant curriculum guideline development teams and consider differences in student aptitudes and needs. Teaching periods may be increased to provide adaptive teaching, the required funds and regulations of which should be determined by relevant competent authorities.

B. School-developed required courses

- a. School-developed required courses are designed according to each school's development directions and features.
- b. Each school should offer a variety of school-developed required courses according to its development directions, faculty structure, and relevant conditions.
- c. Special needs domain courses refer to courses arranged for students with special needs or special talent students.
 - (a) Students with special needs (including gifted students and students with physical and mental disabilities), following professional evaluations, are provided with domain-specific courses that address topics including life management, social skills, learning strategies, vocational education, communication, braille, orientation and mobility, functional movement, auxiliary technology use, creativity, leadership capacity, affective development, independent study, and other expertise domains.
 - (b) Special talent students (including those in sport talent and art talent classes) are provided with courses that cater to the needs to develop their talent.

C. Elective courses

- a. Elective courses may be developed by the MOE or designated professional education groups (e.g., universities, academic organizations, or general senior high school subject centers). Each school may also develop its own course plan for these courses. Upon the approval by the school curriculum development committee, elective courses may be incorporated into the school's overall curriculum plan. The plan is sent to relevant competent authorities for record keeping and referencing.
- b. Schools should offer cross-class elective courses. The total credits of elective courses available should be 1.2–1.5 times the elective credits needed by students.
- c. In principle, an elective course must be enrolled by at least 12 students. Under specific conditions or insufficient funds, the minimum number of enrolled students may decrease to 10, and interscholastic enrollment should be allowed. The number of students required to enroll in Native Languages and Taiwanese Sign Language courses should be determined by the respective competent authorities.

D. Project-based and cross-curricular courses

- a. When schools offer project-based cross-curricular courses, relevant regulations specifying the number of students in each project group and fund allocation for assigning teachers to each group are determined by relevant competent authorities.
- b. If a teacher engages in collaborative teaching for integrative cross-curricular courses, the number of periods taught for these courses is counted toward his or her total number of teaching periods after approval from the school curriculum development committee. Related regulations and fund allocation are determined by relevant competent authorities.

E. Course selection guidance

- a. Development of course handbooks: To allow students to select courses based on their

aptitudes, curriculum guideline development teams should develop course handbooks that align with relevant curriculum guidelines to establish a complete course structure as well as clarify the relationships between education advancement and career paths. The handbooks should be provided for use by teachers and students as course selection guidance and for colleges and universities to screen student applicants.

- b. Reinforcement of course selection guidance: Students should participate in course selection and career guidance to select elective courses suggested by aptitude and interest testing or those recommended by colleges and universities. Students should participate in course selection consultation with the assigned teacher every semester; each student's consultation record should be listed in his or her academic portfolios. If a teacher assumes the responsibility of course counselor, his or her number of required teaching periods is reduced accordingly. Regulations for teacher certification and teaching period reduction are to be stipulated by relevant competent authorities.
- c. Credit waivers: Students under special conditions may apply for exemptions in required and elective courses. Exemption rules are determined by each school in accordance with relevant regulations. Students who are determined to satisfy the exemption requirements are awarded the corresponding credits. Opportunity should be provided to students with credit waivers to participate in cross-curricular courses in other grade levels, and guidance should be provided to them in selecting suitable courses.

D. Group activity classes

For the course planning and matter needing attention of group activity periods, please refer to Appendix 2.

E. Alternative learning period

- A. According to student needs and school conditions, alternative learning periods may be allocated for self-directed learning, contestant training, enrichment education, remedial education, or school-distinctive activities. Teachers may provide teaching or guidance during alternative learning time; the number of periods taught is counted toward the teacher's total number of teaching periods (if the periods are taught throughout the entire semester) or paid in accordance with the hourly rate (if the periods only span a specific period of the semester).
- B. School-distinctive activities are routine or special events held according to each school's background and current situation, students' interests and developments, parental expectations, and available community resources. Examples of these events include educational tours, media literacy, learning outcome demonstration, festival celebrations, health-related fitness events, international exchange, social events, interscholastic events, graduation events, parenting education events, and other creative events.
- C. To encourage students to take the initiative to plan their learning content, the implantation of self-directed learning by each school should be examined during annual curriculum plan filing and school evaluation.
- D. Common courses and activities arranged for the entire school should be held during group activity periods if possible.

E. Graduation credit requirements

Students must attend periods worth 182 credits and pass 150 credits to graduate. At least 102 passing credits must be obtained from MOE-mandated and school-developed required courses, and at least 40 passing credits must be obtained from elective courses.

VII. Implementation Directions

Implementation directions of 12-Year Basic Education are based on the concepts of taking initiative, engaging in interaction, and seeking the common good in the Curriculum Guidelines of 12-Year Basic Education, which stipulates relevant regulations and provides suggestions conducive to innovation among education entities including teachers, schools, parents, and governmental and private organizations. The objectives of the guidelines are to promote communication between relevant education entities, facilitate flexibility in school curriculum design and development, support teaching and learning activities, integrate diverse teaching resources, and evaluate curriculum implementation outcomes to ensure students' right to learn and enhance teachers' professionalism and responsibilities.

The implementation directions consist of eight major items, namely, curriculum development, teaching implementation, learning assessment and application, teaching resources, teacher professional development, administrative support, participation of parents and nongovernmental organizations, and supplementary provisions.

1. Curriculum Development

Curriculum development should be based on the goals at the various educational stages and students' physical and mental developments to provide flexible and diverse courses that facilitate students' adaptive development and support curriculum development and teaching innovation. Course plans arranged by schools serve as blueprints for student learning and as crucial communication channels for course implementation, with school curriculum development committees' endeavor to enhance national education and school-based courses.

(1) Organization and operation of school curriculum development committees

- ① Each school should formulate guidelines for organizing curriculum development committees. Following the approval of school affair meetings, the guidelines are used to promote curriculum development and establish school curriculum development committees. Teaching and research committees of various domains, clusters, programs, and subjects can be further established under school curriculum development committees. Interscholastic curriculum development committees can be jointly established by different schools according to the scales and geographical locations of the schools.
- ② The composition and operation methods of school curriculum development committees are decided during school affairs meetings. The committee members should include school administrators; teachers of all grades, domains, clusters, programs, and subjects, including those teaching special needs domain courses; and representatives from teacher organizations and parent associations. Curriculum development committees of general senior high school should also include professionals and experts of related fields. Depending on schools' development needs, curriculum development committees of schools at all levels should invite off-campus experts, community and tribal members, industry representatives or students.
- ③ School curriculum development committees should understand the educational vision of their schools and develop school-based courses accordingly, and assume responsibility for reviewing the course plans and self-compiled teaching materials used in all grades. In addition, the committees should conduct curriculum evaluations.

- ④ Curriculum plans represent the concretized outcomes achieved from the planning of school- developed courses. Therefore, at least two-thirds of curriculum development committee members should be present—with approvals from at least half of the attending members— when finalizing a curriculum plan. Subsequently, the finalized plan must be submitted to relevant competent authorities.

(2) Curriculum design and development

- ① School curriculum development should emphasize the integration of distinct domains, clusters, programs, and subjects as well as the bridging between the different educational stages.
- ② Curriculum design should integrate issues of global importance, including gender equality, human rights, the environment, the global ocean, morality, life, the rule of law, technology, information, energy, security, disaster prevention, family education, career planning, multiculturalism, reading literacy, outdoor education, international education, and indigenous education. These issues should be incorporated into the content of school- developed courses where necessary.
- ③ To meet the requirements of students with special needs, assistive tools and adequate domain-specific courses should be provided, and curriculum adjustments should be made.
- ④ Special education courses should be designed adaptively based on the individualized education programs or individual guidance programs regulated by the Special Education Act. The MOE-mandated courses can be adjusted where necessary for students with special needs.
- ⑤ A curriculum plan should clarify the overall framework, content of alternative learning and school-developed courses (including school-based courses), and the learning focuses, assessment methods, and progresses of various domains, clusters, programs, and subjects. Under relevant teaching regulations, flexible adjustments can be made for cross-curricular integration and collaborative teaching.
- ⑥ After approval from school curriculum development committees, curriculum plans should be submitted before the semester begins to relevant competent authorities for archiving and reviews. Various forms of information, including printed and online information, can be provided to students and parents to clarify the curriculum plan. To help students select their appropriate schools, each school should complete and publicly announce their curriculum plans six months prior to the school enrollment date.
- ⑦ The central and local governments should establish guidance and resource integration platforms for the development and implementation of curriculum plans by schools.

(3) Curriculum evaluation

- ① Relevant competent authorities should establish and implement evaluation mechanisms for the 12-Year Basic Education to assess the effectiveness of curriculum implementation and related promotional measures. The curriculum evaluation results of schools provide feedback for revising the curriculum guidelines and references for improving curricula. The central competent authorities can construct a database archiving students' learning achievements to assess the effectiveness of the MOE-mandated curriculum.

- ② The relevant competent authorities should integrate curriculum-related evaluations and school visits and assist in the normalization of teaching. Curriculum evaluation results will not be rated, and rankings will not be announced; instead, these data are used as the basis for improving curriculum policy planning and the overall teaching environment.
- ③ The objective of curriculum evaluation is to assist teachers in teaching and enhance students' learning outcomes. Off-campus professional resources can be utilized to facilitate teacher reflections and professional dialogues among communities to guide the reform and innovation of school curricula and teaching methods. The implementation schedule, content, and methods of curriculum evaluation are stipulated by the relevant competent authorities.

(4) Curriculum experimentation and innovation

- ① Relevant competent authorities should provide resources for the development and implementation of school-based courses, and encourage teachers to experiment with innovative teaching materials and methods; in addition, teachers are encouraged to share their implementation results.
- ② Relevant competent authorities should analyze the results of curriculum development and experimentation to provide feedback for curriculum guideline revisions.

2. Teaching Implementation

To practice the concepts of taking initiative, engaging in interaction, and seeking the common good, teaching activities should evolve from the conventional one-way teaching model (in which teachers are the sole knowledge providers and students are passive receivers of knowledge) to incorporating other adequate teaching models and strategies based on core competencies, learning content, student performance, and varying student needs. The goals are to elicit students' learning motivation, encouraging them to engage in teamwork with peers and become active learners.

(1) Teaching preparation and support

- ① Teachers should compose their teaching plans before the beginning of the semester and prepare required resources and complete relevant tasks.
- ② While preparing course content, teachers should analyze students' learning experiences and cultural backgrounds, the nature of teaching materials, and teaching goals; prepare course content that meets students' needs; and arrange diversified and adaptive teaching activities. This enables providing students with opportunities to learn, observe, explore, question, reflect, discuss, innovate, and solve problems, thereby enhancing their understanding of the course materials and ability to apply them in real life scenarios.
- ③ According to their teaching activities, teachers should conduct innovative teaching experiments or action research, with funds and assistance provided by relevant competent authorities.

(2) Teaching models and strategies

- ① Teachers should select appropriate teaching models based on core competencies, teaching goals, and students' learning outcomes, and adopt effective teaching methods and strategies that have been tested in practical scenarios and align with the characteristics of various domains, clusters, programs, and subjects. Teachers should also design effective teaching activities to address various dimensions of learning content such as facts, concepts, principles, skills, and attitudes, and incorporate e-

learning resources and methods when necessary.

- ② To promote the learning of Native Languages/ Taiwanese Sign Language and Native Languages of New Immigrants, these language courses should be taught primarily in the original languages and supplemented by bilingual teaching. The courses should emphasize interactive and communicative usage of the original languages to create a fully or partially immersive classroom environment. For courses in other domains, clusters, programs, and subjects, under the preconditions that the teaching content is comprehensible and in context, teachers are encouraged to employ bilingual instruction in courses of various domains or during alternative learning periods and different activities. Furthermore, students in their daily life are encouraged to communicate using multiple languages.
- ③ To promote students development that accords with students' aptitudes and interests, teachers should group students appropriately based on their differences such as age, sex, learning level, learning interests, aptitudes, physical and mental characteristics, ethnic background, and socioeconomic background. In addition, teachers should adopt multiple teaching methods, and provide learning materials and employ multiple assessment methods to meet various needs. Teachers are encouraged to arrange learning activities that encourage exchange between students from regular classes and those from special education classes.
- ④ Homework should contain diversified content and account for students' aptitudes, and the amount of homework should be adequate. The meaning and performance rubrics of homework should be clarified to enhance students' learning motivation, inspire their thinking and imagination, extend and apply what they have learned, and elicit a sense of accomplishment through feedback.
- ⑤ Teachers should establish class rules that are conducive to learning, strive to create a positive learning atmosphere and class culture, and strengthen teacher–student communication and collaboration to improve students' learning outcomes.
- ⑥ Teachers should plan experiential learning activities such as outdoor education, industry practicum, and service learning for students to acquire practical experiences, act on ethical values, reflect their performance, and widen their horizons.
- ⑦ To improve students' learning outcomes and develop their capability in self-directed and lifelong learning, teachers should guide students in using various learning strategies. These include motivational strategies; general learning strategies; domain-, cluster-, program-, and subject-specific learning strategies; thinking strategies; and metacognitive strategies.

3. Learning Assessment and Application

Students are the subjects of education. Thus, teachers should focus on students' learning outcomes and pay attention to whether students have fully understood the course content rather than merely completing the courses. Learning assessment tools should be employed to understand students' learning process and outcomes, and tutoring should be provided according to the assessment outcomes to meet students' varying needs.

(1) Implementation of learning assessment

- ① Learning assessments are conducted in accordance with learning assessment criteria and supplementary regulations stipulated by the relevant competent authorities.
- ② Learning assessments should consider formative and summative assessments and should involve the use of diagnostic assessments, placement assessments, or student transition assessments based on students' needs.
- ③ Teachers should design their own learning assessment tools when necessary. Assessment content should take into account students' physical and mental development, individual and cultural differences, and essentials of core competencies as well as learning performance in specific aspects such as cognition, skills, and affection.
- ④ In response to the individual needs of special education students, schools and teachers should adjust their assessments in an appropriate manner.
- ⑤ Learning assessments should be based on the nature of the subjects and activities in question, and should take various forms such as written tests, hands-on assessments, and portfolio assessments; overemphasis on written tests should be avoided.
- ⑥ Assessment reports should provide quantitative data and qualitative descriptions to help students and parents understand students' learning outcomes. Qualitative descriptions should include students' achievement of learning goals, learning strengths, participation in curricular and extracurricular activities, and learning motivation and attitude.

(2) Application of assessment results

- ① Learning assessments are collections of evidence-based data that should be utilized adequately. The assessment results can serve as a reference for teachers to improve their teaching methods and students' learning outcomes, and for schools to improve their curricula.
- ② Teachers should analyze students' learning on the basis of their assessment results, adjust their teaching methods and materials accordingly, and provide tutoring. For students who fall behind, teachers should adjust their teaching methods and conduct remedial teaching; for fast-learning students, the teaching progress should be accelerated and course content should be enriched and broadened.

4. Teaching Resources

Teaching resources include various forms of teaching materials and graphic equipment, relevant resources developed by research institutions, communities, industries, and private organizations, and human resources from various sectors. Governments should provide budgets for teachers to develop diverse and appropriate teaching resources, and those for implementing school curriculum plans should be allocated by the central and local governments.

(1) Textbook selection

- ① Textbooks should be developed and edited according to curriculum guidelines and revised and approved according to regulations. School textbooks are selected by schools following discussion and approval in accordance with relevant regulations.
- ② Curriculum and teaching materials for schools of various levels and types should be employed from a multicultural perspective and should consider gender equity and the history, culture, and values of each ethnic group to promote understanding and respect among students of different backgrounds.
- ③ In addition to the approved textbooks, special municipal or county (city)

competent authorities or schools can select and edit appropriate teaching materials according to the local characteristics, students' traits and needs, and the nature of the respective domains, clusters, curricula, and subjects. Self-selected and self-edited teaching materials used by schools for all grades and semesters should be submitted to the school curriculum development committees for review.

(2) Teaching material development

- ① Teaching materials include textbooks, reference books, digital materials, remedial materials, diagnostic tools, and various learning resources. In addition, teaching materials should consider articulation between upper and lower grades as well as that between different domains, clusters, curricula, and subjects.
- ② To coordinate the implementation of curriculum guidelines, the MOE should establish collaboration mechanisms for developing teaching and assessment materials, encouraging the participation of personnel from research institutions, universities, elementary schools, junior high schools, upper secondary schools, communities, private organizations, and industries. Municipal and county (city) competent authorities can develop resources with local features or encourage schools to create school-based textbooks and learning resources.
- ③ The relevant competent authorities and schools can integrate human resources inside and outside of schools and collaborate to enhance curricula and develop remedial materials and diagnostic tools to improve students' learning outcomes.
- ④ The central competent authorities should establish and integrate curriculum and teaching resource platforms. Under the principles of single input, compartmentalized management, quality screening, joint creation and sharing, and respect for intellectual property rights, these platforms link various developed teaching resources and provide references to students, teachers, and parents.
- ⑤ For national languages (Native Languages and Taiwanese Sign Language) that are at risk of becoming extinct, the MOE and relevant ministries should strive to improve teaching resources, including the completion of teaching materials, books, online learning, and other related resources for national languages education.

5. Teacher Professional Development

Teachers are professionals who must continue their professional development to support students' learning. Teacher professional development involves cultivating disciplinary and content knowledge, improving pedagogical ability, and developing adequate attitude toward educational profession. Teachers should form professional learning communities to jointly explore and share teaching experiences; actively participate in on-campus and off-campus learning and training to receive latest information on educational developments; and make full use of social resources to improve their curriculum designs, teaching strategies, and learning assessments in order to improve students' learning outcomes.

(1) Implementation content for teacher professional development

- ① Teachers can engage in diverse professional development activities through teaching and research communities of various domains, clusters, programs, and subjects (including special needs domain courses); (cross-) grade conferences; or self-initiated on-campus, cross-school, or cross-curricular professional learning communities. Such activities include joint lesson preparation, teaching observations and feedback, workshop participation, seminar planning, onsite visits, online learning, action research, lesson study, and open sharing and exchange; the purpose of these activities

is to continue teachers' professional development and enhance students' learning outcomes.

- ② Teachers should enrich their basic knowledge on multiculturalism and special education and enhance their teaching and counseling capabilities for students of varying ethnic backgrounds and special needs.
- ③ To improve teaching quality and learning outcomes, a teaching culture of peer learning should be fostered, with the principal and teachers each giving at least one lesson per year that welcomes the participation of other faculty members and the public to view the in-class teaching activities and discuss how students' learning outcomes can be improved. Accordingly, the principal and teachers can receive professional feedback.
- ④ Teachers for indigenous education should enroll in indigenous cultural education courses to enhance their professionalism.
- ⑤ In response to the needs of the teaching contexts of Native Languages, Taiwanese Sign Language, and Native Languages of New Immigrants, teachers should develop and strengthen their use of diverse teaching strategies, such as differentiated instruction.

(2) Support system for teacher professional development

- ① Schools should provide adequate assistance and incentives to teachers who strive to develop (and have shown achievements in) curriculum design, teaching materials, teaching strategies, learning assessment, and tutoring measures.
- ② Relevant competent authorities and schools should support and provide teachers with resources for professional development, such as organizing teaching and research committees, arranging schedules for teachers to participate in professional learning communities, supporting the professional development of new teachers or teachers with needs, and providing assistance for obtaining resources such as equipment and funds.
- ③ To support students' diverse and adaptive learning, relevant competent authorities and schools should encourage and support teachers in integrating courses of different domains, clusters, programs, and subjects, engaging in collaborative teaching with other teachers and professionals, and integrating and utilizing off-campus resources, such as those from communities, private organizations, industries, colleges and universities, and research institutes.
- ④ For teachers to master the content of the curriculum guidelines and develop professionalism in teaching cross-curricular courses, the relevant competent authorities should provide teachers with training or refresher courses and assist them in acquiring or renewing teaching certifications.
- ⑤ Relevant competent authorities should exercise leniency when allocating budgets to assist and support teachers in their professional development and continuing education.

6. Administrative Support

Administrative support from the relevant competent authorities and schools can facilitate the implementation of school curricula and teaching methods. This supports teaching activities and student learning to attain the visions and goals of the curriculum guidelines. Administrative support includes funding, professional support, and revisions of related measures.

(1) Funding and professional support

- ① To protect students' right to education, improve educational development, and enhance the effectiveness of fund allocation, relevant competent authorities should exercise leniency when providing budgets to support schools' needs for curriculum development and implementation.
- ② Relevant competent authorities should review amendments of relevant laws and regulations (e.g., the Teacher Education Act and basic standards for school facilities), ensure these regulations are in line with the curriculum guidelines, and implement corresponding measures.
- ③ Prior to implementing the curriculum guidelines, relevant competent authorities should organize seminars for local governmental administrators, inspectors, school administrators, teachers, parents, and teacher education institutions to fully understand the visions, goals, content, and implementation of the guidelines. After the implementation of the curriculum guidelines, schools should uphold school-based principles and arrange professional development activities for teachers.
- ④ Relevant competent authorities should conduct comprehensive or sampling surveys on each school's curriculum design, teaching material compilation, and teaching practice to evaluate the implementation of curricula and teaching methods, and provide each school with the resources required for improvement. Schools and teachers should make improvements based on their evaluation results.
- ⑤ Relevant competent authorities should integrate existing educator communities and groups, subject and cluster centers, teacher training universities, and teacher education strategic alliances; stipulate relevant laws and regulations to improve the guidance mechanism for the 12-Year Basic Education curriculum; increase participation in curriculum guideline training; facilitate the promotion and dissemination of the curriculum guidelines; and organize seminars and workshops.
- ⑥ Relevant competent authorities should assist schools in overcoming difficulties associated with school operations, curriculum selection, and teacher allocation. In addition, they should allocate human resource and operation budgets according to the actual needs of schools, and improve libraries, specialized classrooms, and practicum classrooms in accordance with the equipment standards stipulated in the guidelines for various domains, clusters, programs, and subjects as well as those announced by the MOE. On the basis of teaching needs, schools should establish a mechanism for students and teachers of different domains, clusters, programs, and subjects to share equipment and venues, maximizing the utilization of available resources.
- ⑦ Relevant competent authorities should design training programs for education administrators and school principals to strengthen their professional knowledge and skills.

(2) Amendments to supporting measures

- ① Teacher education institutions should, in accordance with the present curriculum guidelines, train teachers based on the requirements of different domains, clusters, programs, and subjects. These institutions should also consider adjusting curricula and teaching methods based on relevant regulations in the Teacher Education Act, in addition to actively establishing partnerships with research institutions and elementary and secondary schools for joint development of teaching materials and teaching methods.

- ② Institutes in charge of entrance examinations and learning achievement assessments at each educational stage should comply with the curriculum guidelines to conduct relevant adjustments.
- ③ The central competent authorities should establish a communication mechanism between curriculum implementation and revision units and the recruitment departments of colleges and universities (including vocational and technological colleges and universities) to jointly discuss measures related to student admission and the curriculum guidelines.

7. Participations of Parents and Nongovernmental Organizations

- (1) Curriculum implementation requires support and participation from parents. Schools should encourage parent associations to establish parent learning communities or parent–teacher co-learning communities to improve educational knowledge among parents, strengthen collaboration between parents and teachers, and support students’ effective learning and adaptive development.
- (2) Schools should regularly invite parents to attend various courses or teaching activities, or ask them to participate in teaching lessons that welcomes the participation of other faculty members and the public to discuss how the lessons can be improved. This encourages parents to care more about their children’s classes and the implementation of curricula and teaching practices. Accordingly, a positive communication channel between parents and the school culture can be established to promote co-learning between teachers, parents, and students.
- (3) Individualized Education Programs for students with special needs should be formulated with the participation of the students’ parents.
- (4) Schools can integrate social resources from nongovernmental organizations and industries and establish partnerships to enrich teaching activities. Vocational senior high schools, specialized senior high schools, and cooperative education programs can jointly organize apprenticeship programs with professional industries, enhancing students’ ability in applying their knowledge to real-life scenarios.
- (5) In addition to providing MOE-mandated courses of Native Languages and Taiwanese Sign Language at each learning stage, schools should encourage parents to form a learning community to support students’ learning and application of Native Languages and Taiwanese Sign Language after school.

8. Supplementary Provisions

- (1) The 12-Year Basic Education curriculum guidelines will be implemented progressively starting from the 2018–2019 academic year. These guidelines emphasize bridging the different educational stages and stipulate related supporting measures. The timeline of guideline implementation will be announced by the MOE.
- (2) The number of school days and weeks per academic year for all school levels are determined based on the Regulations for Student Holidays by Semester and Academic Year for All School Levels. However, the number of school days per week should be determined in compliance with the relevant provisions governing the number of office days for administrative agencies of the Directorate-General of Personnel Administration, Executive Yuan.
- (3) Students’ school activities and extracurricular classes are arranged by each school according to relevant regulations stipulated by the relevant competent authorities for upper secondary

school, junior school, and elementary school students.

- (4) According to the relevant laws and regulations stipulated in the Special Education Act, National Sports Act, and Arts Education Act, the MOE-mandated and school-developed courses for special education students (including students with special needs, sport talent students, art talent students, and science talent students) can be adjusted (including number of periods, number of credits, and learning content). Courses for students with special needs can be established as school-developed courses; however, the total number of periods must be retained. Curriculum plans for special education courses must be reviewed and approved by schools' special education promotion committees and submitted to the school curriculum development committees for approval before implementation. Curriculum plans for sport talent, science talent, and art talent classes should be submitted to the school curriculum development committees for review. Curriculum guidelines and implementation regulations for special education should be formulated separately by the central competent authorities according to the present curriculum guidelines.
- (5) Guidelines for continuing education, practical skill programs, cooperative education classes, and other key industry classes in upper secondary schools are formulated by the central competent authorities according to the present curriculum guidelines
- (6) Vocational education in junior high schools should be implemented in accordance with relevant regulations, and the total number of periods for professional courses can be adjusted in a flexible manner.
- (7) According to relevant regulations such as the National Sports Act, schools in each learning stage should arrange physical education activities during flexible learning, group activity, or other learning periods.
- (8) According to relevant regulations such as the Indigenous Peoples Basic Law and the Education Act for Indigenous Peoples
 - ① Domain-specific learning curricula in indigenous regions and schools with special indigenous focuses can be adjusted based on the learning needs of indigenous students and differences among ethnic languages and cultures. Indigenous language courses should be prioritized in education for indigenous students.
 - ② Schools in indigenous community domains and schools with special indigenous focuses should ensure that their school-developed curriculum includes courses on indigenous knowledge and cultural learning activities. Such courses may incorporate cross-curricular and integrative courses with theme-based inquiries in conjunction with other domains.
 - ③ Key indigenous upper secondary schools should offer 6 credits for indigenous language courses, which can be held on weekends or during winter and summer vacations.
- (9) To respect the wishes of indigenous peoples and safeguard the rights of indigenous students to Indigenous Languages learning, schools at all levels should conduct a survey on students' intention to enroll in courses of Indigenous Languages in accordance with the curriculum and announce the survey result and the actual status of the courses on the school information website each academic year; the competent authorities should provide active supervision.
- (10) The implementation of experimental education curricula should be executed by the relevant competent authorities and schools in accordance with relevant laws and regulations.
- (11) Curriculum development and teaching should comply with the guidelines of each domain, cluster, program, and subject, where the curriculum content can be adjusted according to the

latest knowledge on related fields. To facilitate flexible combinations of courses, revisions of domain-specific curricula should stipulate information including the arrangement of subjects by year as well as prerequisites for required and elective courses. Under the precondition of retaining the total period number, different subjects can be offered for students in different grades to reduce the number of weekly periods. The guidelines for each domain should integrate various global issues, allowing students to conduct reflection under different learning contexts, inspire each other, and integrate different issues.

VIII. Appendices

Appendix 1: Planning of the Common Core Curriculum for Upper Secondary School

1. Objectives, Positioning, and Functions

Upper secondary school incorporates of four types of schools, namely, general senior high school, vocational senior high school, comprehensive senior high school, and specialized senior high school. To implement holistic education, strengthen general education, and ensure the promotion of common core competencies, the common core curriculum for upper secondary school is formulated to determine the domains and subjects and the minimum number of credits needed by students in each school type.

2. Domains, Subjects, and Credits of the Common Core Curriculum

The domains, subjects, and credits for the common core curriculum for upper secondary school are based on the aforementioned goals, positioning, and functions, as shown in Table 11.

Table 11. Domains, subjects, and credits of the common core curriculum for upper secondary school

Common core curriculum of upper secondary schools			Remarks
Domain name	Subject (recommended)	No. of credits	
Languages Arts	Chinese	4	
	Native Languages/ Taiwanese Sign Language	2	
	English	4	
Mathematics	Mathematics	4	
Social Studies	History	4	Any two subjects that total 4 credits
	Geography		
	Civics and Society		
Natural Sciences	Physics	4	Any two subjects that total 4 credits
	Chemistry		
	Biology		
	Earth Sciences		
Arts	Music	4	Any two subjects that total 4 credits
	Fine Art		
	Arts and Life		
Integrative Activities	Life Education	4	At least two subjects from these two domains that total 4 credits
	Career Planning		
	Home Economics		
	☉Law and life		
	☉Introduction to Environmental Science		
Technology	Living Technology		
	Information Technology		
Health and Physical Education	Health and Nursing	4	2 credits for each subject.
	Physical Education		
Total no. of required credits		34	

Note 1: © represents subjects that can be offered as integrative activities in vocational and comprehensive senior high schools.

Note 2: The number of required credits for Native Languages and Taiwanese Sign Language may be reduced to 1 credit, with the total number of required credits adjusted to 33 credits, when planning special education curriculum or the domains, subjects, credits of the common core curriculum.

3. Implementation Principles for the Common Core Curriculum

- (1) Implementation time: The curriculum is implemented in Grade 10, but may also be implemented in other grades.
- (2) For Native Languages and Taiwanese Sign Language courses, students should choose one of these language courses to enroll in, and schools should conduct a survey on the actual needs and intention of students and offer courses accordingly. Native Languages include Minnan, Hakka, Indigenous Languages, Mindong, and other national languages at risk of becoming extinct. For ethnic languages with regional characteristics (e.g., Pingpu Languages), schools should conduct a survey on the actual needs and intention of students and offer courses in Native Languages for students to enroll in.
- (3) Flexible combination of courses in the common core curriculum: For domains such as Social Studies, Natural Sciences, Arts, Integrative Activities, and Technology, schools can offer flexible combinations of related courses according to the characteristics of each school and credit requirements.
- (4) Formulation of common core curriculum content: Junior high school students should be attended to when they enter upper secondary schools, and their development of core competencies should be emphasized.
- (5) For students in special education courses, the credit and subject requirements for the common core curriculum are implemented in accordance with the relevant regulations and the present curriculum guidelines.
- (6) Schools should strengthen their adaptive guidance for students and develop relevant supporting measures to help students learn and adapt as they transition from one educational stage to another.

Appendix 2: Explanation and Planning of Group Activity Periods in Upper Secondary School

1. Two to three group activity periods are held weekly, with one homeroom activity period being listed as teachers' basic period. Schools can arrange homeroom activities, club activities, student council activities, service learning, and weekly assemblies or lectures when necessary. However, club activities must account for at least 24 periods per academic year.
2. Each school should formulate an overall plan as well as annual plans for each academic year. The total number of periods in an academic year or semester should be planned in accordance with actual teaching needs. All activities can be arranged in a flexible manner and are not subject to the restriction of one group activity period per week or the restriction of one homeroom activity period and one club activity period per week.
3. Regarding the formulation of the overall plan for group activity periods, school administrators, full-time teachers, homeroom teachers, and student representatives should be invited to establish a curriculum development mechanism. The opinions of teachers, parents, and students are referenced and integrated into the planning of various courses and each school's curriculum plan. Factors such as school characteristics, instructors, equipment, venues, activity duration, and community resources are referenced for flexible course design and implementation.
4. All teachers are responsible for the supervision, guidance, and student participation of group activity periods. Homeroom activities are overseen by homeroom teachers, whereas club activities are managed by designated teachers. When necessary, school staff members, parents, alumni, university students, and social dignitaries can be invited as the supervisor of group activities. Student council activities are arranged by student affairs staff, and service learning activities and school-based activities are managed by related school administrative offices. Activities should be arranged with a focus on cultivating team spirit and providing students with opportunities for joint participation and interpersonal interaction. Group activity periods must not be misappropriated for other uses, including tests or teaching held for a specific subject or domain.
5. Homeroom activities: Class meetings or class-based activities are supervised by homeroom teachers to facilitate the practice of democratic proceedings and promote class autonomy, social activities, group counseling, and life education activities.
6. Club activities: Clubs are established based on students' interests, aptitudes, and needs, as well as teacher availability, equipment, and community conditions. Clubs often involve learning activities under teachers' supervision.
7. Student council activities: Such activities are held for the establishment of student council organizations for matters such as providing student services and voicing students' opinions. Examples include class councils, graduating class councils, and other student autonomy events.
8. Service learning activities: Such activities are held according to the needs of schools and communities. Examples include campus volunteering, community services, public services, leisure services, and environmental protection services.
9. Regarding weekly assemblies or lectures, routine or specially arranged activities are held based on students' interests, physical and mental development stages, school history and status quo, parents' expectations, and community resources. Examples include weekly assemblies and general education lectures.

10. Appropriate activities should be arranged together with special tutoring for students with special needs. Implementation plans for all activities should be comprehensive to consider students' physical and mental development and safety measures.
11. Multifaceted student assessments should be employed based on activity objectives and learning content. The assessments should involve collaboration between different staff members as well as the division and delegation of responsibilities, with club supervisors assessing club activities and staff members in relevant administrative offices assessing student council activities and service learning activities. Assessment results are compiled by homeroom teachers, and are based on students' self-assessments, peer assessments, assessments by parents, and assessments by relevant staff members to yield a final, summative grade. The assessment results are shown mainly as qualitative descriptions but may also appear as letter grades when necessary.