

Macao Special Administrative Region

Medium and Long-term Planning for Non-Tertiary Education (2021-2030)

Consultation Document

Consultation Period: 5th December, 2020 – 22nd January, 2021

Education and Youth Affairs Bureau
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Preface

The Macao SAR Government has successively presented the policies of "Macao Thrives on Education" and "Building Macao through Talent Training" in the policy addresses ever since 2011. The first educational development plan, "Ten Year Plan for Non-tertiary Education (2011 to 2020), (hereinafter referred to as the "Ten Year Plan"), was put in the appendix of the policy address in 2012 and implemented in the same year. As a long-term policy document for educational development, the "Ten-Year Plan" provides a top-down design and guidance on how to achieve objectives such as giving priority to the development of education, progressing towards a high-quality and high-equity education system, promoting curricular and teaching reforms and building a professional teaching team and so on. The "Ten Year Plan" will come to an end this year.

Macao has experienced rapid social development in the last decade. The demands from all walks of life for education, especially non-tertiary education, have changed significantly. With the development of the times, different regions in the world have put forward new educational objectives and requirements for the new era. In addition, as the "Ten Year Plan" will come to an end soon, it is necessary to plan the future direction for Macao's long-term educational development. In order to make a scientific planning for the development of non-tertiary education after 2020 and to make the planning adaptable to current situations; as well as to accelerate the development of education reform; to provide better conditions for the physical and psychological growth and future development of students; and to improve the effectiveness of education within Macao and our country, it is necessary to launch a new round of planning work.

Therefore, the Education and Youth Affairs Bureau (hereinafter

referred to as the "DSEJ") will formulate the "Medium and Long-term Planning for Non-Tertiary Education" (2021-2030) (hereinafter referred to as the "Education Plan").

In order for the public to better understand the policy direction of the "Education Plan", the DSEJ has prepared the consultation document for public consultation, which will take place from 5th December, 2020 to 22nd January, 2021, to collect opinions and suggestions from all sectors of the society.

The DSEJ will write a report based on the opinions collected from the public consultation within 180 days after the consultation period ends, and will publish it in accordance with the provisions of the "Normative Guidelines for Public Policy Consultation".

This public consultation is an important part of the planning work. It is hoped that through analysing and studying the opinions and suggestions collected from all walks of life, the text content of the "Education Plan" can be improved, thereby jointly promote Macao's future social development.

I. Summary

General objectives: To cultivate citizens of the new era, to optimise education ecology and to enhance student competitiveness

To achieve the objective of cultivating citizens for the new era, taking "with correct behavioural conduct, being truth-seeking, pragmatic and innovative" as the core, putting emphasis on personal development, cultivation of talents, formation of moral values, teaching of knowledge and skills, as well as concerning students' individual learning needs and social developmental needs;

To optimise the current education ecology, highlighting the continuous optimisation of the laws and regulations, reviews and promotion of curricular reform and assessment, encouraging the diversified development of education;

It is expected that by 2030, **Macao students' competitiveness** will be enhanced, the overall quality of residents be raised, as well as regional cooperation be facilitated.

Key direction 1: Cultivating students' patriotism and international vision

Nurture students to set up learning objectives to develop their virtues and cultivate their moral characters, master the knowledge of national conditions and Chinese culture, equip themselves with civic awareness and the ability to adapt to the society, as well as to learn to bear responsibilities and so on; establish a systematic framework of learning activities, with the aim of making a comprehensive plan for students to experience national and patriotic education; acquire the skills of intercultural understanding and tolerance, communication and cooperation and so on, and strengthen students' capabilities to express themselves by using Putonghua, Portuguese and English; make better

use of and foster integration of educational resources around the world, and try to grasp opportunities to participate in various international exchanges, competitions and seminars, as well as actively implement various forms of regional cooperation.

Key direction 2: Developing students' soft power

Cultivate students' interdisciplinary capabilities and their knowledge application abilities, foster integrated learning that organically connects different disciplines and subject domains to promote students to apply integrated knowledge; nurture students' capacities of cooperation and coordination, critical thinking, philosophical and logical thinking and so on; highlight aesthetic and artistic cultivation; boost students' reading interest, lift their reading literacy, provide conditions and resources to promote the teaching of reading.

Key direction 3: Enhancing students' sense of well-being

Pay attention to students' learning interest and their individual learning needs, raise their sense of accomplishment and promote success in learning; create a harmonious school life, build harmonious relationships between teachers and students and among students, put effort into building a better school environment and reducing students' learning pressure; pay attention to students' health; enhance their physical fitness; focus on cultivating their mental health, prevent school bullying and avoid any cause of learning anxiety, strengthen students' resilience; highlight the importance of healthy lifestyle and parent-child relationship, and strengthen family education.

Key direction 4: Strengthening creativity and technology education

Review the curriculums of subjects such as mathematics, natural science, and IT, develop integrated and applied interdisciplinary courses

with the aims of developing students' abilities to innovate and create, network information literacy and various kinds of integrated competencies; optimise popular science and technology competition activities; construct a smart campus, and on this basis, promote smart education; train teachers to develop abilities related to creativity and technology education so that they can adapt to the future needs; focus on integrating technology into different subjects and teaching methods so as to optimise teaching and promote the professional development of teachers.

Other key directions: Objectives of different levels and types of education

Pay attention to the effectiveness of curricular reform in infant education, promote physical and mental development and relaxed learning for students of infant education; improve the compulsory education system; pay attention to junior secondary students' attendance and dropout situation; design and develop courses that aim at promoting integrated abilities for students of junior secondary education, including hands-on and application skills and so on; develop diverse courses for senior secondary students to cultivate their innovation, critical thinking and other skills, so as to meet the needs of students with different interests and abilities; encourage students to complete senior secondary education, help them achieve further studies and make life planning. Formulate and implement the **Technical-vocational Education** in **Non-Tertiary** System Education, and continuously support ordinary senior secondary schools in offering technical-vocational courses and promote the signing of cooperation agreements between these schools and enterprises; promote a better connection between technical-vocational education and tertiary education. Optimise the assessment service for students with special educational needs; continue to implement individualised education plans; promote schools' adoption of inclusive education, and raise their awareness of social inclusion; support schools in setting up an inclusive education team; provide appropriate resources for treatment and training services; promote the development of gifted education and create a proper environment for gifted students to develop their potential. Review the development model of recurrent education and help it adapt to the development and transformation of the society; improve the "Continuing Education Development Plan", encourage residents to pursue lifelong learning and build a learning-based society; strengthen parent-child education and home-school cooperation, deepen the role of family education.

Some of the Key Measures

Ensuring the monetary investments: Ensure that public expenditure on education be maintained at an ideal level of investment under relatively stable economic conditions; continue to improve and adjust the types and forms of subsidies according to the needs of the social development.

Optimising free education and compulsory education: Optimise the systems of free education and compulsory education; reinforce the mechanism of preventing students from dropping out and leaving school; ensure the effective implementation of the student assessment system and promote students' learning success.

Improving the teachers' team: Provide teachers with trainings related to the new teaching models, for example, new education technologies and skills, new classroom models and new integrated subjects; optimise the content and structure of the existing teacher trainings; promote the teaching and research mechanism; review the "System Framework for Private School Teaching Staff of Non-tertiary Education"; train teachers for the future; care about teachers' career path and so on.

Building a high-quality school environment: Implement the plan to improve the teaching and learning environment; ensure the availability of high quality educational spaces and school places through construction, expansion and reconstruction of school facilities; support schools in upgrading their facilities and equipment; promote schools to establish creative and practical educational facilities, equipment and resources; construct a smart campus for a gradual development of smart education and so on.

Improving the school system: Ensure the smooth implementation of the "Statute for Private Schools of Non-tertiary Education"; implement the new model of integrated evaluation of schools and so on.

Continue to promote reforms of curriculums, teaching and **assessment:** Review the implementation of the "Curriculum Framework Formal Education of Local Education System" for and the "Requirements of Basic Academic Attainments for Various Subjects of Formal Education"; gradually launch the teaching materials of different subjects suitable for the local curriculums; promote interdisciplinary learning and the application of knowledge acquired in different disciplines; boost the learning of disciplines related to philosophy; encourage the development of vocational-technical education and language learning; establish a framework of activities aimed at learning, such as patriotic educational activities, etiquette educational activities, artistic performances, reading promotional activities, sporting competitions, popular science competitions and so on; implement the student assessment system.

Promoting students' safety and their physical and mental health: Promote safety education, strengthen students' safety awareness; continue to implement various plans to promote students' physical health and growth; facilitate the comprehensive development of students' mental health; upgrade the team of student counsellors

stationed at schools; provide support to students in senior secondary education, in terms of guidance on continuing their studies and making life planning; create an assessment scale for students' physical and mental health and conduct regular assessments.

Improving the system of lifelong learning: Review and optimise the Continuing Education Development Plan; build a community-based learning society, create a community learning network; strengthen family education and so on.

Strengthening regional cooperation in education: Establish connections with advanced countries in the field of education, conduct visits and exchanges, maintain contact with international institutions and participate in international tests, such as PISA (Programme for International Student Assessment), PIRLS (Progress in International Reading Literacy Study), TIMSS (Trends in International Mathematics and Science Study), which also serve as references for improving the quality of education in Macao; implement related cooperation agreements related to Guangdong-Hong Kong-Macau Greater Bay Area, explore cooperation models of education; strengthen the training of Chinese-Portuguese bilingual talents, facilitate exchanges and cooperation with Portuguese-speaking countries and regions.

II. Background of the Planning

As a long-term policy document for education development, the "Ten-Year Plan" published in 2011 has provided top-level design and guidance on the long-term development of education, including objectives such as giving priority to the development of education, moving towards a high-quality and high-equity education system, promoting curricular and teaching reforms and building a professional team of teachers and so on.

The mid-term evaluation of the "Ten-Year Plan" was conducted in 2015 and was finalised in 2016. The evaluation results showed that the phased objectives and the respective measures, determined in the Plan, were basically achieved and that concrete progress was achieved in terms of resource investment, the non-tertiary education system, student development, teacher development, school management, educational equity, expansion of educational openness and regional cooperation. At the same time, the report also pointed out some problems that needed attention and provided some suggestions. According to the report, the DSEJ reviewed the implementation details, and continued to advance the various work of the "Ten Year Plan", in order to try its best to reach a completion rate of 90% by the end of 2020, as required in the Macao SAR Five-Year Development Plan (2016-2020).

With the efforts of all sectors, the quality of education in Macao has been raised in recent years. According to the study result of the Programme for International Student Assessment (PISA) 2018 published in December 2018, conducted by the Organization for Economic Cooperation and Development (OECD), among the 79 participating countries/regions, 15-year-old students in Macao ranked 3rd in reading, mathematical and scientific literacy, representing the best results Macao has ever achieved since its participation in the test; the proportion of

Macao students that have reached the PISA benchmark level in all three literacy domains, ranked the second worldwide. The report also indicated that Macao was the only region that has shown continuous and rapid progress, in terms of educational quality. As the current "Ten Year Plan" is soon coming to an end, a preliminary summative study is being carried out. It will serve as a basis for the future educational planning and development.

Over the past decade, major changes in society have emerged and demands for educational quality have been progressively increased; at the same time, our country and the rest of the world have presented their education plans in the face of the development of the times: In the important speech given by President Xi Jinping in September 2018 at the National Education Conference, as well as in the document "China Education Modernization 2035", published in February 2019 and in the document released later, "Implementation Plan for Accelerating Education Modernization (2018-2022)", issued by the Central Committee of the Chinese Communist Party and the State Council, all stated the educational principles and planning objectives such as giving importance to "cultivating talents with good moral qualities", "giving priority to the development of education" and "accelerating the promotion of educational modernisation". In February 2019, in the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area" published by the Central Committee of the Chinese Communist Party and the Council of State, the direction and positioning of Macao's development was stated as "One Centre, One Platform, One Base", and the document also guided Macao's major direction in cultivating talents. Countries such as China, South Korea, Finland, and regions such as Taiwan have successively presented the concept of core competencies, and have also defined the necessary skills that students should master for the future. The "personal and social well-being" mentioned in the OECD's "OECD Learning Framework 2030" includes

abilities and various literacy domains like knowledge, skills, attitudes and moral values, and it serves as an important reference for the direction of educational development in Macao.

With reference to the aforementioned background of compiling the "Education Plan" consultation document, we insisted on putting the physical and mental health as well as knowledge and literacy in the first place because they are necessary for the future society. Using this document as a starting point, the discussion and reorganisation of the various future development objectives will be carried out gradually, highlighting the balance between the cultivation of attitudes, affections and values, as well as knowledge, skills and literacies needed in the new era. In 2018, the DSEJ started the preliminary and basic work of the "Education Plan" by collecting educational topics and organising exchange workshops. In 2018, the Non-tertiary Education Committee set up a task force and a consultant team for the "Medium and Long-term Planning for Non-Tertiary Education", in order to provide opinions on the study and the preparation of the next education plan. To date, members of the task force and the consultant team have participated in various meetings to provide opinions for the drafting and compiling of the "Education Plan", as well as to discuss the content in depth, which finally culminated in the current document.

The priority contents of the "Education Plan" consultation text are:

- Outline visions for education in the future, formulate general and secondary objectives to be achieved in the next ten years: cultivate citizens for the new era, optimise educational ecology and enhance students' competitiveness;
- Establish guiding principles to achieve the visions and objectives: to develop education with better quality and greater equity according to the laws and regulations, achieve a people-oriented development that is comprehensive and

well-balanced;

- Integrating consistency, continuity and systematisation of the objectives, put up four priorities: cultivating students' patriotism and international vision, developing the soft power of students, enhancing their sense of well-being, and strengthening creativity and technology education;
- ➤ Various measures to support and realise the objectives: such as ensuring financial investment, improving free education and compulsory education, optimising the teachers' team, building a high-quality school environment and constantly promoting reforms in the curriculums, teaching and assessment and so on.

III. Full Text of the Consultation Document

Medium and Long-term Planning for Non-Tertiary Education (2021-2030)

1. Vision and Basic Principles

1.1 Vision

According to the national planning and deployment, the planning of building Macao as "One Centre, One Platform, One Base" has provided the direction for Macao's overall future development. The Macao SAR Government has successively presented the policy principles of "Macao Thrives on Education" and "Building Macao through Talent Training", which have demonstrated the cultivation of talent as an element indispensable for the sustainable development of Macao. Talent cultivation must focus on nurturing people's moral qualities, that is, to put "cultivating talent with good moral qualities" as the fundamental mission. The Macao SAR Government gives priority to the development of education, which draws up a blueprint to determine the direction of local educational development.

Since its establishment, the Macao SAR Government has been committed to the development of education. It has successively promulgated the "Fundamental Law of Non-tertiary Education System" and formulated the "Ten-year Plan for the Development of Non-tertiary Education (2011-2020)", which have laid the foundation for education in Macao, the objectives and direction of the development of non-tertiary education, and the implementation of the education system.

The previous Ten Year Plan will soon come to an end. As the development of the era and the society has become more and more rapid, there is an increasing demand for more diversified education and educational personnel of better quality. At the same time, cultivating residents who can adapt to the future development is also an important direction of the education work. The MSAR Government must prepare and plan in advance, in order to face the challenges of future development. Following the fundamental objectives of the national education policy to "cultivate

talents with good moral qualities", the development of future education should focus on cultivating residents for the new era, and equipping students "with correct behavioural conduct, being truth-seeking, pragmatic and innovative". It is also needed to cultivate in students good moral values, as well as enable them to master knowledge, skills and literacies for the new era, in order to satisfy their needs for physical and mental growth and help them respond to the changes in future society.

The key visions of the Education Plan for the future education development are:

- Form good moral values; let students have a comprehensive understanding
 of the national and MSAR situation; lawfully execute the rights and fulfill
 the obligations of citizens; care about individual learning needs and
 emotional attitudes as well as understand personal needs for physical and
 psychological development;
- 2. Enhance students' scientific spirit and humanistic literacy, and cultivate their truth-seeking attitude; cultivate students' critical thinking and network information literacy and the ability to separate the truth from the false in the future;
- 3. Give priority to cultivating students' practical literacy and the ability to apply knowledge to solve problems, so that students can meet the needs of the future society in terms of knowledge and skills; elevate their disciplinary capacities of different fields, interdisciplinary capacities and technological application capacities and comprehensively improve their competences and competitiveness;
- 4. Cultivate students' problem-solving abilities, innovative spirit and creative thinking needed to face new things and circumstances, and highlight the cultivation of aesthetic and artistic abilities, as well as technological innovation capabilities.

Based on the past, the Macao SAR Government makes planning for the future by promulgating the "Medium and Long-term Planning for Non-Tertiary Education (2021-2030)" to practically promote the development of Macao's non-tertiary education.

1.2 Basic Principles

1.2.1 Compliance with laws

The Basic Law of the Macao Special Administrative Region of the People's Republic of China grants the SAR government, schools, residents and so on, in terms of education, the rights to formulate education policies on their own, to run schools independently, and to access to compulsory education. In accordance with the principle of observing the laws, when drawing up the future plan and education policies, observation, formulation and improvement of laws and regulations serve as effective methods for the realisation of education policies and the determination of the education system. By doing this, residents' different rights to education can be ensured. The Government will also continuously review and optimise the work of non-tertiary education in Macao, especially in planning, deepening and improving the educational work of the SAR to meet the demands for future development, for students' physical and psychological growth and the social needs of talents.

1.2.2 Developing education with better quality and greater equity

Promotion of education modernisation, improvement of the quality of education, and development of world-leading education with Chinese characteristics have been listed in the "China Education Modernisation 2035" as its strategic missions and policies. Through participating in the Programme for International Student Assessment (PISA), promoted by the Organisation for Economic Cooperation and Development (OECD), Macao has been identified as a region where its education system is of high quality and equity. According to the PISA 2018 study report, Macao was classified as the only region that has made continuous and rapid progress in terms of educational quality. The SAR Government will continue to optimise the system and develop educational work for a better quality and greater equity. Optimise teaching and learning, and implement literacy-oriented learning more comprehensively; take care of the disadvantaged groups and individual differences, and provide support to students with special educational needs so as to improve their learning achievement and quality, and to optimise the management and administration of schools, by setting up indicators to monitor the school operation, reviewing all parts of the non-tertiary education to identify the weak areas and then carry out updates or reforms; resolve problems like individual differences between students, teachers and schools, which in turn enables the non-tertiary education system to continue to develop with high quality.

1.2.3 Achieving a people-oriented development that is comprehensive and well-balanced

Holding the fundamental objective of "cultivating talent with good moral qualities", when formulating the Planning, key principles that should be taken into account are the balance between the needs of individual development and that of the society, as well as the cultivation of students' capacities, affections and attitudes to face future demands. In the previous Ten-Year Plan, attention was given to the creation of Macao's non-tertiary education system and the implementation of the basic education system mechanism. The new ten-year plan will be a student-oriented one, taking into account their development needs, transmitting Chinese culture and cultivating students' moral values and conduct, improving individual quality and cultivate civic awareness. It will also highlight the physical and mental health of students, and their sense of well-being; at the same time, paying attention to the learning path and progress of students, strengthening integrated competencies, equipping students with the essential skills to respond to the development of the future society.

2. Development Objectives

General objectives of the Planning:

- 1. Insist on the core educational value of "cultivating talent with good moral qualities", continue to implement the long-time educational policy of "Macao Thrives on Education" and "Building Macao through Talent Training"; with the core value of cultivating citizens for the new era "with correct conduct, being truth-seeking, pragmatic and innovative", emphasise individual development, talent cultivation, moral values cultivation, knowledge and skills cultivation, individual learning needs and social development needs.
- 2. Optimise the current educational ecology, focus on the continued improvement of the laws and regulations, review and promote curriculum reforms and assessments, encourage the diversified development of education.
- 3. Cultivate students to have global vision; raise students' competitiveness and general qualities of the residents as well as foster regional cooperation by 2030.

2.1 Four Key Developmental Directions

2.1.1 Cultivating students' patriotism and international vision

The focus of education should be on students' morality, with the aims of cultivating their patriotism and international vision. Understand the relationship between personal development, family, the society, the nation and the world; learn to put moral values into practice and attain civil consciousness through studying and understanding the "Constitution of the People's Republic of China", the "Basic Law of the Macao Special Administrative Region of the People's Republic of China", the national conditions, the Chinese culture and intercultural knowledge; cultivate citizens with morality and conscience. At the same time, it should raise students' understanding of the society; enhance their adaptation, communication, cooperation abilities, nurture them to have a sense of responsibility, a global mindset and broaden their horizon, so that they can adapt to future social changes, be equipped with stronger competitiveness within the region and possess the abilities to become a world citizen. The related work will have the following main objectives:

- With the current basic academic disciplines, nurture students' personal moral virtues and moral character, enable them to master the national conditions and the Chinese cultural knowledge, cultivate their civil awareness, social adaptation abilities and sense of responsibility. These learning objectives should be introduced to the courses and teaching materials or to the development of new courses and teaching materials;
- Establish a systematic framework of patriotic and national education activities, with the aim of establishing a comprehensive plan to conduct such activities; create conditions to realise the activity framework like constructing an education base for patriotism education, and so forth;
- Provide schools with necessary support and assistance in organising different types of relevant activities for students of various grades according to their school-based characteristics;
- Cultivate students' global vision and awareness, as well as intercultural understanding and tolerance, communication and

cooperation skills, strengthening their competence to use Putonghua, Portuguese and English in order to maintain and strengthen their competitiveness within the region;

- Integrate global educational resources and make better use of them; take the opportunities to participate in various international exchanges, competitions and conferences and actively implement various forms of regional cooperation.

2.1.2 Developing students' soft power

In order to meet students' development needs in the future, it is necessary to cultivate, based on the hard power obtained from the education of traditional disciplines, students' soft power needed for their future. In the face of the diversified society in the future, it is necessary to develop interdisciplinary skills and the ability to apply knowledge of each discipline as well as the integrated knowledge of various disciplines. In order to face the rapidly changing society in the future, it is necessary to cultivate the judgement ability to view the past and to have philosophical and logical thinking; in the face of the complexity of the future society, it is necessary to develop areas abilities to balance, communicate and coordinate various sectors, and also have respect and sympathy for others. The above-mentioned skills and qualities must be linked to the cultivation of reading literacy, exploration spirit and art literacy. Special attention should be paid to the followings:

- Cultivate students' interdisciplinary competence and the competence to apply the knowledge learned; organically integrate various disciplines and disciplinary areas while keeping the original curriculum setting of fundamental subjects, in order to promote the learning and application of integrated knowledge. Do researches on developing interdisciplinary courses and courses about integrated skills;
- Create conditions to help students form competences and literacy in terms of cooperation, coordination, judgement, philosophical and logical thinking. Encourage schools to develop courses and educational activities related to philosophy or integrate it in different disciplines;

- Pay attention to the formation of aesthetic sense and artistic literacy; expand the learning of different forms of art and the level of participation of students in artistic activities;
- Raise students' interest in reading, improve their reading literacy, including the ability to interpret, use, evaluate, reflect on and engage with written texts; provide resources and conditions to promote the teaching of reading.

2.1.3 Enhancing a sense of well-being

Care about the sense of well-being and the physical and mental health of the students; cultivate students to establish a healthy lifestyle, and an optimistic and positive attitude towards life. Students should be encouraged to pay attention to personal needs and daily life routine; enhance students' physical fitness and learning interest by improving the learning environment and creating a harmonious relationship between teachers and students and among students; promote family education and harmonious parent-child relationship. Special attention should be paid to the followings:

- Care about students' learning interest and learning needs, raise their sense of accomplishment to encourage them to achieve success in learning; create a harmonious school life, and allocate resources to improve the school environment; build a harmonious relationship between schoolmates and between teachers and students; reduce the pressure of studies; continue to give out guidelines and measures to help students reduce pressure, and establish a suitable learning mode to achieve balance between learning and resting;
- Promote the health conditions of students, improve their physical fitness, advocate the healthy work and rest, eating and living habits; continue to examine, advocate and promote students' physical quality;
- Attach importance to cultivating students' healthy psychological quality, improve students' resilience; deepen and broaden student counselling services at schools, especially in terms of preventing school bullying, deviant behaviour and learning anxiety, and so on;
- Promote a healthy family life and parent-child relationship; strengthen the role of family education.

2.1.4 Strengthening education about creativity and technology

Science and technology development has been so rapid; the future educated citizens need to be capable of adapting to social changes brought about by the technological progress. Therefore, the enhancement of creative and technological education gives a direct response to the modernisation of education and the formation of students' skills needed for the future. In order to popularise the application of science and technology and to realise creativity and computational thinking, students need to be equipped with good network information literacy. Conditions should be created to modify the respective traditional disciplines; to promote the construction of a smart campus; to improve teaching and learning methods; to encourage teachers to adapt to educational changes in the new informatisation era and to make good use of technologies to optimise teaching. Particular attention should be paid to the following key objectives:

- Review the curricular organisation of subjects such as mathematics, natural sciences, IT and so on; develop interdisciplinary courses of integrated application, with the aim of cultivating students' skills in innovation and creativity, network information literacy and the various comprehensive qualities.
- Optimise "popular science and technology competition activities", through which, students can acquire more relevant skills, literacy, emotions and attitudes:
- Build a smart campus, and on this basis, promote smart education and develop AI education. Use more technology in teaching to provide personalised and accurate education to students, and to increase learning motivation and the effectiveness of learning and teaching. Gradually achieve the objectives of student-centred learning and teaching according to students' abilities, and at the same time, cultivate the artificial intelligence knowledge that students need for the future;
- Train teachers and equip them with teaching abilities related to creative and smart education so that they can adapt to future teaching needs, and at the same time focus on integrating technology into the subject contents and teaching methods, in order to optimise teaching and promote the professional development of

the teachers.

2.2 Deepening the Development of Various Levels and Types of Education

2.2.1 Infant education

- To review the effectiveness of infant education curriculum reform, taking into account the implementation situation of giving importance to the physical and mental development of students, fun learning and avoiding the tendency to become identical to primary education;
- To care about meeting the need for more basic care for children in infant education and to study on the introduction of childcare workers in infant education or other feasible solutions in order to ensure the learning and care needs of children;
- To review the assessment methods in infant education, to consider the application of diversified assessment which mainly focuses on formative assessment, to improve the development of infant education students in Macao.

2.2.2 Primary and junior secondary education

- To improve the compulsory education system and to review the existing mechanisms in order to protect students' right to education from the aspects of laws, regulations, guidelines and measures, and so forth; to care about the situation of students' school attendance and dropout;
- To ensure that the learning progress in primary and junior secondary education levels is in line with the development of the cognitive skills of students of the corresponding school age, review the grade retention system and gradually reduce the retention rate;
- To care about the transition and adaptation of students from primary education to junior secondary education;
- To design curriculum and activities appropriate for junior secondary school students, especially the curriculum aiming at developing their comprehensive abilities such as manual and practical application skills;
- To regulate the assessment of student performance in terms of system,

and deepen the model of diversified assessment.

2.2.3 Senior secondary education

- To develop diversified curriculum for senior secondary education in order to satisfy the needs of those students with different interests and abilitiess;
- To create or integrate curriculum in senior secondary education to cultivate students' ability of innovation and critical thinking, and so forth:
- To promote students to complete senior secondary education, and to increase the survival rate at that level:
- To encourage senior secondary school students to further their studies, to cultivate more talents in different fields, and to support secondary school students in further studies and career planning.

2.2.4 Vocational-technical Education

- To formulate and to implement the vocational-technical education system of non-tertiary education, to develop vocational-technical education meeting the needs of society according to the economic development model of Macao; as well as to establish a modern vocational-technical education system;
- To constantly support regular schools of senior secondary education to offer vocational-technical education courses, to create conditions for vocational-technical education schools and other secondary schools in Macao to develop different models of vocational-technical courses;
- To promote schools offering technical-vocational courses to sign cooperation agreements with enterprises; to promote a better articulation between vocational-technical education and tertiary education.

2.2.5 Special education

- To optimise the assessment service for students with special

educational needs and to provide assistance and support to these students; to create a database of students with special educational needs;

- To continue the implementation of individualised education plans and to develop educational plans suitable for the personal development of students with special educational needs;
- To continue to invest resources and carry out teacher training in order to promote schools to implement inclusive education, and to raise awareness about social inclusion;
- To support schools to form an inclusive education team and to increase investment in resources for therapeutic and training services, encouraging students to receive the relevant services in the school attended;
- To promote the development of gifted education, to prepare guidance documents for gifted education, to develop assessment tools and to create a database of gifted students; to increase investment in resources, teacher training and promoting and guiding parents to understand about gifted education; and to provide an environment conducive to the development of the potential of gifted students in cooperation with schools, tertiary education institutes and other institutions.

2.2.6 Continuing education

- To review the development model of recurrent education, assist in its transformation in order to adapt to social development;
- To improve the "Continuing Education Development Plan", to continue to encourage lifelong learning of Macao residents and create a learning society;
- To strengthen parent-child education and home-school cooperation, deepen the work of parent education.

3. Key Measures

3.1 Ensuring the funding

- Ensure that public expenditure on education maintains an ideal level of investment in resources under relatively stable economic conditions so as to realise the education right of residents;
- Constantly improve and adjust the funding types and forms according to the needs of social development, continue to assist students from economically disadvantaged families, and cultivate talents in different fields through the funding of tertiary scholarships and grants;
- Optimise the free education subsidy, tuition subsidy and textbook subsidy; bring the functions of the various funds into full play in order to encourage schools to develop related educational work.

3.2 Improving free education and compulsory education:

- Continue to improve the free education subsidy system and the compulsory education system;
- Reinforce the mechanism for preventing students from dropping out of and leaving school; improve the follow-up mechanism for student cases; promote cooperation among the Government, schools, families as well as social and welfare organisations; supervise resumption of schooling;
- To promote students' academic success and complete the reform of the grade retention system;
- Ensure the implementation of the "Student Assessment System for Formal Education of Local Education System", develop regulations and guidelines on formative assessment and summative assessment, and so forth.

3.3 Optimising the construction of the teaching team:

- Explore new forms of education and train teachers to have sufficient ability to deal with education development; train teachers to acquire

new educational technology and skills, focusing on integrating technology into the subject contents and teaching methods; train teachers to master new classroom models; provide necessary teacher training on new integrated subjects, philosophical and logical subjects, and so forth;

- Optimise the current contents and model of teacher training, deeply understand teachers' needs and develop training courses more tailored to the needs; in addition to subject teaching, teachers should also be trained to master the methods for cultivating students' good attitudes and values by infiltrating the related teaching into different subjects, for example, personal care, moral values, moral behaviour, taking initiatives to understand the development of the country, as well as the international vision, and so forth;
- Promote a teaching and research mechanism, encourage the setting up of a research team in schools, provide the necessary resources and researchers to carry out project research, modify the teaching models, improve teachers' professional competence, establish and develop teachers' professional progress;
- Revise the "System Framework for Private School Teaching Staff of Non-tertiary Education", review the requirements for entering the career, the level of rank and promotion system, registration, the professional development allowance and the number of teaching periods per week for teachers, improve the professional security of teaching staff and promote professional development;
- Care for the professional career of teachers and focus on reducing their job fatigue, promote the diversification of the orientation of professional development of teachers.

3.4 Building an excellent school environment

- Implement the plan to improve the school environment; ensure the supply of quality educational spaces and school places through the construction and reconstruction of school facilities;
- Continue to support schools in Macao by providing necessary grants to improve facilities and equipment;

- Gradually promote schools to build creative and practical educational facilities, and continually support schools to optimise related facilities, equipment and resources
- Build the smart school campus, gradually promote smart education, create conditions for schools to use technology to help achieve the goals of teaching students in accordance with their aptitude, carrying out personalised learning, as well as supporting teaching innovation.

3.5 Optimising the school system, improving the education leadership and the internal administration of schools

- Ensure the implementation of the "General Rules for Private Schools of Non-tertiary Education" so as to effectively monitor the operation of private schools in Macao;
- Ensure the implementation of the "Special Education System";
- Complete the revision and the implementation of the decree-law of the "Vocational-technical Education System";
- Complete the revision and the implementation of the "Accounting Plan for Private Schools";
- Implement the new model of integrated evaluation of schools;
- Continue to promote schools to organise parent associations and play the role of home-school cooperation.

3.6 Constantly advancing curriculum, teaching and assessment reforms

- Review the implementation of the "Curriculum Framework for Formal Education of Local Education System" and the "Requirements of Basic Academic Attainments of Formal Education" for various subjects, in particular, the situation of reflecting and implementing the goals of cultivating the love for the country in the curriculum of the subjects of Chinese Language, Moral and Civic Education, History and General Studies;
- Gradually launch the teaching materials of different subjects appropriate to the local curriculum; continuously review and revise in a timely manner the local teaching materials of "Moral and Civic

Education", "History", "Chinese Language", etc.; actively promote the teaching materials and encourage schools to use them in class or as a reference; start to develop the teaching materials of "General Studies" for kindergarten and primary school;

- Cultivate interdisciplinary skills and the ability to apply the knowledge of each discipline, optimise the curriculum design of globally applicable skills;
- Study to promote the learning of logical thinking and philosophy, compile the supplementary teaching materials for logic and philosophy;
- Prepare the construction of the Education Base of Love for the Motherland and for Macao, gather the education resources of "Love for the Motherland and for Macao" and deepen the related educational work;
- Highlight the functions of the "Vocational-technical Educational Activity Centre" and the "Language Educational Activity Centre", promote the development of vocational-technical education and language learning;
- Establish the general framework of activities aimed at learning, and make it an important measure for improvement, expansion and supplement of teaching and educational activities; for example: integrating patriotic education activities, carrying out educational activities about Chinese traditional etiquette and culture, expanding art performance activities and reading promotion activities; optimising sports competition activities and science competition activities.
- Implement the "Student Assessment System for Formal Education of Local Education System" and promote students' academic success.

3.7 Promoting the safety as well as physical and mental health of students:

- Promote the implementation of safety education in schools in Macao, popularise safety education teaching materials, promote and reinforce students' awareness of disaster prevention and safety;
- Continuously implement various plans to promote the physical

condition and healthy growth of students, teach students the knowledge about and the importance of maintaining their physical health, improve the allocation of school health promotion staff and strengthen their training;

- Fully promote the development of students' psychological health, including the promotion and services of moral education, psychological counselling, sex education, and so forth;
- Reinforce the forming of a team of student counsellors in schools and improve the related mechanism, especially focus on preventing school bullying and alleviating academic anxiety, in order to care about the psychological needs of students;
- Strengthen the policy guidance and cooperation with schools and associations, assist senior secondary school students in their further studies and career planning so that they can receive appropriate support, and assist schools to develop counselling services on further studies and career planning.
- Develop a scale to assess students' attitudes and affection, and periodically assess students' development needs, which contributes to schools' moral education planning, as well as promotes the comprehensive and balanced development of students' physical and mental health.

3.8 Improving the lifelong learning system

- Review the implementation of the Continuing Education Development Plan and optimise it, so that it is more effective and corresponds to the development needs of Macao;
- Build a community-based learning society, and create a community learning network to provide more convenient and diversified means of learning to the public;
- Strengthen parent education and use different platforms to organise various activities to promote and carry out thematic parent education courses, and provide appropriate support for parents.

3.9 Strengthening regional cooperation in education:

- Understand the international educational environment, development trends and current trends; strengthen exchange and cooperation between educational institutions in different regions and establish contacts with the advanced countries in education, send staff to exchange and obtain experiences;
- Continue to maintain communication and exchange with international institutions, such as UNESCO and OECD, participate in international tests; take full advantage of international tests, such as PISA, PIRLS and TIMSS, the related results and data are served as the reference for improving the quality of education in Macao;
- Implement the regional cooperation in the "Framework Agreement on Cooperation Between Guangdong and Macao" and the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area", explore the model of educational cooperation in the Guangdong-Hong Kong-Macao Greater Bay Area, such as exchanges, visits, establishing sister schools, etc.;
- Promote cooperation with mainland tertiary education institutions, implement diversified teacher training programmes, such as the "Elite Training Programme for a Thousand Teachers";
- Reinforce the training of Chinese-Portuguese bilingual talents, as well as exchanges with Portuguese-speaking countries and regions, playing the role of Macao as an "exchange and cooperation base with Chinese culture as the mainstream and co-existence of different culture".

4. Mid-term Review and Adjustment

4.1 Creating the mid-term review mechanism

By 2025, a mid-term review will be conducted to review the state of implementation and effectiveness of various policy objectives and related measures, the mid-term review report will be prepared.

4.2 Formulating the adjustment plan

According to the mid-term review report, formulate and implement a necessary adjustment plan in order to achieve all the objectives by 2030.

IV. Ways of Expressing Opinions

Residents can go, in person, to the Public Information Centre, the Government Integrated Services Building, Public Service Centres, the DSEJ and the activity centres under the DSEJ to obtain the consultation document, or download it from the DSEJ website at www.dsej.gov.mo.

The opinions of school running entities, administrators and teachers, educational organisations, individuals in the education sector, enterprises and institutions, tertiary education institutions, parents and the public are welcome. Opinions can be offered to the DSEJ, between 5th December, 2020 and 22nd January, 2021, by mail, fax, phone, e-mail or in person during the consultation sessions.

- By Mail: The Education and Youth Affairs Bureau, Avenida de D.
 João IV, No.7-9, 1st Floor, Macao) (Please state on the envelope:
 "Opinions of Public Consultation on Medium and Long Term
 Planning for Non-Tertiary Education (2021-2030)")
- By personal delivery:
 The Education and Youth Affairs Bureau (DSEJ) and the centres under the DSEJ

Location	Address
The Education and Youth Affairs	Avenida de D. João IV, No. 7-9, 1st Floor,
Bureau	Macao
Youth Activities Centre of "Areia	Estrada Marginal da Areia Preta Edifício "Kin
Preta"	Va", Macao
Centre of Experimentation for the	Rua Filipe O'Costa (Tap Seac Multisport
Youth	Pavilion), Macao
Youth Activities Centre of "Exterior	Avenida Marciano Baptista, Macao Forum,
Port"	Block 2, Macao
Youth Activities Centre of "Bairro	Praceta da Serenidade, next to Avenida Leste
do Hipódromo"	do Hipódromo, Macao

Location	Address
Centre of Education Resources	Avenida da Praia Grande, No. 926, Macao
Centre of Permanent Education	Rua da Tribuna, No. 313, Edifício Jade Plaza, 3 rd Floor, Macao
Centre of Languages	Rua Formosa, No. 31, 3 rd Floor, Macao
Centre of Educational Activities of	Rua de Bragança, Nova Taipa Garden, Block
Taipa	24-26, Ground Floor Taipa
Centre of Moral Education	Rua Nova de Toi San, Edifício Litoral (Lei Tat
	San Chun), 3 rd Floor, Macao
Centre of Psycho-pedagogical	Rua Formosa, No. 31, 2 nd and 4 th Floors,
Support and Special Education	Macao

Office Hours:

Monday to Thursday: 9:00 am to 1:00 pm, 2:30 pm to 5:45 pm;

Friday: 9 am to 1:00 pm, 2:30 pm to 5:30 pm;

Tel.: (853) 2855 5533

Fax: (853) 2871 1750

Email: webmaster@dsej.gov.mo

If you intend to keep all or part of your opinions or suggestions confidential, please indicate this intention clearly when submitting the written opinions or suggestions.

In addition, the DSEJ will hold at least three consultation sessions to present the contents of the consultation document and directly listen to the opinions of various stakeholders. The specific arrangements for the consultation sessions will be announced before or in December 2020, through newspapers, emails, letters, the DSEJ website and mobile phone applications.

Attachments: Opinion Form for Medium and Long Term

Planning for Non-Tertiary Education (2021-2030)

You are welcome to give your opinions or suggestions on the content of the "Medium and Long Term Planning for Non-Tertiary Education" (2021-2030) to the DSEJ by filling in the form or by other means.

My / Our organisation's opinions are as follows:

Highlights of the Consultation	Opinion / Suggestions
Vision, Basic Principles and General Objectives	
2.1.1 Cultivating students' patriotism and international vision	
2.1.2 Developing students' soft power	
2.1.3 Enhancing a sense of well-being	

Highlights of the Consultation	Opinion / Suggestions
2.1.4 Strengthening	
education about creativity	
and technology	
2.2.1 Infant education	
2.2.2 Primary and junior	
secondary education	
2.2.3 Senior secondary	
education	
2.2.4 Vocational-technical	
education	
2.2.5 Special education	

Highlights of the Consultation	Opinion / Suggestions
2.2.6 Continuing education	
3.1 Ensuring the funding	
3.2 Improving free	
education and compulsory	
education:	
3.3 Optimising the	
construction of the teaching	
team:	
3.4 Building an excellent	
school environment	
3.5 Optimising the school	
system, improving the	
education leadership and	
the internal administration	
of schools	

Highlights of the Consultation	Opinion / Suggestions
3.6 Constantly advancing curriculum, teaching and assessment reforms	
3.7 Promoting the safety as well as physical and mental health of students:	
3.8 Improving the lifelong learning system	
3.9 Strengthening regional cooperation in education:	
Others	

(If there is not enough space, please write on another paper and indicate the number when presenting your opinions)

Name o	of the opinion provider or name of the organisation:
Contac	t No. or other contact information:
identity	ople/organisations that want to keep all or part of their information, opinions or suggestions confidential, please fill \square with a " \checkmark ":
	or organisation request/requests to keep my/our identity rmation confidential.
	or organisation request/requests to keep the offered opinions / gestions confidential, including:
	THI OI MEIII
	Part of them, the confidential content is as follows:

Note: if the opinion provider has not clearly stated the request for confidentiality when presenting written opinions or suggestions, he/she is considered to agree with the disclosure of the personal information, as well as the opinions / suggestions provided.

