# 4. Ten Year Plan for the Development of Non-Tertiary Education (2011-2020)

Education is the foundation of social progress and the key for nurturing talents. The natural resources in Macao are very limited and the future long-term development must take the building up of human resources as the foundation. It can be achieved by developing high quality education, nurturing talents and improving the overall quality and competitiveness of residents.

Since the establishment of the Macao SAR Government, it has been paying much importance to education development. It has effectively increased investment in non-tertiary education and successfully implemented 15-year free education. It has carried out in-depth review and improvement of the non-tertiary education system and supported schools to improve the school conditions. It has spared no efforts to improve teachers' working environment and professionalism, as well as to care about students' comprehensive needs and health. The environment and effectiveness of education have improved significantly. Currently, Macao is in the critical period of leaping development. In the future, great effort will be spent on building Macao into a "World Tourism and Leisure Centre". In order to promote appropriate diverse economic development, while ensuring and regulating the appropriate and order development of gaming industry, Macao will dedicate the best effort to the development of modern service industries such as tourism, convention and exhibition, finance and cultural creativity, as well as other social undertakings such as science technology and culture, etc. However, all of these depend on developing education and nurturing talents, so as to provide human resources for the long-term development of Macao.

Non-tertiary education of Macao is currently in the key stage of enhancing quality and advancing quality education. The Macao SAR Government has already introduced the policy of "Developing Macao through education". In the coming decade, the education investment of the Government should be protected by a more powerful system; teachers' working conditions and professional abilities are expected to be constantly improved; students' comprehensive ability needs to be further strengthened, especially the language skills, arts literacy, international perspective and the ability to think and explore; curriculum and teaching should no longer focus only on examinations, but pay attention to the long-term development of students; the school life should provide students with the all-round learning experiences and the pathways of lifelong learning need to be further smoothed.

To further enhance the effectiveness, foresight and coordination of non-tertiary education policies, the Macao SAR Government has set the "Ten Year Plan for the Development of Non-tertiary Education (2011-2020)" (referred to hereinafter as the "Ten-year Plan") in accordance with the needs of future long-term development of Macao and the current situation of non-tertiary education. It is for confirming the development direction and objectives for the coming decade, as well as planning for the corresponding measures. All social forces are mobilised to jointly promote the development of non-tertiary education.

## 1. Visions and directions of basic policies

## 1.1 Visions

The visions of non-tertiary education development of Macao in the coming decade are: basing on the long-term needs of Macao development, the reasonable components and effective mechanisms of

educational traditions of Macao are brought into full play. In accordance with the guiding principles of development priority, quality enhancement, nurturing people as the core and promotion of equity, as well as on the basis of 15 years free education, the development of special education and vocationaltechnical education are actively promoted, the implementation of small class teaching in secondary education is accelerated. A team of professional and quality teachers with high moral standard is built to develop and form the curriculum and teaching system that meets the needs of the development of the era and is conducive to students' development. The important function of continuing education and life-long learning for enhancing residents' working ability and quality of life is brought into full play. By building up human resources, the sustainable development of Macao will be secured.

### 1.2 Directions of basic policies

#### 1.2.1 Giving priority to education development

Giving priority to education development will be persisted as a main long-term policy. Education development is given precedence over economic, social and urban development planning. Education investment is given priority in the government budget. Meanwhile, the entire society is adequately mobilised to pay attention to and support the development of education, and jointly shoulder the responsibility of nurturing the next generation.

#### 1.2.2 The core task is improving quality

Improving quality is the core task of the future development of non-tertiary education; in particular the building of the concept of education quality that meets the needs of development of the era. The focus of education should be placed on students' development so as to enable all students to develop healthily, happily and comprehensively.

## 1.2.3 Realisation of coordination development of the various components of non-tertiary education

Improve and innovate the related mechanisms. Ensure coordination development of various levels and types of education in terms of system and investment. Especially, it is necessary to ensure the effective implementation of compulsory education and free education. Increase the enrollment rate of senior secondary students. Actively develop vocational and technical education and vocational training in accordance with the needs of the diverse industries of Macao and construct a flexible and open lifelong education system.

#### 1.2.4 Promotion of education equity

Set promotion of education equity as the basic policy for non-tertiary education. Secure residents' rights of receiving education in accordance with the law, particularly the conditions for and opportunities of completing compulsory education. Strengthen the support to students from families with financial difficulties.

#### 1.2.5 Development of a diverse school system

Keep encouraging schools to form their own characteristics and style in terms of school philosophy, emphasis of curriculum and teaching models by means of sponsorship and other ways, so as to provide learners with more choices and nurture diverse talents for the society.

## 2. Development objectives

## 2.1 Development of various levels and types of education

#### 2.1.1 Infant education

- Promote the innovation of curriculum and teaching methods of infant education, in particular the learning activities in the form of games, avoid the tendency of infant education being primary-like;
- Develop infant education quality assurance evaluation indicators to help infant education institutions achieve better quality performance.

## 2.1.2 Primary and junior secondary education

- Ensure the conditions for all school-age children to complete compulsory education;
- Promote students' successful learning and reduce the repetition rate in primary and junior secondary education;
- Strengthen the connections between primary and junior secondary school in the aspects of curriculum, teaching and student development. Enable students to have a full and coherent learning experience.
- Promote diverse forms of assessment; reinforce advice on learning, thereby to enhance students' learning effectiveness.

#### 2.1.3 Senior secondary education

- Increase the enrollment rate of senior secondary school students;
- Promote the implementation of small class teaching in the senior secondary school;
- Promote the development of diverse senior secondary education systems and modes, including educational institutions, diversification of curriculum and learning modes; provide students with the possibility of making learning choices of their own in accordance with their interests and abilities.

#### 2.1.4 Vocational-technical education

- Develop vocational-technical education to meet the needs of appropriate industrial diversification;
- Improve the curriculum of vocational-technical education and increase the number of students;
- Mobilise the related enterprises to participate in vocational-technical education actively.

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#### 2.1.5 Special education

- Gifted education will be substantially promoted;
- Diagnosis of students with special education needs, individualised education and related services will further be improved;
- The related parents and teachers will receive more sufficient and effective support.
- Increase the investment of resources; optimise the hardware and software of special education.

#### 2.1.6 Continuing education

- Establish standardised assessment mechanisms for recurrent education and implement recurrent education in flexible and diverse ways;
- Improve the various conditions for residents to continue their studies;
- Develop community education and parent education; construct a flexible and open lifelong education system, so as to further create a learning-based society.

## 2.2 Development of students

On the basis of the concept of holistic development and the long-term development needs of Macao in the future, as well as the present status of non-tertiary education, special attention is paid to the development of students.

#### 2.2.1 Language proficiency:

Effectively enhance student's reading interest, written expression ability, writing skills and literacy accomplishment. Students who graduate from secondary education need to be able to use at least one foreign language proficiently, while those with the Chinese language as the medium of instruction can speak fairly fluent Putonghua.

#### 2.2.2 Physical and mental qualities:

Pay particular attention to the healthy development of students, including their physical and psychological health, as well as good social adaptability, let them develop a healthy lifestyle.

#### 2.2.3 Moral and civic formation:

Strengthen the Moral and Civic Education, assist students to build positive values, strengthen their understanding and recognition of the country and Macao, foster good moral and civic awareness, as well as patriotism, encourage them to participate actively in the society and nurture their ability of resisting temptation and frustration.

#### 2.2.4 Innovative Thinking:

Cultivate students' attitudes of active learning and positive thinking, as well as their innovative spirit. Develop their independent and critical thinking abilities.

#### 2.2.5 International Perspective:

Foster students' recognition of the local history and culture, as well as the open and tolerant attitude to various cultures; encourage them to expand their international vision and increase the confidence in exploring the world.

#### 2.2.6 Artistic Accomplishment

Enhance students' artistic accomplishment, including teaching them the related art knowledge; foster students' interest in arts and good aesthetic taste, as well as the feelings, appreciation and creativity of arts. Develop students' potential through art education; enhance their abilities in observation, imagination and creativity.

## 3. Key Measures

## 3.1 Ensuring the investments

#### 3.1.1 Government and the society:

- On the basis of ensuring economic development and financial stability, the annual budget of the Government arranges certain increase in the percentage of investment in non-tertiary Education as a priority.
- Increase the percentage of investment in non-tertiary education of the Government's total public expenditure to a desirable level.
- Expand the scale of the Education Development Fund step by step through financial appropriations in phases, so that it can adequately perform the function of reservation and adjustment of the education funding; strengthen the roles of policy guidance and financial support for the development of non-tertiary education.
- Take initiative to increase the tuition and free education subsidies, as well as the recurrent education subsidy, so as to provide students with equal opportunities of access to education.
- Fully utilise the function of the Student Welfare Fund, improve the funding mechanisms for students from families with financial difficulties. Avoid the case of losing education opportunity due to financial reasons.
- Strengthen the management and supervision of the utilisation of the education funding of schools.

#### 3.1.2 Schools:

- The annual expenditure on the remuneration and provident fund scheme for teaching staff of non-profit private schools of the local school system should be 70% or above of the long-term fixed revenues of schools.

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- Gradually increase the difference in salaries between teaching staff of different ranking.
- Establish a provident fund scheme for all teaching staff.

#### 3.1.3 Parents:

Provide financial security for their children's schooling.

## 3.2 Improving free education and compulsory education

#### 3.2.1 Government and the society:

- Complete the revision of the Decree-law of Compulsory Education in 2012.
- Subsidy of free education is calculated in accordance with the measure of 25 to 35 students per class, and this measure will be extended to the whole junior secondary education level no later than the Academic Year 2014/2015, and it will be extended to the whole senior secondary education level no later than the Academic Year 2017/2018.
- The class-teacher ratios in infant, primary and secondary education will be 1:1.6, 1:1.9 and 1:2.4 respectively in 2015, and 1:1.7, 1:2.0 and 1:2.5 respectively in 2020.
- Strengthen the mechanism for preventing students from dropping out and leaving school.
- Improve mechanisms for tracking cases of students in compulsory education.

#### 3.2.2 Schools and teachers:

- Fully utilise the function of small class teaching. Improve the learning environment. Fully enhance the quality of education and allow students with different needs to acquire more comprehensive care.
- Review and improve the assessment, promotion and repetition systems of schools. Promote all students to learn successfully and reduce the repetition rate.
- Adhering to the spirit of "education for all without discrimination", students in the compulsory education should not be expelled in principle.
- Strengthen home-school cooperation to promote students' healthy development.

#### 3.2.3 Parents:

- Care for children's healthy growth and learning problems, so as to promote their successful learning.
- Ensure their children to complete compulsory education.
- Create conditions and encourage children to continue their studies.
- Adequately communicate with the school, coordinate with the plans carried out by the Government and the school, so as to jointly promote the development of students.

## 3.3 Strengthening the building of teaching team

#### 3.3.1 Government:

- Promote the prevailing custom of respecting teachers and make teaching a respected profession.
- Actively implement the "System Framework for Private School Teaching Staff of Non-tertiary Education" and the related legislation, in particular the implementation of the rank and promotion system, granting of professional development subsidy, reduction of teachers' weekly teaching hours, so as to effectively enhance the occupational security and promote their professional development.
- Enhance the professional standard of teachers, so that by 2020, the percentage of teachers with "pedagogical training" in infant education, primary education and secondary education will reach 97%, 95% and 90% respectively.
- Strengthen the coordination of in-service training of teaching staff, broaden the disciplinary areas of "principal teacher training" and continue to carry out the" Off-the job training" and "Sabbatical leave for further studies ". Optimise the Award Scheme on Instructional Design. Gradually develop a good teaching staff professional development system.
- From 2013 onwards, the newly appointed principals and middle & senior management personnel have to complete the training recognised by the education authority.
- Collaborate with tertiary education institutions to provide places of pedagogical training for teachers with needs.
- Encourage excellent graduates of senior secondary education to take education programme in higher education.
- By 2014, complete setting the Putonghua criteria for teachers of Chinese Language (including teachers of Putonghua), and orderly prepare and carry out the related test.
- Collaborate with related institutions to strengthen the training for teachers of foreign languages, lifting the teaching level of foreign language.

#### 3.3.2 Schools:

- Create a provident fund scheme for teaching staff of private schools.
- Implement the ranking and promotion system of teaching staff.
- Conduct appropriate school-based training; establish an effective mechanism for educational research.

#### 3.3.3 Teaching staff:

- Reinforce the mission of education; fulfill teaching staff's professional criteria and ethics. Attach importance to both "Passing knowledge" and "Educating students", love each and every student.
- Actively make their own professional development plan, participate in in-service training programmes and educational research. Constantly reflect and improve themselves, so as to enhance their professional image, as well as the quality of education and teaching.

## 3.4 Improving the school system

### 3.4.1 Government:

- Reserve land for the development of schools in urban planning, particularly in new reclamation area.
- Promote further development of free education school system.
- Complete the revision of "Statute of Schools" by 2015.
- Complete the revision of the Decree-law of Special Education by 2014.
- Complete the revision of the Decree-law of vocational-technical Education
- Improve the specific duty personnel system of schools. Fully utilise the function of the specific duty personnel. Promote the development of schools.
- Reform the administration model by new ideas and concepts. Optimise the public school system.
- Continue to support schools in implementing various plans to improve the environment and facilities.
- Support cooperation between schools, enterprises and other social organisations. Develop diverse vocational-technical education meeting the needs of economic and social development.
- Subsidise schools to optimise various types of facilities.

#### 3.4.2 School:

- Plan the development of the school in accordance with the principles of "Enhancing their own characteristics" and "Fulfilling social needs".
- Plan the development dimension and educational model of the school effectively. Optimise the school space and facilities.

## 3.5 Improving the education leadership and the internal administration of schools

#### 3.5.1 Government:

- Ensure autonomy of all schools in teaching, as well as the administrative and financial autonomy of private schools. At the same time, regulate the running of schools in accordance with the law, so as to form a well-coordinated and orderly regulated school system with clear rights and responsibilities between the Government and the school running organisations, as well as to enhance the vitality of school education.
- Complete the revision of the accounting system of private schools in 2015
- Review the relevant statutes and make a clear definition between "profit" and "non-profit" for private schools.

#### 3.5.2 School:

- Create a School Board in accordance with the law.

- Improve the internal management structure. Introduce democratic supervision and social participation. Promote the modernisation of school administration.
- Encourage students to manage their own affairs and improve their sense of belonging to the school.
- Develop the function of parents and parent associations in the development of the school and the educational process.

#### 3.5.3 Parents:

- Actively participate in the parent association, be concerned about school management and development.

#### 3.6 Strengthening the assurance of education quality

#### 3.6.1 Government:

- Complete the elaboration of student assessment and the revision of the school inspection system in 2015.
- Continue to carry out systematic, integrated and specific evaluations of schools, establish an evaluation system with self-evaluation and external evaluation. Help and guide schools to implement innovative reforms according to their own problems. Improve school management and teaching. Enhance the quality of education.
- Further utilise the functions of the Programme for International Student Assessment (PISA).
- Establish a leading and coordinating institution related to student assessment.

#### 3.6.2 School:

- Implement diverse assessment, strengthen the formative assessment, encourage teachers to develop innovative education and methodology, help students learn to learn.
- Establish management systems and working mechanisms with the orientation of improving education quality. Concentrate the distribution of educational resources and the principal work of the school in strengthening teaching, so as to improve the overall quality of education.

#### 3.7 Curriculum and teaching reform

#### 3.7.1 Government:

- Define the "curriculum frameworks" for formal education by 2012. On the basis of the principles of improving education quality and promoting holistic development, insist on optimising the curriculum structure with students as the core.
- Develop the "requirements of basic academic attainments" and curriculum guidelines for various education levels and various subjects of formal education, which will be implemented comprehensively in phases.
- Support schools to implement curricular and pedagogical reforms through the Education Development Fund.

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- Assist schools to implement creative thinking teaching and small class teaching, as well as to improve the teaching methods.
- Develop a mechanism for sharing teaching resources by combining with the application of information technology.
- Encourage teachers to share their teaching experience with colleagues, and further raise teachers' teaching level through teaching observation and experience exchange.
- Bring the role of the Education Development Fund into full play, assist schools to enhance students' language proficiency, including the capacity in using Putonghua and at least a foreign language, by providing support in terms of teachers, curriculum and learning environment, etc.

#### 3.7.2 Schools:

- Develop school-based curriculum, which reflects the characteristics and education philosophy of the school.
- Improve school curriculum leadership and the ability in curriculum development, as well as teachers' curriculum capacity.
- Establish a collective teaching research system, strengthen educational exchanges between teachers and enhance the effectiveness of teaching.

#### 3.8 Promoting moral education development

#### 3.8.1 Government:

- Improve and implement the systematic moral education policy. Establish mechanisms of moral education coordinated and supported mutually by the government, school, family and society.
- Bring the functions of the Centre of Moral Education, Centre of Psycho-Pedagogical and Special Education, other youth centres and educational activity centres into full play, help schools to carry out the work of moral education.
- Improve the functions of the "School Crises Management Team"

#### 3.8.2 School:

- Enhance the functions of the "Moral Education Working Group" of the school in terms of planning, leadership, organisation, coordination and evaluation.
- Gradually establish the mechanism of student participation in class management and school construction.
- Enhance the professional capacity of teachers of Moral and Civic Education (including curriculum development).

#### 3.8.3 Parents:

- Serve as a role model. Develop the moral functions of family education.

- Understand the difficulties might be faced by children in various education levels and provide them with support and encouragement, guide children to develop correct values and outlook on life.

## 3.9 Strengthening the psychophysical development of students

#### 3.9.1 Government:

- Guide and support schools to carry out various types of plans aiming at enhancing students' health; encourage students to make good use of their leisure time to strengthen their health and physique, arrange the work and rest hours scientifically, develop a good lifestyle.
- Increase the number of counselling staff at school to assist schools to carry out more activities that improve students' psychological quality.

#### 3.9.2 School:

- Through classroom teaching and leisure activities, teach students the knowledge related to the healthy life and balance diet, strengthen students' physique.
- Reinforce the systematicness of student counselling, further enhance students' psychological quality, in particular, the ability to cope with temptation and frustration.

#### 3.9.3 Parents:

- Cultivate children's good psychological quality, assist children to develop good life habit, and share with children the joy of healthy life.

#### 3.10 Developing Continuing Education actively

#### 3.10.1 Government:

- Complete the formulation of the Statute for Continuing Education in 2012.
- Complete the formulation of the subsidy regime for recurrent education in 2013.
- Establish the mechanism for "standardised assessment of recurrent education" to enhance the quality of recurrent education in 2013.
- In 2013, revise the implementation situation of the Continuing Development Plan, so as to frame the long-term policy.
- Increase investments; continue to promote continuing education and lifelong learning.
- Provide residents working in shifts with more flexible opportunities to attend courses of recurrent education.
- Integrate the learning resources of the society; provide residents with the learning information.
- Promote the development of community education and family education to build a learning-based community.

#### 3.10.2 Related Institutions:

- Organise various types of continuing education courses to provide the working people and the elderly with diverse learning opportunities.
- Open the learning resources for residents of the community to use.

## 3.11 Expanding the opening up of education and regional cooperation

- 3.11.1 Orderly implement various measures related to education in the "Guangdong-Macao Cooperation Framework Agreement".
- 3.11.2 Deepen the educational exchanges and cooperation with Guangdong province and other regions in mainland China, as well as the HKSAR and Taiwan, China. Boost the cooperation between the department and schools in the aspects of school development, exchanges of teachers and students, curriculum and teaching.
- 3.11.3 Continue to participate in the Programme for International Student Assessment (PISA) organised by the Organisation for Economic Cooperation and Development (OECD).
- **3.11.4** Further promote the close contact with the United Nations Educational, Scientific and Cultural Organisation (UNESCO).
- 3.11.5 Strengthen the exchanges with Portuguese speaking countries and regions; promote the development of non-tertiary education in Macao with a more open vision.

## 4. Mid-term evaluation and adjustment

## 4.1 Establish the mechanism of mid-term evaluation

By 2015, a mid-term evaluation on the achievement of the objectives of various policies and the effectiveness of the related measures will be carried out.

#### 4.2 Adjustment of the plan

By 2015, develop and implement necessary adjustment in accordance with the result of the mid-term evaluation, so as to enhance the overall effectiveness of the Plan.