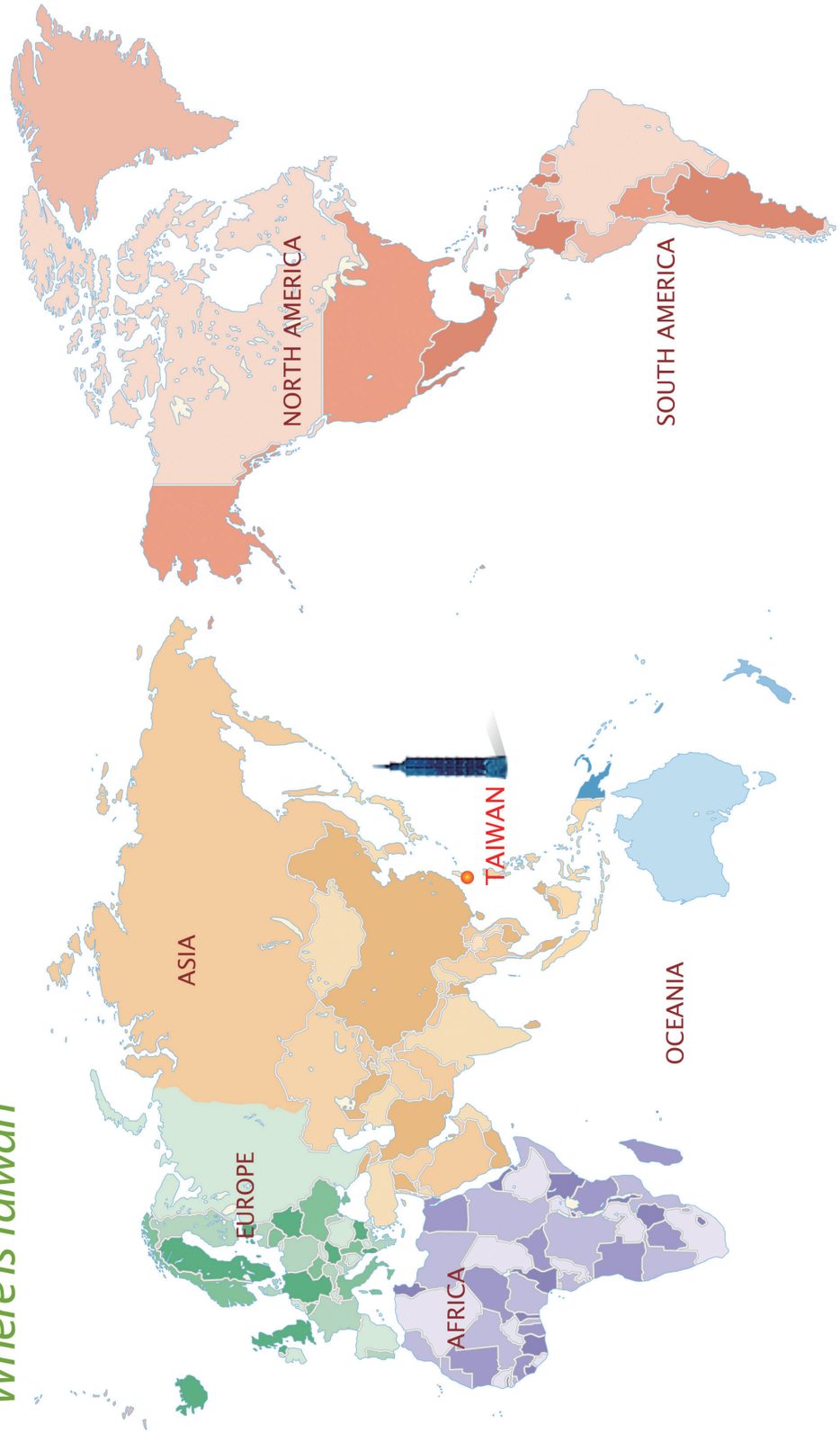
Education in Taiwan

2016 ▼ 2017

Ministry of Education
Republic of China



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Words from the Minister…

Minister of Education Pan Wen-chung is signing his first official document of the ministry after taking office.


President Tsai Ing-wen and Minister of Education Pan Wen-chung visit the Qianhua Elementary School, Shihmen District, New Taipei City.

Learner-oriented Education: The Right to Learn is Replacing the Right to an Education

A core principle of the Ministry of Education's approach is to "replace the right to an education with the right to learn, for all citizens, and make education genuinely learner-centered." Students are at the heart of education, and students' learning is our critical goal, and so the government must keep improving the education system to achieve this. We must pay serious attention to differences between individual learners and their learning experiences: it is not appropriate to continue indiscriminately applying uniform standards and education pathways to all students. Respect for diversity and ensuring students' learning is developmentally appropriate means that we must provide opportunities for each student to have their individual strengths identified and nurtured. This will require teachers to transcend their familiar traditional role of dispensing knowledge and become guides for their students' individual learning. This will also entail adapting and transforming teaching methods and teacher staffing arrangements.

Education is a life-long endeavor and a constantly evolving process. Continuously striving to improve is an essential part of this. The Ministry is working to achieve the goals of: making learning enjoyable; lightening parents' burdens; keeping education up-to-date; and having all our citizens fully educated and trained. Our educational philosophy is staunchly people-oriented and we are committed to creating high-quality preschool, elementary school, and junior high school education environments; to vitalizing teaching, progressively implementing flexible and developmentally suitable teaching and learning practices in the 12-year Basic Education program; and to invigorating technological and vocational education with academia and industry working together and linking what students learn in classrooms with practical workplace training.

In the higher education sector, we are encouraging our universities and colleges to be innovative centers of excellence that help create strong local vitality. We will also continue leading students to dare to think critically and to be concerned about social issues. Their teachers will be trained to teach in ways that cater for diversity and respect differences, and encouraged to independently engage in ongoing professional development, and to nurture their students' confidence and skills to vigorously face future challenges.

We will ensure a stable supply of teachers and quality teaching so that students in remote regions and disadvantaged students enjoy their right to access teaching and learning. We will continue to create learning environments in which diversity is respected and students' different needs are catered to, and encourage young people to explore career options and engage in community affairs.

We will improve lifelong learning opportunities, in order to build a strong civil society, and we will actively incorporate an international outlook into all aspects of education, as we implement the New Southward Policy. We will also continue working to increase the general population's fitness by promoting regular exercise for all, and at the same time boost Taiwan's athletic competitiveness.

The Ministry will continue to nurture a fair society by ensuring quality education for all. We will vigorously use a range of developmentally appropriate teaching practices to students' interest and engagement, and provide diversified learning pathways to achievement. We will fairly distribute resources to bring social justice to life; go beyond citizen's "right to an education" and replace it with the "right to learn". And we will enhance our citizens' capacity to meet whatever the future brings, with the goal of making Taiwan a better country for all its people.

Wen Chung Pan

Wen-Chung Pan, Ph.D.
Minister of Education

An Overview

The Ministry of Education is part of the Executive Yuan and is responsible for national academic and educational administration, including education policy planning and legislation and supervision of educational matters.

Education has always been highly valued in Taiwan. Our education system is currently a 6-3-3-4 structure which offers compulsory education as well as teacher training and vocational education. Although preschool education is not part of the compulsory education and educational system, the government provides assistance to toddlers in financially disadvantaged families to enter the school system early, which has led to an increase in the number of pupils attending preschools enrolling children from age 2-6. On Jan. 1, 2012, kindergartens and nurseries were integrated as preschools into the education system. Elementary school lasts for six years, from age 6-12; junior high school three years, from age 12-15; compulsory education was extended to 9 years in SY1968, which includes elementary and junior high school; in SY2014 the period was extended to 12 years to cover senior secondary school. Senior secondary school lasts for three years between the ages of 15 and 18; university undergraduate education is four years, masters level graduate education one to four years, and doctoral education two to seven years. In addition, to offer the general public a broader range of continuing education options, there is also supplementary education and continuing education as well as special education for students with special needs due to extraordinary talent or mental/physical disability. Widely available lifelong learning courses give the general public an opportunity to extend their learning experience.

In SY2015, the total number of schools (including preschools) is 10,948, with a total of 4.62 million students, the record of lowest number of students in after SY1981. The ratio of indigenous students is 3.0% of the student population, with a total number of about 140,000, and the ratio of new Immigrants' children is 5.5% of the student population, with a total number of about 250,000 students. There are approximately 300,000 teachers nationwide. In order to improve the quality of education and under the impact of a low birth rate, the number of students per class in elementary school, junior high school, and senior secondary school are respectively 6.1, 6.9 and 3.2. The number of students per teacher has been decreasing for all educational levels except in universities, colleges and junior colleges. In SY2015, the net enrollment rate for primary education (from age 6-11) is 99.5%, 96.0% for secondary education (from age 12-17) and 70.9% for tertiary education (from age 18-21), an increase of 13.5 % over the last decade.

Higher education of Taiwan aims for global development, and the total number of non-citizen students study or research in Taiwan hit a record high of 110,182, accounting for 8.3% of all students in universities, colleges and junior colleges.

The Education Administration System 2016

Educational System

Students may study, under the current education system, for up to 20 years, which includes 6 years of primary education, 3 years of junior high school, 3 years of senior secondary school, 4 to 7 years of college or university, 1 to 4 years for a master's degree and 2 to 7 years for a doctoral degree.

Compulsory Education

A 9-year Compulsory Education system was put into effect in SY1968, of which 6 years are for elementary education and 3 years for junior high school. To offer more diverse development opportunities for junior high school students, technical arts education is included as well, in addition to the regular curriculum. Practical classes allow students to better understand vocational education and their future career choices. 12-year Basic Education was carried out in SY2014.

Senior Secondary Education

Senior secondary education consists of three years of schooling and includes "general senior secondary schools," "skill-based senior secondary schools," "comprehensive senior secondary schools," and "specialized senior secondary schools."

Junior College Education

Junior college education can be classified according to admission requirements into 5-year junior colleges and 2-year junior colleges. 5-year junior colleges admit graduates of junior high schools, whereas 2-year junior colleges admit graduates of skill-based senior secondary schools.

Teacher Education Programs

The teacher education system is comprised of diversified, training and selecting methods. Teachers who teach in preschool, primary school, junior high school, and senior secondary school are trained in universities of education or normal universities with teacher training programs or centers. These institutions are also responsible for providing in-service training and guidance for local education practitioners. In December 2012, the Ministry published its White Paper on Teacher Education, which focuses on pre-employment training, counseling-infused teaching, teacher's professional development and support system with 9 development strategies and 28 action plans to provide a comprehensive plan for the education of teachers at all levels and for all subjects. To protect the teacher's professional status and the student's right to education, the Ministry will promote a professional development evaluation system for teachers in primary and secondary education. As a response to the implementation of 12-year Basic Education in SY2014, the Ministry will improve professional knowledge and skills for effective teaching, multiple evaluations and differentiated knowledge among teachers.

University / College and Graduate School Education

The maximum study period for university education (including universities, colleges, universities of technology, and technical colleges) is 4 years (the Post-bachelor Second Specialty Program is 1-2 years, while the bachelor's program is usually 2 years), and internships can last one-half to 2 years depending on the needs of the subject. For Master's Degree candidates, the study period is 1-4 years and for Doctoral Degree candidates the duration is 2-7 years.

Special Education

Special education institutions are established for students with mental and/or physical disabilities, and offer education at the levels of preschool, primary school (6 years), junior high school (3 years), and senior or vocational high school (3 years). Moreover, students with disabilities from all educational levels may apply for extensions according to their mental and physical conditions, learning needs and willingness.

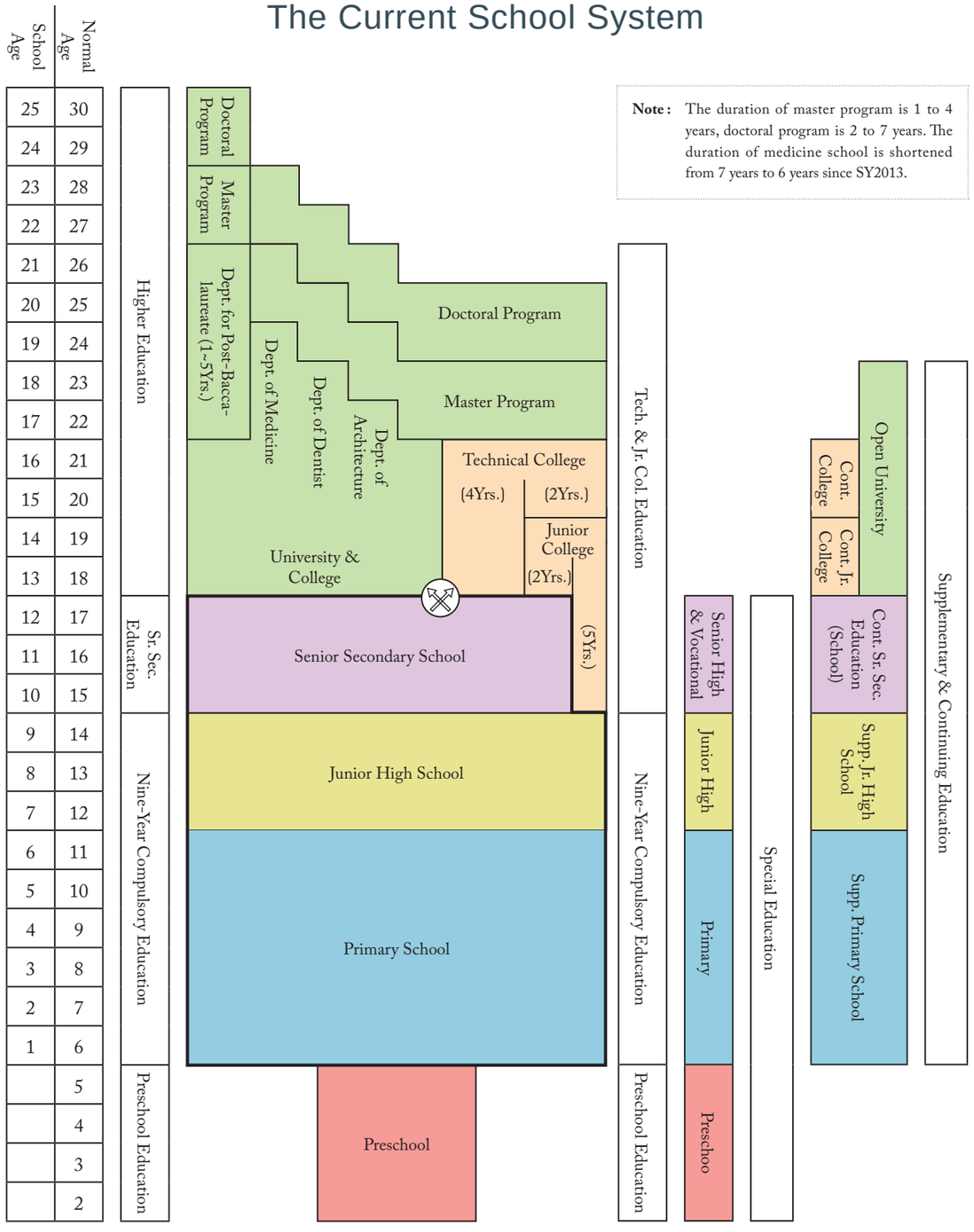
Arts Education

The goals of arts education are to cultivate artistic talent, enrich the spiritual lives of citizens and elevate the cultural level. Arts education in Taiwan can be divided into professional arts education offered at schools, general arts education offered at schools and arts education offered to the public.

Supplementary and Continuing Education

Supplementary and continuing education academies provide extensive and comprehensive learning opportunities for the general public, offering supplementary education, continuing education, and short-term supplementary education.

The Current School System



Note: The duration of master program is 1 to 4 years, doctoral program is 2 to 7 years. The duration of medicine school is shortened from 7 years to 6 years since SY2013.

Including non-school mode of experimental education

Education Reform

1 Establish Quality Environment for Preschool and Junior High and Elementary Schools

Gradually increase the provision of public educational and child-care service through multiple channels in order to provide affordable, convenient and quality public educational and child-care service; draft "Regulations for Preschool Educators" to complete qualifications for and rights of preschool educators; give priority to young children who are economically, culturally, physically and mentally, ethnically and geographically disadvantaged the opportunity for appropriate educational and care services.

Enact "Program for Speeding up Renovation Projects at Elementary and Junior High Schools to Improve Their Campus Facilities" to improve the seismic capacity of school buildings so that the safety of teachers and students is ensured and construct a quality learning environment on campus; supervise schools to conduct an analysis of students' health data to establish an appropriate health program for each school; actively promote education for life, gender equality, human rights and rule of law and character.

2 Promote Innovative Teaching and Gradually Implement 12-Year Basic Education with Adaptive Development

Promote group instructions for certain subjects. First, implement group instruction programs for English and math at junior high schools, offering adaptive planning in terms of teaching content, plans and methods of assessment to incentivize students to study hard and improve their learning results and decrease the chance of twin-peak learning. In addition, MOE required courses offered by senior secondary schools must be adaptive in order to accommodate the learning differences among students; gradually

implement 12-year Basic Education that is "exam-free admission and nearby enrollment" via the following three strategies: more senior secondary schools to be examination free, encouraging the implementation of exam-free admission in school districts or municipalities, counties (cities) and promote "Star Admission".

3 Improve Technological and Vocational Education and Ensure Smooth Connection between School Education and Work Practice

Establish an exchange platform and matching mechanism for local industry-academia cooperation centers to speed up the industrialization of development results of vocational and technological colleges and universities, cultivate talent that can apply what they study in schools, promote development of practical courses in schools and industry study and in-depth knowledge for teachers; implement smooth connection between school courses and work practice, encourage industry-academia cooperation to offer courses of practical or crucial competence, and plan the perfect mechanism for internship; shorten the learning gap among school students, encourage schools to readjust the needs of talent for future industry, adjust courses, review and improve the assessment system for schools, request schools to establish a specific mechanism for course planning, offer practical instruction and internships and allow students to apply what they learn at school in order to carry out the spirit of applying what you learn to your work.

4 Promote Innovative Higher Education and Create Its Values Locally. Guide Students to Dare to Think and Care for Society

Promote deregulation of higher educational system, establish university autonomy, boost students' competitiveness and strengthen accountability of schools; promote innovative higher education, suitability and fitness

to students, promote a regional innovative system that is university-centric, strengthen cooperation among public and private universities, universities and academia-industry, shape a "learning-centric" zone, establish a platform for academia-industry cooperation, social practices and international connections; promote an interdisciplinary talent cultivation measure that is school-centric; facilitate integration of regional resources, assist national schools that are geographically available and complement each other in terms of academic resources to draft a plan for merging in order to improve diversity in our students' education, the international competitiveness of our higher education and synergy in educational resources.

5 Cultivate Teachers to Respect Diverse Differences and Encourage Professional and Autonomous Development of Teachers

Implement instruction that focuses on student learning, so that "adaptive instruction (including group cooperation instruction, differentiated instruction)" is included in preservice teacher education; come up with reasonable numbers of teachers to balance the teaching load among teachers; encourage teachers to form professional learning clubs to head for the development that is professionally autonomous, teaching-practice related and learning-club oriented; actively establish a digital platform that provides learning; provide digital learning

courses for elementary and junior high school teachers and establish multiple channels and courses for further study for teachers.

6 Foster Students' Foresight for the Future

Train students to do independent thinking, practice what they learn, innovate and create and solve problems and make best use of the information and technologies available to them to solve problems, cooperate with others to innovate and create, communicate and express themselves and to do self-regulated learning; promote long-term aesthetic education, and improve students' aesthetic sense; assist students in exploring their aptitudes before and when they study in senior secondary schools; establish friendly and flexible channels for enrollment so that youths with work experience need not worry about not being able to continue their study once they choose to work first, offering an alternative path for youths to work first and study later.

7 Stabilize Quality of Teachers and Teaching in Remote Areas and Guarantee the Rights to Learn for Students in Remote Areas and Underprivileged Students

Continue to promote programs such as "Innovative Development Program for Rural Education" and "Stabilization Program for Education in Rural Schools," making stabilizing the quality of teachers and teaching in rural

areas top priorities as well as improving dormitories in rural schools; guarantee the right to learn for students in rural areas as well as underprivileged students. In addition to offering financial assistance, perfecting study coaching for underprivileged students will be promoted. At the meantime, guarantee students' opportunities to enroll and actively construct adaptive special education.

8 Create Diverse Learning Environment that Respects Diversities and Appropriates for Students with Different Needs

Respect multi-ethnicity, encourage native languages and transmission of culture, ensure sufficient learning resources for native language learning and education in elementary and junior high schools, establish a native language learning system of new immigrants to ensure students' right to learn any languages of new immigrants no matter at which educational level they are; strengthen education for indigenous people and children of new immigrants, help protect the education unique to indigenous people and the transmission of their culture and improve our indigenous students' learning efficiency; encourage diverse experimental education modes and offer assistance in improving teachers' professional proficiencies, support the sustainable development of experimental education and create a diverse learning environment.

9 Promote Youth Development that Explores Life and Takes Part in Public Affairs

Offering assistance to youths in their career development provides, youths opportunities for diverse work experiences, organize internships in the public sector, subsidize schools in organizing career development activities, establish an exchange platform so that learning resources may be shared by all users, inspire students to ponder diverse career paths; continue to encourage youths to participate in overseas activities to exchange experiences with foreign students as well as gain more experience, guide youths to serve society and promote youth travel; encourage youth to participate in public affairs, organize policy forums, R&D contests and organize campus seminars.

10 Perfect Lifelong Learning System and Construct a Robust Civil Society

Make the best use of resources of various social learning and lifelong learning institutes, offer assistance to institutes in offering various courses, strengthen diverse learning channels for civil knowledge and skills, work with both public and private sectors to organize services or learning activities for people in communities and develop a robust civil society; establish senior citizens learning centers and promote "Senior Citizens Learning Camp Program" to allow them to share learning resources; encourage social teaching organization to incorporate intelligent technology and innovate their services; establish comprehensive library services.

11 Prepare International Education that Aims for Macro-development

Promote cross-border cooperation with educational institutes in other countries to improve ROC's influence, establish communicative platforms with other countries, implement degree verification, promote visits and experience exchanges among teachers and students and industry-academia cooperation; continue to promote bilateral or multilateral educational forums, look for opportunities to cooperate with higher educational institutions in foreign countries; establish diverse student recruitment strategies and explore new possibilities for new students, offer more opportunities for international students to study, do research and internships in Taiwan; continue to encourage and subsidize schools in Taiwan to have industry-academia cooperation or cooperative education with foreign enterprises or schools in order to select and send Taiwanese students to work in foreign enterprises or study in foreign academic institutions.

12 Strengthen the Fitness of Our Citizens, Promote Regular Exercise for All and Improve Our Competitiveness in Sports Competitions

Promote regular exercise activities and fitness improving activities for all, include exercise time, sports skills and fitness in the targeted management for universal exercise, improve the fitness of our students in PE classes; combine exercise with health and leisure to form an industrial chain with enormous output value, increase the number of viewers watching various sports competitions; strengthen the training of our athletes, construct a perfect system to select potential athletes, train them, allow them to participate in competitions, offer them guidance in school work and employment as well as rewarding them for excellent performances; gradually build venues for international-scale sports competitions to promote sports and exercise development in different regions.

Compulsory Education

A General Information

The infrastructure of a country and the development of its economy are a function of the country's cultivation of manpower and talent. This requires long term, continued investment and needs to start from the very bottom. The government set the length of compulsory education at 9 years in SY1968, and further extended it to 12-year Basic Education in SY2014, which helped to nurture and develop the manpower needed for economic growth.

Ensuring that all toddlers receive proper preschool education is a major objective of our educational policy. Kindergartens are preschool institutions set up in accordance with relevant legislation for children aged 4 and above up until the eligible age for elementary school, and are supervised by education administrative authorities, whereas nurseries are welfare organizations set up in accord with Children and Youth Welfare Act that accept toddlers aged 2 to 6 and are supervised by social administrative authorities. The talks and negotiations for merging nurseries and kindergartens started in 1997, and culminated in the Early Childhood Education and Care Act passed on June 29, 2011, to be put in place beginning Jan 1, 2012.

B Preschool and Compulsory Education Structure

The Early Childhood Education and Care Act is a revolutionary move in our preschool system. After the bill was enacted on Jan 1, 2012, nurseries and kindergartens were redesignated "preschools", in which toddlers from the age of 2 onwards are given complete and thorough education and care in the preschool until they enter elementary school. This bill consolidated the education and care of toddlers under a single administrative system, putting into practice a toddler-centered strategy that focuses on the toddler's best interests. Taiwan is also the first country in Asia to consolidate the two systems.

According to statistics by UNESCO, there are over 40 countries in the world that have a basic education system that exceeds 10 years. The main reason for this is that many non-developed countries have noticed that basic education is directly connected to national competitiveness.

Put into practice in SY1968, Taiwan's 9-year Compulsory Education system is compulsory, free and obligatory. Legislation states that citizens from the age of 6 to 15 should receive compulsory education; which is divided into two stages – the first 6 years at the elementary school level, and the latter 3 in junior high school. However, this system has been in place for over 4 decades.

When first put in place, there were fewer than 10 countries worldwide with more than 9 years of compulsory education in place, making us one of the forerunners. Compared with developed countries, however, the number of years was not that high. To solve the current educational conundrum and enhance the development of national manpower, a 12-year Basic Education system was adopted in SY2014, a new landmark for our education system.

C Preschool and Compulsory Education Policies

Under Taiwan's educational setup, preschool education is not compulsory. The education and care of preschool-aged toddlers was originally provided by, respectively, kindergartens and nurseries, largely consisting of privately-established institutions. As the two systems were separate and had different supervisory administrative units, they evolved different set-up standards and have different regulations regarding personnel and curriculum. Thus toddlers of the same age often received inconsistent education and care at different institutions. Also, internationally, the trend of offering edu-care service has become a common scene. We thus started to promote the integration of early childhood education and care. The integration is aimed to be completed within 14 years.

To stimulate the development of junior high and elementary school education and improve its quality, and lay the groundwork for course planning, fundamental research in the development of elementary and junior high school curricula was carried out and added to the 12-year Basic Education policy strategic plan in 2012 to allow the National Academy for Educational Research to complete the Proposal for 12-Year Basic Education Curriculum Development and Guidance for 12-year Basic Education Curriculum Development to ensure consistency. In November, 2014, Curriculum Guidelines of 12-year Basic Education (General Curriculum Guidelines) were promulgated, and

curriculum guidelines for different subjects have been promulgated in phases since February, 2016 and starting in SY2018 in phases.

Social development has caused population to move into cities and industries and people to move out of rural areas, resulting in the withering of local industries, difficulties in making a living and grandparenting. In order for each and every child to have his / her chances to adaptive development , and embody the fair and just social values of education, MOE has promulgated respectively on April-28th, 2015 and October-2nd, 2015 the Innovative and Experimental Program for Rural Education and the Stabilizing Rural Education Program and included highlights for balancing urban and rural development into the 5-year-to Improve the 12-Year Basic Education Program in order to offer an enriching learning environment, stabilize teaching manpower as well as introducing outside resources to ensure the students' rights to learn in rural areas.

Another key strategy is the idea of social care and assisting in the education of children from economically disadvantaged families. Currently there are 3,440 schools participating in the Promoting School Education Savings Account project nationwide, which authorizes the schools to receive charitable donations. Many philanthropists in both business and society have been long term donors to children in the program, a testament to the generosity of the people of Taiwan.

Alternative Education Centers Individual Development

Waldorf Elementary School affiliated to Zen Mei Junior High School in Taoyuan that centers education on the individual development has seen its process over the decades.

Waldorf education is based on the educational philosophy of Rudolf Steiner, emphasizing the holistic development of pupils in the intellectual, practical, and artistic aspects. The major focus switches in different phase of development, according to director Chuang Wan-Ting.

From grade 1 to 8, the emphasis is emotional education as well as imagination and personality development of pupils. During the time span, activities related to stories, ballads, rhythm, painting, hand-made, and farming are introduced to complement main courses such as language, mathematics, nature, and society. Consequently, pupils are enabled to garner knowledge and capability closely related to life.

"And the artistic nature of the courses will lead to the balanced development of body, emotion, and thinking ability of pupils," said Chuang.

Specially-catered courses are sought to explore local environment and culture. For instance, 1st and 2nd graders are guided to stroll in the neighborhood, which allows them to observe the changes of environment along the fixed route twice a week. 3rd graders are given farming and architecture courses, while 4th graders explore community features. The 6th graders then push the border to the seashore lines of Taoyuan to learn more.

Waldorf education offers a freer curriculum design to echo the inner state of pupils instead of catching up regulated progress. Meanwhile, it weighs the cooperation among the parents, the teacher, and the pupil, in particular the family education, said Chuang.III

Houlong Diabolo Team Wows the Audience

The diabolo team from Miaoli's Houlong Elementary School won a convincing victory at Diabolo Malaysia Open Competition 2015.

Practice makes perfect and is the promising way leading to success. Their regular drills include basic movements, figure, steps, techniques, and group practice, according to Coach Fu, Shih-Ming.

Many would presume that mastering the techniques is the most difficult during training. But it is not the case. "When we seek advancement, the tough part is the pose and consistency of group movements," said Fu.

We went to school early in the morning last summer vacation and spent a lot of time practicing—leg lift and steps in particular, said team member Lee, Chih-En. But to give an excellent group performance, consistency matters. "So I think it's important that the whole team reaches sync in movement," said Lee.

Distinguished styles presented by international delegations were impressive, in particular, creativity, said Fu. Playing diabolo is not only about showing off techniques, but a combination of power and beauty, he said.

He especially appreciated Japanese team's easy and have-fun attitude, which had made the competition more like a game. "I was inspired to try to have breakthrough in moves and glad to see children trying to pursue innovative and advanced techniques after the contest," said Fu. And this is definitely a huge reward.

The attachment among team members and their family becomes the strongest support behind. More than ten parents of members flied together with the team to Malaysia to assist make-up, styling, and seized time to take photos as record, and eventually witnessed their victory.III

Senior Secondary Education

Senior secondary education is designed to cultivate physically and mentally sound citizens, laying the foundation for academic research and the acquisition of professional knowledge in later years. Senior secondary schools can be divided into "general senior secondary schools," "skill-based senior secondary schools," "comprehensive senior secondary schools," and "specialized senior secondary schools."
Students who graduate from junior high school or have an equivalent education level can gain admission to senior secondary school through methods such as exam-free entrance, specialty enrollment. 160 credits are required for graduation.

A Promote Advanced Science Education and Cultivation of Talent in the Science

1 Taiwan has achieved outstanding results in the international Mathematics and Science Olympiad. Domestic mathematics and science competitions are frequently held for senior secondary school students, and supports are continued to offer to junior high and elementary school education project in science, cultivation programs for senior secondary school scientific talents and domestic and international exhibitions to stimulate interest and learning in the sciences.

2 Key objectives for the year 2016:

i. Continue training students for the Math and Science Olympiads, and organize similar domestic competitions in mathematics and information technology for junior high school and senior secondary school students.

ii. Continue supporting secondary and elementary education projects in science and cultivation programs for scientific talent.

iii. Set up science programs in senior secondary schools and monitor the effectiveness of the programs.

iv. Set up the "2017 Classes Preparatoires aux Grandes Ecoles" selective exams.

B Bring Second Foreign Language Education into Practice and Improve Students' International Awareness:

1 The main goals of the fourth phase 5-year plan is to "Improve Second Foreign Language Education in Secondary Schools" include the following:

i. Encouraging schools to adopt the plan and offering them support.

ii. Strengthening the promotion mechanism for the second foreign language education system.

iii. Creating a second foreign language learning environment.

iv. Improving the teacher recruitment system.

2 In SY1999, a total of 22,623 high schools students enrolled in 648 second foreign language classes, a number which ballooned to 334,396 students with 115,464 classes by SY2014, which is 14.78 times the number in SY1999. In SY2014, eleven universities, colleges and junior colleges applied to offer 37 advanced placement foreign language classes for high school students.

3 Key points for the year 2014~2016:

Continue encouraging schools to teach more foreign languages and offer more foreign language classes in order to cultivate talent and increase international competiveness in the area of languages ; meanwhile, continuing to encourage universities to offer classes for second foreign language in order to cultivate more talents for second languages, and boosting Taiwan's international competitiveness.

C Practical Technical Program and Cooperative Education

Practical Technical Program

These programs impart practical skills to students who choose the technical arts curriculum in junior high school, providing them with the means to enter the job market and secure employment. Instruction is provided via day classes or evening classes, and students are eligible for graduation after completing 150 credits in 3 years.

Cooperative Education (Alternative Classes)

These classes were first implemented in 1969. Students study general subjects and theory at school while receiving hands-on training in the workplace. This approach was extremely popular in past decades. Now, in response to the changing environment, the Ministry of Education has published "Implementation Guidelines for Cooperative Education in Vocational High Schools," in 2004, changing the hour-based system into a credit-based system. Students can graduate after completing 150 credits in 3 years.

In order to enhance cooperative education and ensure the rights and privileges of students in the cooperative education programs, the Ministry of Education established "the Act of the Cooperative Education Implementation in Senior High Schools and the Protection of Student Participants' Right," which was approved, promulgated and enacted by the President on January 2, 2013 with Hua-Tsung (1)-Yi-Tzu No. 10100290761.

Steadily Promote 12-year Basic Education

A The Ministry of Education has long been planning for the launch of 12-year Basic Education, and since 2008 has been implementing the 12-year Basic Education Precursor Program.

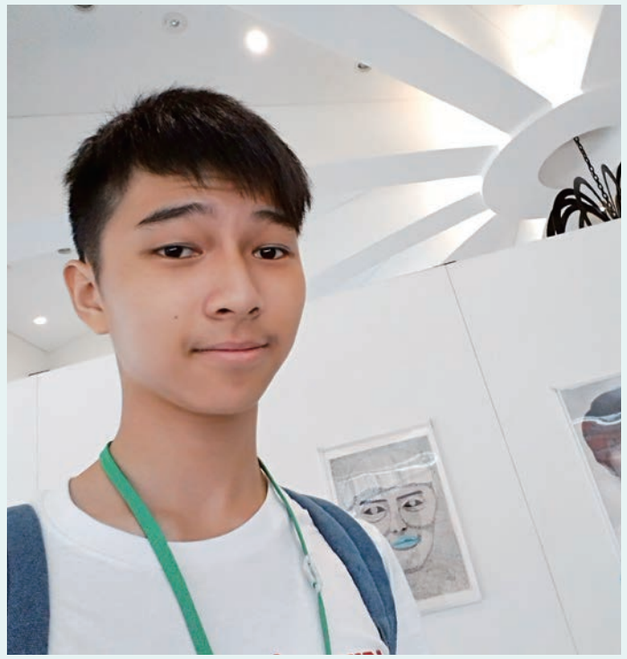
B To allow junior high school education to become more adaptive, creative, active, superior and quality-driven, and to enhance the quality of senior secondary education, President Ma Ying-jeou made the announcement during his New Year's speech for the ROC's Centennial Celebration of the initiation of 12-year Basic Education.

C Key objectives for the year 2015~2016:

Promote the "Implementation Plan for 12-year Basic Education" approved by the Executive Yuan and ensure that it is completely and effectively carried out. Additionally, the policies will be continuously discussed and improved.

Look in and out: Student's Self-portrait Won International Competition

Chen, Zhen-Xiang
Sophomore, Fu-Hsin Trade and Arts School



A self-portrait is a medium to reflect one's inner side. Chen, Zhen-Xiang, then a freshman at Fu-Hsin Trade and Arts School, further made it a bridge for him to see a broader world, as his self-portrait won him the Gold Prize at Art For Asia 2015.

Running into the fifth edition this year, the competition was founded by Kyoto University of Art and Design and Tohoku University of Art and Design. It recruits self-portrait created through means including sketch, painting, animation, and photograph.

The delineation and expression of Chen's winning sketch conveys a melancholy atmosphere, which he described it echoed his status of mind as being gloomy. "I would like to portray what's inside my heart, so I chose a picture that has strong contrast on light and shadow," he explained.

Winning the first prize upon his first-ever participation in the competition was out of doubt a huge surprise to Chen. "It's an awesome experience," he said. The international event also broadened his horizon by seeing other entries presented using varied skills and in different styles. Some of them impressed Chen and encouraged him to continue pursuing excellence.

"Without enough training, I'll not be able to fully convey my ideas, therefore I always wanted to learn more," said Chen. Not only international peers' works drove Chen to pursue advancement, he also recognized the great talents shown by friends and schoolmates. "It's a great joy to exchange ideas with them, and I wish one day I can equal them in terms of skills," said the diligent student.

Students Propose a Win-win Solution for a Better Future

Shen, Yu-Ru, Senior, National Pingtung Senior High School
He, Cheng-Han, Senior, National Pingtung Senior High School

Students from National Pingtung Senior High School striving to provide a win-win solution to economic development and environment protection won the top prize as a group at the 2015 Taiwan Geolympiad.

Under the instruction of Yuan, Lung-Mao, Shen, Yu-Ru and He, Cheng-Han focused their competition topic on the land utilization of Kenting National Park Recreation Zone 1. The site that slated for a hotel construction project happens to be where lodges land crabs of the most varied species in Taiwan.

Their studies covered land crabs' growth traits and distribution in Kenting area; the formation of their inhabitation in Houwan; geographically uniqueness; economic development of Houwan and other substitutional solutions. Under the circumstances, the team tried to bring forth the most feasible plans. One of which is to change Houwan inhabit into marine reserve.

Diligent preparation and careful data verification, and fully comprehension were considered by He as the key to excel other entries. Both of them agreed that what they learned during the research process weighed more than the award. "What's more is the continuous effort and the wish to do something for our motherland," said He.

Shen cited his favorite comic and saying that "the most important thing will show up sooner than your target during the pursuit." Seeing other excellent entries also inspired them to different research topic and approaches, said He. "This reminds me to inspect my research from a broader and various perspectives in the future," he said.

Yuan examined the current condition of geography education in Taiwan, and suggested a more balanced teaching resource distribution and a deeper and broader introduction in guiding students to the essence of the subject.

Higher Education

Taiwan enjoys excellent global competitiveness in spite of limited land and natural resources. According to the World Competitiveness Yearbook 2015 published by the International Institute for Management Development (IMD) in Switzerland, Taiwan ranked fifteenth overall in global competitiveness among 60 countries, and was notably outstanding in "Economic Performance" and "Business Efficiency."

One reason for Taiwan's economic prowess is its quality human resources, an accomplishment closely tied to the issue of higher education. In the Global Competitiveness Report published by World Economic Forum (WEF) published in 2015, Taiwan ranked fourteenth in "Higher Education and Training." Taiwan's human resources provide highly-qualified workers in sufficient supply to the labor market and bring positive benefits for industry innovation.

Universities, Colleges and Junior Colleges

Higher education institutions in Taiwan include 2-year junior colleges, 5-year junior colleges, and universities. Like most countries, the study period is 4 years for an undergraduate university degree, 1 to 4 years for a master degree, and 2 to 7 years for a doctoral degree.

The popularization of education has led to a rapid increase in universities, colleges and student enrollment numbers, although the figure has leveled off in recent decades. In SY2015, there are 158 universities, colleges and junior colleges, totaling 1,332,445 students.

Reforms in teacher training have played an important part in the expansion of higher education. Significant improvements in teacher quality can be attributed to policy adaptations and the newly implemented evaluation system. Currently, Ph.D. degree holders account for over 80% of faculty in universities, the figure having increased by 15% in the past 10 years. Professors account for one-third of all teaching personnel.

To maintain competitiveness, Taiwan's government has invested more than US$400 million in higher education annually in the last five years to encourage universities to enhance their standards for research and teaching, and the results have been remarkable.

Although Taiwan's higher education system has gained recognition for its achievements in many areas, tuition still remains very reasonable. Tuition is about NT$58,720 (US$1,924) dollars per year at public universities, and about NT$109,944 (US$3,552) dollars at private universities. College tuition stands at only 10~20% of the national per capita GDP, considerably lower than that of many other countries, which in some cases is over 30%.

The Ministry of Education and several universities have jointly established the Higher Education Evaluation and Accreditation Council of Taiwan in the year 2005 to conduct evaluations of universities. This evaluation of accreditation consists of Institutional Evaluation and Program Evaluation. The former is held every 6 years to examine whether schools have achieved their strategic goals, while the latter is also conducted once every 6 years to examine the quality of faculty, teaching, research, and service. The Ministry also encourages universities to obtain international certification. The Higher Education Evaluation and Accreditation Council of Taiwan, for example, is a member of several international organizations, such as the Asia-Pacific Quality Network (APQN) and the International Network for Quality Assurance Agencies in Higher Education (INQAAHE).

Another of Taiwan's significant achievements is in the area of "Innovation". In a report from the World Economic Forum (WEF), Taiwan ranked eleventh among 144 countries in innovation in 2015. While universities are pursuing for innovation, university students in Taiwan exhibit abundant creativity. To encourage students to unleash their creativity, the Ministry screens and selects outstanding students to study abroad under sponsorship by the government. In recent years, students from Taiwan have been making their mark in international design competitions such as Germany's iF Awards and Red Dot Award every year.

More Signs of Progress in Education

Everywhere around the world competition is getting fiercer and more talent is migrating across borders. How can Taiwan's higher education industry face up to these challenges so as to promote commercial innovation while strengthening Taiwan's international competitiveness?

Knowledge and innovation is the only way to increase global competitiveness. Countries the world over spare no effort in investing in the cultivation of innovation and talent by improving their higher education systems. Thus since 2006, the Ministry of Education has been promoting a plan called "Develop World-Class Universities and Research Centers." The program was renamed "Heading toward Top Universities" and has been in place since April 2011. After 7 years, we are now reaping the rewards:

A Taiwan is Reaching Out to the World

Looking at various international assessments, as of the end of 2015, 11 universities subsidized by this plan are ranked as top 500 universities in the world as well as the world's top 100 universities in the global university rankings (Quacquarelli Symonds, QS). In addition, seven schools are ranked among the 500 schools in Shanghai Jiao Tong University's Academic Ranking of World Universities in 2015 and their ranks improved year by year. This is a sign that the subsidized schools have inspired themselves to meet international benchmarks and rise up to international competition with the top schools in the world.

B The Quality of Students Continues to Improve

In terms of teaching, we see the light at the end of the tunnel for reform. Top universities in Taiwan have instigated reforms in their general education systems and interdisciplinary programs.

For example, National Taiwan University offers 183 open courses which have accumulated more than 10 million CTRs so far and are awarded The Outstanding Site Awards in 2014 and educator Award for Excellence in 2015 by Open Education consortium. National Sun Ya-Sen University has established "COllegiate Learning Outcomes Assessment "COLA" for long-term follow-up survey and has accumulated 7,582 person-times taking the survey so far, implementing a mechanism for guaranteeing students' learning results and quality as well as establishing a support system for students and teachers. In addition, the number of foreign teaching staff and researchers hired by top universities in Taiwan has increased from 339 in 2010 to 420 in 2015 for improving the overall teaching and research quality. As for shouldering its social responsibilities, top universities doing their parts by offering educational opportunities for disadvantaged students. Since 2011, the total number of students admitted through star admission is 12,842, making up more than 10% of the total numbers of students admitted via various channels.

C The University is Becoming a Place for Innovation in Business

Taiwan's innovative ability has been recognized in the World Competitiveness Yearbook published by IMD. In recent years, the number of patents and new breeds developed by Taiwanese universities has continued to grow and the income derived from intellectual property related products has increased significantly. The number of patents and new breeds developed has grown from 320 in 2005 to 1,581. As of the end of 2015, the expenses for industry-academia cooperation provided by non-governmental sectors have grown to 4.103 billion dollars, a proof that Taiwan universities promote industrial innovation and make contributions to the society through research and development.

D Campuses Play Host to the World

"Internationalization" is the key to global visibility. Whether the universities in a country are attractive to foreigners is also a criterion in evaluating national power. The number of teachers and students of top Taiwanese universities doing short-term research, participating in exchange-programs or studying double degrees have increased from 1,868 in 2010 to 6,216 in 2015. The number of foreign students studying in Taiwan or as exchange students in Taiwan has grown from 4,662 in 2005 to 18,118 in 2015. In addition, on average, almost 558 international conferences are held in top Taiwanese universities each year, thereby increase the international mobility of teachers and students, strengthen the international interaction of teachers and students while broadening the horizons of Taiwanese students.

Vocational and Technological Colleges and Universities

1 School System

The higher technical and vocational education in Taiwan is divided into 2 levels: junior colleges, technical colleges and universities of science and technology.

1 Junior colleges

Junior colleges are established according to Junior College Act and are divided into 2-year program (2-year colleges) and 5 year-program (5-year colleges). Students take 5-year program must complete 220 credits and those take 2-year program must complete 80 credits in order to graduate and receive an associate degree.

2 Technical colleges and universities of science and technology

Technical colleges and universities of science and technology are established according to the "University Act" for nurturing highly-specialized professionals and vocational ones. Technical colleges and universities of science and technology may have associate-degree programs, bachelor programs, master degree programs and doctoral degree programs. Students take 4-year program need to complete 128 credits, and those take 2-year program need to complete 72 credits in order to graduate. Students take master degree program need to complete 24 credits and finish their thesis and students take doctoral degree program need to complete 18 credits and finish their doctoral thesis in order to graduate.

2 Characteristics of Technological and Vocational Education

1. A comprehensive system.
2. Private schools offer excellent courses actively .
3. Multiple school systems and subjectsfor adaptive development.
4. Great Accomplishments brought by industry-academia cooperative projects.
5. Offer effective and practical teaching.
6. Fruitful results achieved in international competitions.

3 Key Points for Development of Technological and Vocationa Education

1 Take great care of disadvantaged students: 1. first 3 year free school tuition for 5-year junior college program; 2. sponsorship program for disadvantaged universities, colleges and junior colleges students; 3. other sponsorship measures.

2 Implementation of Multichannel Admission

1/ Amount control: it's for emphasizing equally on the national's overall development, features of local industries and development of vocational and technological colleges and universities; in the future, total amount will be adjusted according to the demands of manpower from industries and the overall development of our nation.

2/ Separation of examination and enrollment system: the school system and subjects of vocational and technological colleges and universities are diverse, therefore, a separation of examination and enrollment system is applied in order to integrate various admission methods, simplify the procedure of enrollment and upgrade the quality of examination.

3/ Multiple admission program

1 5-year junior college: 5-year junior college admits mostly junior high school graduates and its ways of entrance include exam-free admission and special enrollment.

2 4-year technical college & 2-year junior college.

- (A) Admission not through paper examinations.
- (A) Value students' performances in competitions as well as their abilities to obtain credentials – "special achievement-based admission" (incorporated into elite class of vocational high school).
- (B) In order to balance the gap between urban and rural areas, and take care of disadvantaged students in rural areas – "Vocational Star Admission."

Ⓑ Admission that requires paper examination.

Ⓐ "Recommendation and screening-based admission" is to highlight the spirit of being practical and usable emphasized by technological and vocational education, plus, this method requires the students' scores in joint entrance examination, students' certificates of merits, and their performances in competitions.

Ⓑ To select and fill in the priority departments in universities with the joint entrance examination scores for "application-based admission" and individual recruitment by schools.

3 2-year technical college: 2-year technical colleges admit 2-year and 5-year junior college graduates. Channels for admission include day school nursing department: its admission is based on joint entrance examination scores.

3 To actively enhance teaching quality: 1. to upgrade the teaching quality of junior college; 2. to implement the Teaching Excellence Project for encouraging universities of science and technology and technical colleges; 3. to enhance teachers' skills in teaching practice in vocational and technological colleges and universities; 4. to introduce resources offered by industries to vocational and technological colleges and universities to assist in teaching; 5. to encourage students to participate in various competitions; 6. to implement certification system.

4 To promote vocational and technological colleges and universities evaluation: for upgrading the quality of vocational and technological colleges and universities. The evaluation is based on "school as a whole", and the evaluation for general school affairs and various departments is done together.

5 To nurture talents through industry-academia cooperation: 1. industry-academia class: through the interaction between industry and academia, the following two classes nurture talents demanded by industry through such cooperation: (1) industry-academia cooperation class; (2) industry master program 2. off-campus internships; 3. the 2nd bachelor program for people who already obtained their first bachelor's degree; 4. industry schools.

6 To value the innovative industry-academia research and development:
1. comprehensive industry-academia law; 2. to establish local industry-academia cooperation centers; 3. to promote industry-academia cooperation in industry zone program.

7 To develop exemplary university of science and technology: to clearly define that higher technical and vocational education focuses on talent nourishment and innovative research and development of industry-academia cooperation, emphasizing the research and development by the cooperation of industry-university of science and technology, laying foundation for basic skills, and capabilities to add values to patented technology transfer. Meanwhile, promoting practice teaching in order to achieve the goals of improving students' practical skills and competitiveness which are vital in facilitating the reform of technical and vocational system as well as guiding vocational and technological colleges and universities to rediscover their features as technical and vocational education.

8 To recreate technical and vocational schools by linking with industries: The Phase 2 of the Technological and Vocational Education Reform Plan (2013-2017) is implemented with the following 9 strategies from 3 aspects: 1.system adjustment (integrating policies, department adjustment, talent selecting through practice), 2.course revitalization (flexible courses, renewed facilities, practical curriculum development), 3.promoting employment (employment right after graduation, innovation and entrepreneurship, certificate and ability attained).

9 Initiate international cooperation and exchange: 1. facilitating international cooperation and improving students' foreign language proficiency; 2. recruiting foreign students.

4 The Vision for Vocational Education

1 Implementation of the 12-year Basic Education: According to the regulations of the Senior High School Education Act, the 12-year Basic Education was officially implemented in SY2014. The free school tuition policy for vocational school students (including the first-3-year of the 5-year junior college program), starting from first graders, will be implemented in phases.

2 To popularize and deep root holistic education: encouraging vocational and technological colleges and universities to integrate their general education curricula and professional curricula, having programs and disciplines that are trans-disciplinary and interdisciplinary and offering channels for communication between general education and professional subjects in order for teachers to deepen the concepts and design of general education curricula and their teaching strategies.

3 To enhance the teaching quality of vocational and technological colleges and universities: to implement "Teaching Excellence Project for Encouraging universities of Science and Technology and Technical Colleges" and "Program for Subsidizing Colleges to Improve the Overall Teaching Quality" in order to assist vocational and technological colleges and

universities in developing a comprehensive management mechanism, action plans to ensure their teaching quality, and to nurture professional talents that are good at both theories and practice.

4 Let the evaluation system guide the development of vocational and technological colleges and universities: evaluation system of technical colleges and universities is changed from letter grading system to accreditation and from criterion-reference to self-reference to allow schools to develop their distinctive features and return to the goal that the evaluation system is for self-improvement.

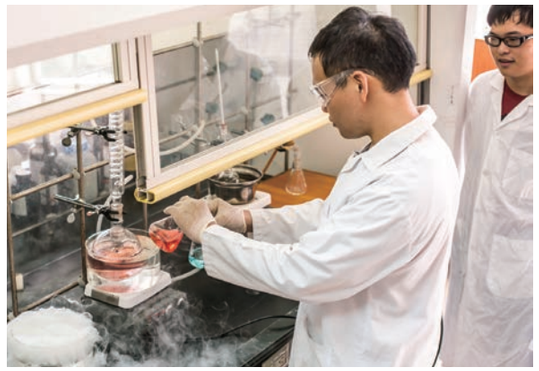
5 To nurture practical and usable professionals: to plan for more innovative practice for vocational and technological colleges and universities and cultivate teachers' professional practical skills, guide school return to policy for practical and usable, spread talent cultivate model of industry-academia cooperation to enhance students' competitiveness in the job market.

6 To construct a heavyweight town of higher education in Eastern Asia: subsiding vocational and technological colleges and universities in organizing international cooperation to enhance students' foreign language proficiency as well as encouraging these schools to have classes especially for foreign students for exporting our quality higher education.

7 To actively promote cross-strait academic exchange: to gradually promote cross-strait academic exchange. In addition to promoting the recognition for Mainland China academic credentials and allowing Mainland China students to study in Taiwan, it is also important to improve the quality of cross-strait seminars, visits and learning experience exchange between teachers and students based on the current cross-strait academic exchange as well as allowing vocational school graduates from Mainland China to apply for studying two-year junior colleges in Taiwan to facilitate cross-strait cultural and educational exchange and promote amicable interaction between both parties.

8 To encourage recurrent education: to encourage vocational and technological colleges and universities to offer recurrent education classes for non-students, providing learning channels for on-the-job training.

9 To shoulder the responsibilities of serving the society: the features of technological and vocational education lie in the fact that they are closely connected to industrial practice. By promoting "Developing Technological University Paradigms", expansion of industrial talents and skill-consulting mechanism are continued to be developed. Meanwhile, schools are encouraged to develop their own features, hire professionals specialized in intellectual property to make relevant plans and promote the results so that the promotion on school intellectual-property-related products is enhanced qualitatively, not quantitatively to further establish an atmosphere of research and development that emphasize on technology shift.



Quench your Thirst: A Drink Refilling Device Won i-ENVEX 2016

Wu, Chen-Fong, Junior, Department of Digital Technology Design, Asia-Pacific Institute of Creativity
Shiao, Chi-Lin, Sophomore, Department of Digital Technology Design, Asia-Pacific Institute of Creativity
Huang Zheng-Xian, Freshman, Department of Digital Technology Design, Asia-Pacific Institute of Creativity
Liu, Chieh-Wen, Consultant for Invention Patent

Thirst being quenched is one of the most satisfying experiences in one's life. The need that can be appeased through remote control is even super. Taiwan delegation from Asia-Pacific Institute of Creativity won a top prize at the International Engineering Invention & Innovation Exhibition (i-ENVEX) 2016 held in Malaysia with just such a device.

Titled Smart Automatic Drink Refilling Device, it's the outcome of solving the interruptive refills of drinks during meetings. The innovation incorporates the school's feature of promoting tea and pottery art, said Department Chair Yeh, Lu-Tsou. "We took the advantage to be among the first to apply robot technology in the daily life activity: drinking, which makes it more fun," added Yeh.

The 10cm-diameter circle-shaped invention is designed to load up to three kilograms of drinks that can serve six people. With the aid of micro controller and RFID locating technique, it tours along the magnet route on the conference table to where signals emit to fulfill its task. Its interactive nature attracted many visitors to stop by and inquiry during the exhibition.

The winning device has also undergone minute and complicated invention process during which signal disconnection and control failure occurred. Participating students Wu Chen-Fong, Shiao Chi-Lin, and Huang Zheng-Xian, nevertheless, countered all difficulty under the guidance. "We always wanted to apply what we have learned into real life and found great joy innovating" they said.

Nurturing the business potential, the Technology Transfer Center under the Industrial Technology Research Institute has reached the team to discuss the possibility of commercialized the product, according to Yeh.

Less is More: National Central University Won "2016 Asia BRICOM"

Lin, Guan-Hong, Junior, Department of Civil Engineering, National Central University
Lee, Yu-Che, Junior, Department of Civil Engineering, National Central University
Hong, Wun-Saio, Junior, Department of Civil Engineering, National Central University
Qiu, Ji-Zheng, Junior, Department of Civil Engineering, National Central University
Wan, Hung-Hsien, Junior, Department of Civil Engineering, National Central University
Chen, Sih-En, Junior, Department of Civil Engineering, National Central University
Cheng, Hai-Ning, Junior, Department of Civil Engineering, National Central University

A team from National Central University grabbed the overall championship in "2016 Asia BRICOM" in Japan. The team also snatched the top prize of categories "Structural Cost", "Presentation" and "Prediction of Deflection".

The winning design is aimed to achieve the desired deflection with the simplest structure, and therefore yield the best efficiency upon loading. Eventually, the 4 meters long and 1.7kg bridge won them the gold.

In deciding the theme, team leader Lin Guan-Hong pinpointed Taiwan. The bridge structure implies the island's circuit railway, which symbolizes the continuous development of Taiwan. The red, white, and black colors intertwine upon the bridge relate to the internationally renowned Alishan Forest Railway. "We integrate Taiwan's history and features with the iron bridge aesthetics, which is expected to increase the world's understanding toward our country," said Lin.

Other entries also inspired the NCU team. Aesthetically speaking, the humpback bridge stands with smooth radian, decorated with dominant gold color with black symbolizing the Thai royalty, by the Thailand representatives, was pretty outstanding among all entries, said the NCU team.

Participating in the competition allowed us to associate with international peers from different countries and cultures; experienced what is not available in class; and refine the skills of teamwork, self-learning, and accumulate practical experiences. The NCU representatives will not stop with the victory, and are resolute to lay a much more solid foundation of knowledge applied in practices.

Lifelong Education

A Subsidize Community Colleges and Offer Guidance for it to Flourish

In order to raise civic awareness of people, to care for major social issues and encourage the public to take part in community education, subsidies and guidance were offered to 78 community colleges in 2013, 80 community colleges in 2014 and 79 community colleges in 2015 to popularize lifelong learning. In the future, local colleges will be encouraged to offer local culture courses and develop areas of specialization. Meanwhile the Ministry of Education will facilitate the certification of informal courses, help to raise quality of instruction, and work to improve community learning institutions and increase the level of community participation, thus revitalizing community learning power and stimulating community growth.

B " The Learning City Project"

To promote lifelong learning, establish a lifelong learning system, integrate all lifelong learning resources and raise people's consciousness to learn, transforming cities to a lifelong learning environment where there are various channels for people to participate and make their skills best used, realizing the vision that everyone learning anytime and anyplace is attainable, 7 cities and counties were subsidized to organize learning city project in 2014. Through the courses of community culture, ecological and leisure and the upgrade of local industries, current available learning space is thus revived, offering the public with participatory and learning channels for lifelong learning and the means to contribute what they have learned through revitalizing existing space.

C Multi-functional Lifelong Learning Center

To promote the effective use of supplementary elementary school and junior high school facilities and give community elementary schools and their supplementary school education programs a role to play in the promotion of lifelong learning, 28 elementary and junior high schools were chosen in 2014 to be the sites of lifelong learning community centers; 33 community centers in elementary and junior high schools were visited and subsidized in 2015 to assist in their growth and sustainability and offer a learning platform for community members.

D Promotion of Open University Education

Taiwan has two Open Universities, the National Open University and the Open University of Kaohsiung. The cumulative number of students has exceeded 400,000, with the average enrollment per semester at 18,000. The universities have produced over 50,000 graduates so far. Open Universities do not require entrance exams and have no set time limits for completion of coursework. Students who fulfill 128 credits will be awarded a bachelor's degree, while 80 credits will earn the student an associate degree.

E Promotion of Certification for Non-orthodox Learning, Linking Formal and Informal Learning

The Ministry of Education has long encouraged people to engage in lifelong learning and is dedicated to acknowledging accomplishments in personal learning as part of its drive to link formal and informal learning. In November 2006, the Ministry initiated a certification system for courses taken via informal education and achievements obtained through non-orthodox learning, and modified methods of certification for non-orthodox learning achievements, in the process encouraging lifelong learning institutions to establish systematic curricula so as to foster professional skills among the general public.

F Oversight of Short-term Cram School

The number of short-term cram schools stood at 18,687 as of Dec. 2015. Annual subsidies and rewards are provided for local authorities to conduct inspection and training to allow the public to inquire about information related to cram schools and ensure public safety at these facilities. A "Municipal, Counties and Cities Cram-School Information System" database is now being set up to allow the public to look up relevant information.

G Advocate Family Values and Promote Family Education

Social trends such as population aging, low birth rate, globalization and informatization have a major impact on family structure and values. As a result, social phenomenon such as not getting married, married late, divorces, not having babies or infertility bring out the importance to strengthen family functions and revive family values. To promote family values, and family education, the Ministry of Education has established the Mid-Range Plan for Promoting Family Education (2013 to 2017) and Integration Plan for School and Family Education for Primary Education and Preschools by MOE (2013 to 2017) based on Family Education Act as the blueprint. The regulations are intended to connect central and local departments in promotional efforts. In addition, the Ministry established various promotional programs for family education and integrate key holidays such as Grandparents Day, International Day of Families and Family Value Month with promotion events, school and community special family education activities to advocate and bring more awareness to family values.

H Promotion of Elderly Education and Build a Comprehensive Senior Citizens System

With advances in medical science leading to greater longevity for the nation as a whole, the aging of society is an inevitable part of the future. 9 years from now (2025), the elderly are expected to constitute 20.1% of the total population in Taiwan. To improve the adaptability of citizens in both family and social spheres after retirement, to slow the speed of aging of the population, since 2008 the Ministry of Education has set up "Senior Citizens' Active Learning Centers" with courses appropriate for seniors. As of 2015, a total of 313 Senior Citizen Active Learning Centers have been established. The Ministry has also pioneered "Senior Citizens' Active Lifelong Learning Universities". These centers utilize the personnel and facilities of existing higher learning institutions and are aimed at citizens aged 55 and older. In 2015, 103 senior citizens' active lifelong learning universities were established to increase the opportunities for the elderly to participate in society and lifelong learning, and offer them local learning opportunities.

I Promote Across Boundary Value-added Development Plan, Shape the Cross Boundary Experience and Create a Space to Practice Lifelong Learning

Provide assistance and execute "the value-added development plan for cross boundary and lifelong learning by the National Social Education system". The plan will integrate 7 social education institutions under the Ministry of Education through the creative design facilities and incorporating digital resources. The plan will further integrate the locals, civilians, business sectors and interlibrary cooperation, so the values of the social education institutions and the surrounding sites of the targets will increases, values to their creativity and boost the local culture tourism

J Raising Educational Awareness and Collaborating with Non-profits

In order to effectively integrate education foundation resources and achieve sustainability in non-profit organizations, the Ministry started promoting educational foundations as part of the lifelong learning project in 1999. The Ministry put many efforts in expanding all types of education discussion topics, increasing more lifelong learning opportunities, to include core educational issues in the previously mentioned implementation project to maximize the effectiveness of the strategy alliance of the education and charity fund. In 2011 this effort was transformed into a lifelong learning education foundation. In 2015, there were 6 major topics, 7 learning circles, and executed 120 activities.

K Promoting Reading and Improving the Quality of Libraries

To improve the quality of service at libraries, the Ministry of Education has secured funding from the Executive Yuan to launch the "Reading Promotion and Space Transformation: Library Service Renewal Development Project 2013-2016" to assist both national and public libraries established by local municipal, county and city governments in improving the reading environment and upgrading collections and facilities, as well as promoting reading activities. The project also aims to promote the integration of library resources and enhance library hardware and services.

L Establish Native Language Learning, and Promote Taiwan's Native Language

To promote the native language skills for the people of Taiwan and to encourage balanced development and environment for learning native languages, the Ministry continues to promote and support native language learning. The Ministry will continue to maintain the electronic dictionary for native languages, conduct certification programs for Taiwanese, establish learning resources, promote Taiwan Mother Language Day and establish an ideal environment for learning native languages in order to maintain the functionality of native languages. The Ministry will also conduct literary contests for native languages to speed up the revitalization and growth of the culture of multiple languages.

Special Education

Special Education represents the refinement of the general education. It enforces that education provides good guidance to every student and executes adaptive education and protects every student's right to a proper education. The special education gives both gifted and disabled students the best future development; they will be independent and thus serve the society. Our nation's special education emphasizes on both quality and quantity in education, and protecting these students' rights to a proper education. The Golden Decade report published in 2011 laid out the plans to refine the education of both gifted and disabled students, which not only improves the quality of special education and it also serves as the blueprints of the development of the special education system.

Besides modifying the Special Education Act and its branch laws due to the change in environment and education needs, the enhancement of the special education should be done through actively upgrading teachers' knowledge, promoting the new curriculum, rising the results of special education, establishing an online support system for the administration of the special education, improving the services and training of the professional team, advancing the accessible environment of the campus, creating a friendly campus, increasing the parents' participation, and integrating resources from the communities. Improvement in the understanding and consideration of the society towards the disabled students shall enforce the human rights of persons with disabilities and their basic rights to freedom.

The budget for special education has increased from NT$5.579 billion in 2001 to NT$9.903 billion in 2015. The percentage of the total education budget allotted to special education rose from 3.72% to 4.56%; there is a huge increase in students of special education in various levels. The number of disabled students in preschool rises from 3,689 in 2001 to 15,559 in 2015. The number of disabled students in primary school rises from 35,721 in 2001 to 42,022 in 2015. The number of disabled students in junior high school rises from 20,993 in 2001 to 28,228 in 2015. The number of disabled students in senior and vocational high school rises from 6,952 in 2001 to 23,577 in 2015. The number of disabled students in higher education rises from 2,961 in 2001 to 12,376 in 2015. There are 25,746 gifted students in 2015.

For the Golden Decades, the Key Goals in the Special Education Policies Include:

1. Completion of legislation for special education; establishment of guidelines for special education policy.
2. Strengthening of multiple-route placement system for students with special needs; promotion of inclusive education.
3. Enhancement of quality and quantity of special education classes.
4. Increase in availability of preschool special education; emphasis on early intervention for children.
5. Improvements in primary and secondary school special education; providing more flexible alternatives.
6. More opportunities for students to receive tertiary education; making available more special education classroom resources.
7. Encouragement and subsidies for schools that help students with special needs complete full education.
8. Adjustment of teaching methods in special education curricula and training of special education teachers.
9. Establishment of least restrictive environments and support programs on campus.
10. Promotion of multiple education alternatives for gifted students so as to fully develop their talents.
11. Digitization of special education administration and establishment of administrative support networks.[iii]

Sports Affairs

A Overview

On January 1, 2013, Sports Administration of the Ministry of Education inaugurated and made a new start with integration of sports resources and affairs in schools and society. The Sports Policy White Paper was issued in June 2013. The action plan for the White Paper was completed in September and published in December. The White Paper sets out the vision of Healthy Citizens, Athletic Excellence and Vitality in Taiwan with the core philosophy of Quality Sports Culture, Outstanding Athletic Performance and Prosperous Sports Industries as guidelines for sports development in Taiwan. In the next decade, the proposals in the action plan will be gradually put into practice to generate pleasant sports experience, cultivate healthy, outstanding athletes and move the entire nation toward a better sports environment.

B Key Policies and Achievements

1 Popularize and Diversify National Sport

i. Promote “Taiwan i Sport Program”, implement“ Deep-rooting Sport Culture Program”, ”Expansion of Sports Knowledge Program”, “ Spread Seeds of Exercise Program” and “ Sports City Program”. MOE works with city and county governments to realize the vision of the Sports Policy White Paper “sports improve your health and quality of life“.

ii. Improve students’ physical fitness and promote12-year Basic Education – Fitness Examination Establishment Plan , all cities and counties are subsidized to establish 41 Fitness Examination Stations in SY2015.

iii. Promote corporate and women sports programs and encourage employees and women to exercise and participate in sports activities, helping them cultivate regular exercise habits.

iv. Care for seniors’ health, extend the age limit for physical fitness exam and encourage seniors to participate in outdoor activities and develop the habit of exercise.

v. Continue to promote exercise programs for the disabled and in 55 indigenous villages and take care of the disadvantaged and their rights.

vi. Fully implement sports education for indigenous students: Reinforce athletes' health and stress management ability through education on medicine, sports injury, nutrition and drugs. Monitor the changes that take place in athletes' body shapes through sports science. Establish a database on indigenous athletes' physical and psychological condition as a foundation for awareness of their physical characteristics and sports potential.

vii. Continue to promote further studying and evaluation system of sports and leisure professionals to deep root the human resources for national sport.

2 Obtain Better Results in International Competition

i. Prepare for the 2016 Summer Olympics, Rio de Janeiro: There are three stages in the athletes' training and preparation for the 2016 Rio Olympics Plan. The government will assist the athletes to train, provide medical team and support the delivery of the equipment.

ii. Continue with the Comprehensive Plan for Baseball Revitalization and submit Baseball Strengthening Program to the Executive Yuan. The program period is from 2014 to 2017 and the goal is to increase grade 4 baseball teams to 900, raise the percentage for female participation in baseball yearly and reach the top three spots in the international baseball community.

iii. Reform the training system for competing athletes: Reestablish the support system for sports training, integrate school sports and competing sports and strengthen the athlete selection and cultivation mechanism. Choose athletes that are appropriate for international competitions through a systematic training system. In addition to supporting athletes with training and award mechanisms through selection, training, competition, counseling and reward, the functions of the National Sports Training Center will also be strengthened to improve international competitiveness.

iv. Establish a sound full-time sports coach system: Supervise local governments to comply with the National Sports Act and hire more full-time sports coaches for sports classes. Continue to conduct improvement training for full-time sports coaches and establish a system for coaches on tour. Conduct regular visits to check the services of full-time sports coaches, emphasize the transportation of talent and continuous training results.

v. Establish a sports injury prevention system: Sports Administration of the Ministry of Education is promoting the Subsidy Program for Touring Sports Injury Prevention Specialists at All Levels of Schools. 45 sports injury prevention specialists are programmed for 44 schools. The implementation focuses on three strategies, including sports protection and management, establishment of a regional medical service network as well as visits for sports science and guidance in health education as references for evaluating future regional and national expansions and executes the care which the entry level athletes are entitled to.

vi. Prepare for the 2017 Universiade in Taipei: Established the Plan of Athlete's Training and Preparation for the 2017 Universiade in Taipei, which integrated the training resources of Olympics and ensured the consistency in the training system to achieve the best performances possible in the competition.

3 Develop the Sports Industries

i. Continue to implement the stipulations and support measures for Sports Industry Development Regulation to build an environment that is friendly to the development of the sports industry in Taiwan.

ii. Actively promote rewarding measures of financial assistance, collaboration between industry and academia, research and development as well as innovative service and increase expenditure on sports consumption to promote the development of sports industries.

iii. Actively implement the Promotional Program for Corporate Sports Sponsorship to encourage the infusion of private resources into sports development.

4 Actively Promote International and Cross-Strait Sports Events

i. Continue to guide and promote sports organizations in Taiwan to hold international tournaments: Promote international exchange in sports; strengthen communication with international sports organizations; host international sports competition and conferences; cultivate talent in international sports affairs, actively obtain key positions in international organizations; guide sports organizations in Taiwan to hold international tournaments and competitions to fulfill our duty as a member country, increase Taiwan's strength in sports, improve our national reputation and expand the extension and depth of international exchange on sports.

ii. Actively prepare for the 2017 Universiade in Taipei and 2019 East Asian Youth Games in Taichung: Assist with the operation of the Department of Sports, Taipei City Government, and offer guidance to establish the" 2017 Universiade in Taipei Preparation Plan", which was approved in principle from the Executive Yuan on Oct 25, 2013 and fight for more budget planning. Additionally, the government will determine which sports categories have higher possibility to win the medals, and help the operation of program preparation, facilities arrangements and athlete training. Assist the Taichung City to win the race to host 2019 East Asian Youth Games. A preparation committee was established in June, 2015. Two meetings

were held since then to formulate a preparation plan and calculate the budget of the event.

iii Train recruits with expertise in international sports affairs: Continue to conduct training for international affairs specialists and establish a databank to cultivate trainees with the abilities to assist sports associations to conduct international exchanges abroad and provide potential recruits for the preparation of the 2017 Universiade in Taipei and 2019 East Asian Youth Games in Taichung.

iv Establish harmonious, equal and reciprocal cross-strait exchanges in sports: Conduct cross-strait exchanges and visits for sports professionals based on the principles of equality and dignity, facilitating mutual understanding. Conduct cross-strait discussions between the two Olympic Committees to optimize the communication platform for Senior Secondary School Sports Foundation and University, College and junior college Sports Foundation to establish mechanisms for good communication and harmonious and reciprocal cross-strait exchanges in sports.

5 Build a Quality Sports Environment for the Public

i Enhance public sports facilities at all levels. It is anticipated that 32 civil sports centers and 430 sports facilities of all types will be built between 2010 and 2017 to provide a friendly, high-quality sports environment for the public. There were 10 civil sports centers built at the end of 2015 and it is expected to build 6 more sports centers by the end of 2016. In additions, it is confirmed to subsidize the total of 448 cases of various sports facilities and renovation; this includes 53 parks, 61 swimming pools, 67 softball fields, 53 basketball courts, 14 gate ball fields and 200 other cases. The Ministry wants to promote a healthy sporty lifestyle and provide the citizens with excellent exercising environments. Furthermore, the Ministry will continue to supervise the municipal city and county (city) governments to manage and monitor the operation of these facilities as well as listing and managing public sports facilities that may potentially be idle. In addition, experts and scholars are invited to conduct visits to understand the operation of subsidized sports facilities to encourage local governments to maximize the efficiency of facility operation.

ii Establish the bike path network: NT$1.2billion will be appropriated to establish 470 km of bike path between 2013 and 2016. The Ministry will form an interdisciplinary collaboration platform with the Ministry of the Interior, the Ministry of Transportation and Communications and other departments to integrate resources for the bike path program and promote the establishment of a bike path network in order to increase the effectiveness of the program. The construction of Cycling Route No. 1 was completed by the end of 2015.

iii Conduct a comprehensive plan for establishing a national sports park: Continue the renovation of National Sports Training Center and training bases to support athletes in order for them to achieve excellently in competitions. To plan and build a comprehensive environment so that National Sports Training Center becomes a place that offers facilities for professional sports training that improve scientific physicality of athletes as well as their performances. In addition to that, such advantages will help strengthen Taiwan's abilities to host international sports competition and our competitiveness in sports in the international society.III

Youth Development Affairs

A Youth Career Counseling

1 Research and Formulate Youth Development Policy Guidelines

Continue to revise Youth Development Policy Guidelines as the blueprint for realizing the vision of youth development. Conduct preliminary studies of the youth development index to gather information and to assist the formulation of suitable youth development index.

2 Promote Career Development for Students of University, College and Junior College

To assist university, college and junior college students make good career development, MOE promotes the Program for Promote Youth Student Career Counseling by subsiding schools in course-oriented and activity-oriented plans. Moreover, MOE guides teachers to establish career counseling or incorporate such counseling into professional courses in school, helps integrate schools' resources to organize career counseling activities to execute the promotion of career counseling.

3 Explore and Experience Diverse Career Fields

Expand opportunities for exposure to diverse career fields, including the public sector, private sector and others, with improving youth employment as the core value. Provide students the opportunity to experience careers through work-study and internship. The information should be integrated and posted on the website of RICH to help youths to experience work fields as early as possible in their academic careers and to develop professional skills and a proper work attitude.

4 Cultivate Innovation and Creativity in Youth

The Intelligent Ironman Creativity Contest was held to help develop youth into pioneers of innovation and reform who will lead the country into infinite possibilities. The contest hones the intellectual and creative abilities of senior high and vocational high school students in multiple fields. Promote Taiwan International Student Design Competition. The competition and exhibition will encourage Taiwanese students to expand their design energy and connect with international design education.

Conduct the U-start program to connect industry and academia and create innovative and entrepreneurial spirits in universities, colleges and junior colleges. The purpose is to allow students to apply what they study and effectively improve our human resources.

B Youth Public Participation

1 Promote Youth Social Participation

Cultivate youths' ability to participate in public affairs, provide youth with multiple channels and opportunities for public participation, encourage youths to explore the entire country, develop their sense of responsibility toward and recognition of their native land, transform youths' perspective, thoughts and passion into action and expand the influence of their actions.

i Action program to promote youth community involvement: The Ministry shall subsidize youth group action programs with various characteristics and encourage youth groups to form alliances with the NPOs. They are also encouraged to develop proposals that combine local needs with local characteristics. The five program categories include local industries, community construction, environment and habitat, cultural creativity and care for the disadvantaged.

ii Campus forums: Great role models of youths and experts are invited to share their experience in social participation and public affairs with youths in universities, colleges and junior colleges and senior secondary schools to encourage youths to devote themselves to public affairs by face to face talk.

iii Work with Taiwan Youth Foundation to promote youth development: Establish an exchange platform for Youth Development Administration and Taiwan Youth Foundation to enhance collaboration and horizontal dialogue system. There has been many seminars and conferences held for Taiwan Youth Foundation to share their valuable experiences and provide youth diverse opportunities and channels to be involved in the communities. In turns, it expands the efficacy of the horizontal dialogue between the organizations.

2 Promote Youth Involvement in Policies

Actively construct platforms that will promote dialogues or recommendations for youth involvement in policies. Promote the Youth Policy Union program and conduct training for the master of ceremony for youth policy forums, establish a Youth Advisory Committee, promote and guide the student unions in universities, colleges and junior colleges to increase the opportunities for youth involvement in policy-making.

i Conduct the Youth Policy Union program: Conduct Youth Policy Forum, Youth Group Policy Development Competition, and Youth Creativity Action Program to encourage social participation among the youth with their own actions to increase their civic awareness.

ii Establish a youth advisory committee: Conduct discussions on issues that youths are concerned about and collect comments and approaches to provide specific policy recommendations as a way to bridge communications between the government and youth.

iii Assist the development of student unions in universities, colleges and junior colleges: Conduct various seminars, training, competitions and observations among student unions to improve the students' understanding of civic literacy, their abilities in rational thinking and to better the quality of organizational management.

3 Enhance the Involvement of Youth Volunteers

Promote diverse youth volunteer services, cultivate their knowledge and skills in volunteer services and strengthen the platform and network for youth volunteer services to reach the goal of a million youths, a million volunteers.

i Conduct a series of service activities to rouse youths' willingness to volunteer. Subsidize youth groups that perform volunteer services and encourage youths to perform various services. Hold national competitions and assemblies and award ceremonies for outstanding youth volunteer groups to honor exemplary volunteers.

ii Establish regional youth volunteer centers and reinforce the organizational connection and integration of local resources. Conduct basic and special training for youth volunteers and empowerment courses.

iii Integrate government and private forces to assist with the promotion of youth volunteer services. Promote and maintain websites for Youth Volunteer Service for Regional Peace and integrate the information concerning youth volunteer services to provide a communication platform for public and private resources.

C International Experience and Learning for Youths

1 Promote Youth International Involvement and Exchange

Integrate related resources to push proposals for diverse international participation and services. For examples, to expand international in-depth youth exchange, to promote international youth personnel training program, to encourage and subsidize youth to voice out and achieve their goals on the international stage, to broaden the youth's vision, to increase Taiwanese youth's global mobility and competiveness, to enhance youth's international affair knowledge and to nurture leaders with a global mindset. In turns, the influential youth can speak for Taiwan

on the international stage and leads the new generation into the global stage. By upgrading the international competitiveness and mobility of the youth, they will gain more opportunities to be part of the global actions and fulfill their dreams. The young generations will increase the basic international knowledge and quality through the foreign exchange with youth from all over the world.

2 Promote Learning Through Service

Promote and implement proposals for learning through services from the Ministry with a focus on promoting and fulfilling such a concept. Combine forces from governments of all levels, schools, communities and non-profit organizations to create collaboration and support network, and strengthen resource integration for learning through services. The key focus includes developing training courses for seed teachers, and strengthening the information platform for learning, subsidizing universities, colleges and junior colleges to promote a creative proposal for service learning that focus on the community. Also, the colleges are strongly encouraged to lead the nearby junior and elementary schools to promote learning through service in a customized manner. Conduct a national end result exhibition and award ceremony on learning through services to promote exchanges on domestic and international experiences with learning through service and to award role models and promotional staff for exemplary performance in order to encourage youths to gain practical experience by combining courses or activities with learning through service proposals, achieving the goal of using with what you learn. By integrating practical experiences with knowledge and skills, youths are able to gain self-growth. Furthermore, through the mutual interaction that is co-prosperous and co-sharing between servers and receivers, the environment we all share will be improved and a just and harmonic society will ultimately be built.

3 Promote Channels for Youth Travel and Study

Promote a youth travel program to encourage youths to leave their classrooms and comfort zones to try different lifestyles, and guide them to see different aspects of Taiwan so that they care for and become more passionate about their native land through non-orthodoxical educational channels; also, through this youth travel program, youths' ability to do independent thinking, adapt and react and solve problems are cultivated so that they may find themselves, experience life, and look for directions and possibilities for their future while developing self-knowledge and increasing their competitiveness. This program is combined with charity issues to encourage youths to evolve and grow through altruistic acts; meetings are arranged for youths to share their travel experience, including sharing from youth experts, in order to expand the influence of role models and promote a trend for youth travel. To broaden youths' international horizons and their international mobility, the Ministry encourages universities, colleges and junior colleges to incorporate the idea of "Gap Year" in the courses they offer. Specific learning themes will be designed by teachers and with these courses, students are offered a complete and systematic learning opportunity, providing for our young students to study abroad through multiple channels.

Education Expenditures

The government has demonstrated the importance it attaches to educational development by increasing the education budget. President Ma Ying-jeou announced on January, 6, 2016 the some of the amended articles in the Compilation and Administration of Education Expenditures Act, which increased the percentage of funds allotted to education expenditures from 22.5% to 23% of the national budget, which should add more than NT$12 billion to the current education budget which will be shared by central government and local governments according to the law. The new policy will take effect in 2017. In addition, regarding the increased education budget, the Ministry of Education will plan for educational investments and allocate budgets based on two major aspects: its development and whether it takes care of disadvantaged minorities.

Education Expenditures

In the 1951 fiscal year, the education budget for all educational levels was NT$ 213 million, which accounted for 1.68% of GDP; in the 2015 fiscal year, the figure has since reached NT$ 848.21 billion, or 5.08% of GDP. The budget for private education institutions has also risen from the 1961 fiscal year, when private institutions accounted for less than 10% of the total education budget, to fiscal year 2015, when funding for private institutions reached 25.28% of the education budget; public schools meanwhile enjoyed 74.72% of the budget.

Looking at the breakdown of each education level, in SY2014, the total education budget was NT$ 710.4 billion, of which preschool education accounted for 7.57%, elementary and junior high education accounted for 42.61%, senior secondary education accounted for 14.99%, higher education accounted for 34.22% (junior colleges 0.75%, universities and colleges 33.47%), and 0.61% went to other institutions.

Teacher and Arts Education

A Teacher's Professional Training

The Teacher Education Law is designed to develop a pool of qualified teachers for preschools, primary schools and secondary schools. The teacher education system is comprised of diversified, training and selecting methods. Potential candidates are recruited from teacher-training institutions and programs and colleges/universities that offer a teacher-training curriculum. These teacher training programs recruit qualified students at the undergraduate, masters and doctoral levels. Eligible candidates must complete a curriculum which covers regular courses, specialty courses and pedagogy courses, after which they must attend a 6-month internship, at the end of which if they pass the teacher certification assessment,

they will receive official certification. Only candidates who have obtained this certification are eligible to participate in screenings held by local governments for positions in teaching and administration at the secondary, primary and preschool education levels.

Key Policies and Future Plans

1 Promote the White Paper on Teacher's Education to lead the professional development of teachers through four aspects, including pre-employment training, counseling infused teaching, teacher's professional development and support system with 9 development strategies and 28 action plans have been developed to plan for overall professional training for teachers from all levels in all subjects.

2 The Ministry will finetune the Teacher Education Law, especially in the areas of pre-employment training, on-the-job training, and professional development, as well as take into consideration society's expectations and demand for quality teachers.

3 Research and develop the Teacher Professionalism Standard and the Teacher Professional Performance Standard as pre-employment training and references for professional growth to encourage teachers to enhance their teaching skills and professional knowledge.

4 The Ministry will encourage teacher-training colleges/universities to each develop areas of specialization and establish an educational resource exchange platform that will allow different institutions to share resources.

5 The Ministry will develop a mechanism to evaluate the supply and demand of

teachers so as to be able to tweak the number of teachers it trains and ensure superior quality.

6 The Ministry will provide scholarships and grants to encourage talented students to enter teacher-training programs and also to entice teachers to serve in schools located in remote areas.

7 The Ministry will set up an evaluation system to be applied to all teacher-training institutions so as to ensure that only qualified faculty possessing up-to-date professional knowledge take part in training teacher candidates.

8 The Ministry will promote a comprehensive teacher evaluation system and apply the results as references for establishing the professional development system, training evaluation staff and building a database for qualified evaluation personnel to help the teachers grow professionally, improve teaching quality and better the students' performance.

9 The Ministry will establish and maintain the In Service website for teacher's continued education. All competent educational authorities, schools at all levels and teacher's educational facilities may register in the online database. Teachers may search for educational and study programs online according to their needs.

10 The Ministry will subsidize colleges and universities with teacher's education programs and fully implement coaching for local educational programs to improve teachers' professional capabilities and realize the goal of lifelong learning for teachers.

11 In anticipation of an aging society and the implementation of 12-year Basic Education, the Ministry has asked the three major teacher-training colleges/universities to set up an academically-sound professional development platform for in-service teachers.

12 The central government, local government entities, teacher-training colleges/universities and local schools will form a partnership to train primary school teachers under the elementary school teacher training alliance program and secondary education center establishment program. This four-facet partnership is expected to provide vertical integration of teacher supply and professional training. In additions, the secondary education research center plan will be intact.

13 The Ministry will coordinate with the full implementation of 12-year Basic Education in 2014, promote the establishment of the learning support system for 12-year Basic Education and improve teachers' teaching skills, increase teachers' professional knowledge and skill in teaching effectively, multiple evaluation and differentiated instruction.

B Arts Education

In order to fulfill the vision of cultivating teachers for the new age and developing high quality education as well as a creative Taiwan with cultural citizens and meet the expectations in faculty cultivation and arts education, the Ministry has established the Department of Teacher and Arts Education to be in charge of the planning and promotion of faculty cultivation and arts education affairs. The department will be the window for coordinating and integrating interdepartmental affairs and combining resources vertically and horizontally.

The goal is to use arts education to cultivate citizens' sense of culture and cultivate exemplary teachers on the foundation of aesthetic education. The measures are as follows:

1 Establish a communication platform among administrative organizations for arts education at all levels;

2 Formulate and promote mid- and long-range plans for aesthetic education;

3 Encourage industry-academia collaboration;

4 Integrate arts and aesthetic education with faculty cultivation.III

Study in Taiwan

The Ministry of Education (MOE) considers international cooperation and collaboration a cornerstone of its efforts to embrace internationalization, especially for institutions of higher education.

The number of international degree students, language students, and exchange students studying in Taiwan increased to 110,182 in 2015–2016, a significant increase from 2007, when international student enrollment was only 30,509.

The MOE established the Bureau of International Cultural and Educational Relations (BICER) in 1947 to promote international academic and cultural exchanges, and provide international students wishing to study in Taiwan with assistance, especially with their government scholarship applications and information

about Taiwan. The MOE re-organized its former Bureau of International Cultural and Educational Relations, its former Mainland Affairs Division, and the Overseas Chinese Education Affairs Commission into the newly established Department of International and Cross-strait Education. This began operating on January 1, 2013. It is responsible for promoting Taiwan's international education exchange programs and integrating cross-strait educational affairs.

Many efforts have been made to create an internationalized academic study environment in Taiwan, and Taiwan is an ideal study destination for several reasons. According to a survey of international students carried out by the Foundation for International Cooperation in Higher Education of Taiwan (FICHET), these reasons include the following: Taiwan provides a high-quality academic environment, rich cultural heritage, reasonable tuition, excellent living circumstances, scholarships, opportunities to learn Mandarin Chinese, and studying in Taiwan will be helpful for both further study and future careers. In addition, Taiwan's advanced technology, its friendly people, and its breath-taking destinations and sights are all attractive to international students.

Taiwan can be roughly divided into two geographic sections; the flat, gently rolling hills to the west, where 90% of the population lives, and the rugged, forest-covered mountains to the east. There are nine national parks that showcase the diverse terrain and the flora and fauna of the island.

In addition, Taiwan is rich in the diversity of its biological species, boasting more than 50,000 endemic species, or 2.5% of the world's total, according to a survey released by the Council of Agriculture.

Taiwan and its people are renowned for their warm, welcoming and hospitable nature towards international visitors and students. This has become Taiwan's international 'trademark'. The experiences of international scholarship students currently studying in Taiwan are outlined below.

Scholarships

The government provides a range of scholarships to encourage outstanding people to come and study and/or do research in Taiwan.

A Taiwan Scholarship Program – Scholarships for Degree Studies

In 2004, four government agencies – the Ministry of Education (MOE), the Ministry of Foreign Affairs (MOFA), the Ministry of Economic Affairs (MOEA), and the Ministry of Science and Technology (MOST), formerly called the National Science Council of the Executive Yuan – jointly initiated the Taiwan Scholarship Program to encourage outstanding international students to undertake degree programs in Taiwan.

There are three different types of Taiwan Scholarships:

1 MOFA Taiwan Scholarships

These scholarships are offered by the Ministry of Foreign Affairs of the Republic of China (Taiwan) to assist students from countries that have diplomatic relations with Taiwan to undertake degree programs and the non-degree Mandarin Language Enrichment Program (LEP). Special consideration may also be given to providing these scholarships to students from other countries.

- The maximum scholarship periods for the different program categories are:

1. Non-degree LEP: 1 year
2. Bachelor's degree programs: 4 years
3. Master's degree programs: 2 years.
4. Doctorate programs: 4 years.

- The MOFA Taiwan Scholarship provides recipients with an economy-class plane ticket for a flight to and from Taiwan by the most direct route, and a monthly stipend of NT$25,000 for the LEP and NT$30,000 for degree programs.
- Recipients are responsible for all their expenses during their stay in Taiwan. MOFA will not provide any other subsidies.

2 MOE Taiwan Scholarships

These scholarships are offered by the Ministry of Education of the Republic of China (Taiwan) to students from countries whose citizens are not eligible to apply for a MOFA Taiwan Scholarship to undertake a degree program.

- The maximum scholarship period for each degree level is:

1. Bachelor's degree programs: 4 years.
2. Master's degree programs: 2 years.
3. Doctorate programs: 4 years.

- The MOE Taiwan Scholarship provides a monthly stipend of NT$15,000 for bachelor's degree students and NT$20,000 for students undertaking a master's degree or doctorate. The scholarship recipients must pay their airfare to Taiwan.
- The scholarship provides up to NT$40,000 each semester for each recipient's tuition and miscellaneous expenses. If these exceed

a total amount of NTD40,000, the remaining amount must be paid by the recipient. The "miscellaneous expenses" do not include any of the following: administration fees, thesis supervision fees, insurance premiums, accommodation, or internet access. These are all the responsibility of the scholarship recipient.

3 MOST Scholarships

These scholarships are offered by the Ministry of Science and Technology of the Republic of China (Taiwan) to assist students to undertake a master's degree or doctorate program in Taiwan and to promote bilateral scientific and technological exchanges.

- The maximum scholarship period for each degree level is:
  1. Master's degree programs: 2 years.
  2. Doctorate programs: 3 years.
- The MOST Taiwan Scholarship Program provides a monthly stipend of NT$30,000 to scholarship recipients.
- All other expenses, including the costs of tuition, accommodation, books, medical insurance, and airfare to Taiwan must be paid by the student.

B Non-degree Scholarships to Learn Chinese

MOE Huayu Enrichment Scholarships (HES)

The MOE established the Huayu Enrichment Scholarship (HES) program to encourage international students to come to Taiwan to study Chinese and learn about Chinese culture in Taiwan. "Huayu" is one of the names commonly used to refer to the Mandarin dialect of Chinese.

The scholarships are awarded through Republic of China (Taiwan) embassies and overseas missions (Representative Offices), based on merit.

HES scholarship winners study at a Mandarin Chinese Language Training Center affiliated with a university or college in Taiwan for a period from as short as two months, up to a maximum period of one year.

They receive a monthly stipend of NTD 25,000.

Internships for International Students

Taiwan Experience Education Programs (TEEP)

In 2015, the Ministry of Education in Taiwan launched an exciting new initiative, the Taiwan Experience Education Programs (TEEP), in conjunction with a number of universities and colleges in Taiwan. Each offers a distinctive short-term program with a practical focus, in a particular field – for example, International Consulting, Electrical Engineering or Computer Science, Culture Studies, and Taiwan's Natural Environment. Some target undergraduates, others are more suitable for graduate students.

All the programs offer a combination of short courses, Chinese language-learning, a cultural immersion program, and a short-term professional internship or research internship. The language-learning and cultural immersion components are designed to help participating international students learn some Chinese and understand Taiwanese culture to successfully undertake their internship. The internships will give the students opportunities to participate in a range of activities with their placement company or organization. The internships will give the international students participating in TEEP an enormously valuable opportunity to prepare themselves for their future life in the business or research world.

The TEEP gateway is an exciting chance to experience Taiwan's quality higher education and connect with the Asian job market. For more details about the various programs available, see http://www.studyintaiwan.org/teep

Foreign Student Turned into a Cultural Ambassador in Taiwan

Name: Sabrina Sayers
Nation: Saint Lucia
Senior, Department of Environmental Engineering, National Ilan University

Hailing from Saint Lucia, a country which is less familiar with Taiwanese people, Sabrina Sayers took the opportunity to hone her skills as a cultural ambassador while studying at the Department of Environmental Engineering, National Ilan University.

The role encourages her to explore deeper of her culture that she never knew before. "This also allowed me to develop my research skills even more and more importantly, it ignited a passion for my culture and others as well that I probably would not have developed if I had gone to a school in the Caribbean Region," said Sayers.

Living in Yilan and going to a school which has a very small foreign student population has made Mandarin a requisite for communication. Sayers learned Mandarin at the Fu Jen Catholic University Language Centre that features small class and diverse cultural activities. After five years, she found learning and remembering characters and the different tones are the most difficult part.

"Taiwan is a truly unique place from its culture to its physical beauty, from its religion to its food," she said after years of observation. In her opinion, Taiwan is also an extremely safe country, "especially Yilan," said Sayers, who has never felt safer on her own, at night anywhere else.

Couldn't wait to return home to put all what she has learned in Taiwan into work in her hometown. "I do feel that being in Taiwan has made me a stronger and more well-rounded person," she said, adding that "I look forward to making my contribution toward the development of my country upon my return."

Safety, Convenience, and Rich Resources make Studying in Taiwan an Ideal Choice

Name: Tawonga Gondwe
Nation: Swaziland
Graduate, Department of Information Management, I-Shou University

A bright face with lively expression, Tawonga Gondwe is a graduate student at the Department of Information Management, I-Shou University.

Only 19 when Gondwe firstly arrived Taiwan to join the 1 year language enrichment scholarship program in 2010. It's not easy at the very beginning as culture shocks and challenges came together. But Gondwe took it as a driving force. "I used all these to learn the language and be the person that I am today," she said.

Beyond learning language itself, the school offered a range of intriguing courses. A film produced in Mandarin is one among the highlights. She and her team drew the inspiration from the TOCFL exam they were required to take and made a film titled "Super Students," which "shows how much we felt the pressure to have to do our best," she said.

After she got accepted to I-Shou University, she moved to Kaohsiung and it's the sixth year of her stay, which is long enough to enable her to identify some strengths of studying in Taiwan. First of all, it's safety. "Parents would be less worried and student would find it easier to adapt to the environment if it's safe," she said.

Convenience and accessibility are the other traits. The availability of resources like health insurance, online library, and other educational resources have made learning easier and more enjoyable, she added.

Gondwe considered that the work ethic in Taiwan is pretty good and the environment is wonderful, and therefore expects that in the future to create more connections between my country and Taiwan corporately.

Vision

Education is a long-term process that requires continuous effort. The purpose of an educational system is to cultivate talent needed for the next generation. We aim to focus on students, foster their visionary capacity and cross-disciplinary skills so that they will be able to think on their own, connect with our society and overcome challenges in the future.

Regarding compulsory education, the Ministry, after reaching an agreement with local governments and society in general, has started to gradually implement a 12-year Basic Education that provides "Exam-Free Admission and Nearby Enrollment" to eliminate unnecessary academic pressure and allow students to learn happily while respecting diversity and promoting adaptive development for students. Concerning higher education, as a consequence of the low-birth rate, the Ministry will actively provide assistance to universities to make necessary transitions and develop their unique features while protecting students' rights and narrowing the gap between what students have learned and what they do for a living, and fostering talent needed by industry. Meanwhile, an evaluation of the current assessment system will be conducted to make sure it does offer assistance to universities in developing their unique features.

In future, the Ministry will continue to uphold the idea of "replace the right to an education with the right to learn, for all citizens, and make education genuinely learner-centered" and, through firm implementation of various educational projects, start a new page in our nation's education system, carry out deregulation and innovation in the education system, take the initiative to establish platforms to communicate to the world, and strengthen partnerships with local governments to cultivate mature citizens for the next generation.

Statistics

General Information

	Total Population (million)				Life Expectancy (years)		GDP (US$billion)	GDP per capita (US$)	Literacy rate among citizens aged 15 and above (%)
		Population Structure (%)			Male	Female			
		0-14	15-64	65-					
1980	17.9	32.1	63.6	4.3	69.6	74.6	37.8	2,157	87.7
1990	20.4	27.1	66.7	6.2	71.3	76.8	162.7	8,072	92.4
1995	21.4	23.8	68.6	7.6	71.9	77.7	270.3	12,765	94.0
2000	22.3	21.1	70.3	8.6	73.8	79.6	331.5	14,941	95.6
2005	22.8	18.7	71.6	9.7	74.5	80.8	375.8	16,532	97.3
2010	23.2	15.6	73.6	10.7	76.1	82.6	446.1	19,278	98.0
2013	23.4	14.3	74.2	11.5	76.9	83.4	511.6	21,916	98.4
2014	23.4	14.0	74.0	12.0	76.7	83.2	530.0	22,648	98.5
2015	23.5	13.6	73.9	12.5	…	…	523.0	22,294	98.6

Summary of Education at All Levels

SY 2015-2016 Unit : Person

	No. of Schools (school)	No. of Teachers	No. of Classes (class)	No. of Students	No. of Graduates in 2014	No. of Students Per 1,000 Population
Total	10,948	299,921	101,609	4,616,125	1,110,446	196.50
Preschool	6,362	46,169	-	462,115	-	19.67
Primary School	2,633	97,374	52,404	1,214,336	230,012	51.69
Jr. High School	733	50,394	26,048	747,720	276,628	31.83
Senior Secondary School	506	55,340	21,460	792,366	272,563	33.73
Jr. College	13	1,638	-	97,466	18,842	4.15
Uni. & College	148	47,085	-	1,235,171	291,020	52.58
Special Edu. Sch.	28	1,811	620	6,261	2,119	0.27
Supp. & Cont. Sch.	523	35	1,077	47,471	17,146	2.02
Open University	2	75	-	13,219	2,116	0.56

Gross Enrollment Rate and Net Enrollment Ratio by Level of Education

Unit : %

School Year	Total		1st Level (Primary)		2nd Level				3rd Level (Tertiary)	
					Junior		Senior			
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
1976-77	69.61	67.57	100.65	…	90.21	77.33	56.54	43.17	15.40	9.97
1981-82	71.95	69.52	101.11	…	97.71	84.41	68.03	52.58	16.71	11.47
1991-92	82.41	78.74	100.99	…	100.23	91.70	90.28	72.93	32.37	20.98
2001-02	89.07	82.29	99.66	…	99.27	93.53	99.62	88.21	62.96	42.51
2006-07	95.33	88.55	99.54	…	99.48	96.65	98.79	91.31	83.58	59.83
2010-11	95.60	89.55	99.68	99.21	101.80	97.45	98.89	92.89	83.77	66.71
2011-12	95.45	89.76	100.37	99.25	101.02	97.52	99.11	93.12	83.37	68.42
2012-13	95.55	89.84	101.44	99.30	99.67	97.82	98.33	93.22	84.43	69.71
2013-14	95.19	89.79	99.52	99.45	99.31	97.84	101.09	93.35	83.88	70.41
2014-15	95.11	89.70	99.66	99.46	100.17	97.82	100.58	93.66	83.79	70.85
2015-16	95.10	89.52	99.13	99.53	103.30	97.82	99.40	93.85	83.73	70.86

Number of Students Per Teacher at All Levels

Unit : Person

School Year	Total	Pre-school	Primary School	Jr. High School	Sr. Secondary School		Junior College	College	University	Special Edu. School
					Sr. High School	Sr. Voca School				
1976-77	29.90	32.66	36.04	25.94	23.16	22.70	20.00	16.22	11.42	6.65
1981-82	27.25	26.10	31.79	22.97	22.99	22.50	20.79	11.92	13.53	5.24
1991-92	24.22	15.83	27.20	21.23	22.29	21.28	19.35	11.38	14.82	3.72
2001-02	19.71	12.44	18.60	15.67	19.41	19.18	20.56	20.17	19.60	3.58
2006-07	19.30	10.60	17.86	15.70	19.29	18.41	21.01	18.63	19.93	3.95
2010-11	18.18	12.57	15.26	14.31	18.58	18.69	26.74	19.81	21.25	4.16
2011-12	17.90	12.72	14.78	13.74	18.53	18.29	27.69	21.10	21.52	4.08
2012-13	16.59	10.21	14.09	13.00	18.29	17.83	28.34	21.32	21.86	4.02
2013-14	16.03	9.89	13.31	12.50	17.83	17.29	29.70	22.15	21.92	3.98
2014-15	15.60	9.80	12.71	12.06	17.05		29.65	23.41	22.24	3.80
2015-16	15.39	10.01	12.47	11.51	16.61		30.75	22.56	22.58	3.71

Overseas Students in R.O.C.

Unit : Person

Year / School Year	2010	2011	2012	2013	2014	2015
Total	45,413	57,920	66,961	79,730	93,645	110,182
Subtotal of International Students	37,252	41,960	44,601	48,868	53,466	61,098
Studying for a Degree	8,801	10,059	11,554	12,597	14,063	15,792
Overseas Compatriot Students	13,637	14,120	15,278	17,135	20,134	22,918
International Exchange	2,259	3,301	3,871	3,626	3,743	3,743
Studying Mandarin Chinese	12,555	14,480	13,898	15,510	15,526	18,645
Subtotal of Overseas Chinese Students	8,161	15,960	22,360	30,862	40,179	49,084
Mainland China Students (Studying for a degree)	-	928	1,864	3,554	5,881	7,813
Mainland China Students (to take short-term courses or attend meeting)	5,316	11,227	15,590	21,233	27,030	34,114
Short-term Courses	1,604	2,265	3,163	3,915	4,758	4,758
Overseas Compatriot Youth Technical Training Classes	1,241	1,540	1,743	2,160	2,510	2,399

Ratio of Educational Expenditure to GDP

Fiscal Year	Educational Expenditure (US$million)			GDP (US$ million)	% to GDP		
	Total	Public Sector	Private Sector		Average	Public	Private
1970-71	281	227	54	6,270	4.48	3.61	0.87
1980-81	2,014	1,638	376	46,404	4.43	3.60	0.83
1990-91	11,222	9,228	1,994	173,802	6.36	5.23	1.13
2001	17,464	12,997	4,467	300,450	5.81	4.33	1.49
2006	21,586	15,887	5,699	388,589	5.55	4.09	1.47
2010	24,180	18,460	5,719	446,105	5.42	4.14	1.28
2011	26,621	20,481	6,139	485,653	5.48	4.22	1.26
2012	27,612	20,992	6,619	495,845	5.57	4.23	1.33
2013	27,969	20,888	7,081	511,614	5.47	4.08	1.38
2014	27,782	20,816	6,966	530,043	5.24	3.93	1.31
2015	26,581	19,861	6,721	523,009	5.08	3.80	1.29

Reading, Math and Science Scores of 15-year-olds on the PISA 2012

Rank	Reading			Rank	Mathematics			Rank	Science		
	Country	Mean	SD		Country	Mean	SD		Country	Mean	SD
1	Shanghai-China	570	80	1	Shanghai-China	613	101	1	Shanghai-China	580	82
2	Hong Kong-China	545	85	2	Singapore	573	105	2	Hong Kong-China	555	83
3	Singapore	542	101	3	Hong Kong-China	561	96	3	Singapore	551	104
4	Japan	538	99	4	Taiwan	560	116	4	Japan	547	96
5	S.Korea	536	87	5	S.Korea	554	99	5	Finland	545	93
6	Finland	524	95	6	Macao	538	94	6	Estonia	541	80
7	Ireland	523	86	7	Japan	536	94	7	S.Korea	538	82
8	Taiwan	523	91	8	Liechtenstein	535	95	8	Viet Nam	528	77
9	Canada	523	92	9	Switzerland	531	94	9	Poland	526	86
10	Poland	518	87	10	Netherlands	523	92	13	Taiwan	523	83

SD: standard deviation

Trends in International Mathematics and Science Study 2011

Rank	Eighth Grade Science			Eighth Grade Mathematics			Fourth Grade Science			Fourth Grade Mathematics		
	Country	Mean	SD	Country	Mean	SD	Country	Mean	SD	Country	Mean	SD
1	Singapore	590	4.3	S.Korea	613	2.9	S.Korea	587	2.0	Singapore	606	3.2
2	Taiwan	564	2.3	Singapore	611	3.8	Singapore	583	3.4	S.Korea	605	1.9
3	S.Korea	560	2.0	Taiwan	609	3.2	Finland	570	2.6	Hong Kong-China	602	3.4
4	Japan	558	2.4	Hong Kong-China	586	3.8	Japan	559	1.9	Taiwan	591	2.0
5	Finland	552	2.5	Japan	570	2.6	Russia	552	3.5	Japan	585	1.7
6	Slovenia	543	2.7	Russia	539	3.6	Taiwan	552	2.2	Northern Ireland	562	2.9
7	Russia	542	3.2	Israel	516	4.1	United States	544	2.1	Belgium	549	1.9
8	Hong Kong-China	535	3.4	Finland	514	2.5	Czech Republic	536	2.5	Finland	545	2.3
9	England	533	4.9	United States	509	2.6	Hong Kong-China	535	3.8	England	542	3.5
10	United States	525	2.6	England	507	5.5	Hungary	534	3.7	Russia	542	3.7

SD: standard deviation

Medals Attained by Our Students in the Asian Pacific/International Olympiad

Year	2012	2013	2014	2015	2016
Total	28G 12S 6B 5H	26G 12S 9B 3H	22G 18S 8B 3H	24G 17S 6B 3H	…
Asian Pacific Mathematics Olympiad	1G 2S 4B 3H	1G 2S 4B 3H	1G 2S 4B 3H	1G 2S 4B 3H	1G 2S 4B 3H
Asia Physics Olympiad Host Country No. of Participants Medals Rank	India 21 Countries 6G 1S 1B 2nd	Indonesia 20 Countries 5G 3B 4th	Singapore 27 Countries 1G 5S 2B 3rd	China 25 Countries 3G 5S 3rd	Hong Kong 25 Countries 3G 1S 3B 1H 2nd
International Mathematics Olympiad Host Country No. of Participants Medals Rank	Argentina 100 Countries 1G 3S 2H 14th	Colombia 97 Countries 2G 4S 8th	South Africa 101 Countries 4G 2B 3rd	Thailand 104 Countries 4S 1B 1H 18th	Hong Kong 109 Countries 3G 3S 5th
International Chemistry Olympiad Host Country No. of Participants Medals Rank	U.S.A. 72 Countries 3G 1S 2nd	Russia 73 Countries 3G 1S 1st	Vietnam 75 Countries 2G 2S 2nd	Azerbaijan 75 Countries 4G 1st	Georgia 67 Countries 3G 1S -
International Physics Olympiad Host Country No. of Participants Medals Rank	Estonia 82 Countries 5G 2nd	Denmark 83 Countries 3G 2S 6th	Kazakhstan 85 Countries 5G 2nd	India 82 Countries 4G 1S 3rd	Switzerland 84 Countries 5G -
International Informatics Olympiad Host Country No. of Participants Medals Rank	Italy 82 Countries 3S 1B Nil	Australia 60 Countries 1G 2B Nil	R.O.C. 81 Countries 1G 3S Nil	Kazakhstan 84 Countries 2G 1S 1B Nil	Russia 83 Countries 1G 1S 2B Nil
International Biology Olympiad Host Country No. of Participants Medals Rank	Singapore 59 Counties 3G 1S 3rd	Switzerland 62 Counties 2G 2S 5th	Indonesia 61 Counties 4G 1st	Denmark 60 Counties 3G 1S 5th	Vietnam 68 Counties 4G -
International Earth Science Olympiad Host Country No. of Participants Medals Rank	Argentina 17 Countries 3G 1S 1st	India 27 Countries 3G 1S 1st	Spain 21 Countries 3G 1S 1st	Brazil 23 Countries 1G 3S 1st	Japan 26 Countries 4G 1st
International Junior Science Olympiad Host Country No. of Participants Medals Rank	Iran 30 Countries 6G 1st	India 48 Countries 6G 1st	Argentina 39 Countries 1G 5S 1st	Korea 32 Countries 6G 1st	Will be held in December 2016

G= Gold, S=Silver, B=Bronze, and H=Honorary award

Annual Papers and Rank by Nationality in SCI

Country \ Year	2011		2012		2013		2014		2015	
	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank
U.S.A.	366,691	1	378,548	1	390,143	1	391,850	1	512,738	1
China	162,936	2	188,279	2	221,675	2	253,633	2	294,676	2
England	101,217	3	105,782	3	111,687	3	110,578	3	152,006	3
Germany	96,250	4	100,377	4	103,953	4	103,765	4	127,520	4
Japan	77,592	5	78,343	5	79,766	5	77,552	5	88,766	5
France	67,728	6	69,922	6	72,551	6	71,720	6	85,140	6
Italy	55,608	8	59,023	8	63,502	8	63,902	8	80,490	7
Canada	59,347	7	62,113	7	64,665	7	65,092	7	80,125	8
Australia	45,364	12	49,444	11	54,620	10	57,472	9	74,897	9
Spain	50,809	9	54,365	9	56,648	9	56,805	11	67,843	10
Taiwan	27,310	16	27,726	16	28,155	16	27,430	17	28,507	21

Annual Papers and Rank by Nationality in EI

Country \ Year	2011		2012		2013		2014		2015	
	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank
China	251,977	1	255,120	1	279,940	1	303,285	1	227,210	1
U.S.A.	128,389	2	131,732	2	189,982	2	186,209	2	144,992	2
Germany	36,185	4	37,851	4	59,541	3	61,766	3	49,363	3
India	31,693	5	36,189	5	44,297	7	54,618	5	46,912	4
England	28,285	6	29,164	6	48,074	5	50,497	6	40,870	5
Japan	45,864	3	45,512	3	58,804	4	55,844	4	40,190	6
France	26,437	8	27,196	8	45,998	6	46,032	7	36,609	7
S.Korea	27,150	7	28,887	7	36,793	8	38,097	8	32,170	8
Italy	20,358	11	21,810	10	34,569	9	36,787	9	30,354	9
Canada	21,023	10	21,848	9	32,154	10	32,981	10	26,288	10
Taiwan	22,819	9	20,729	11	24,415	12	22,706	14	15,647	15

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