

Ministry of Education
Republic of China

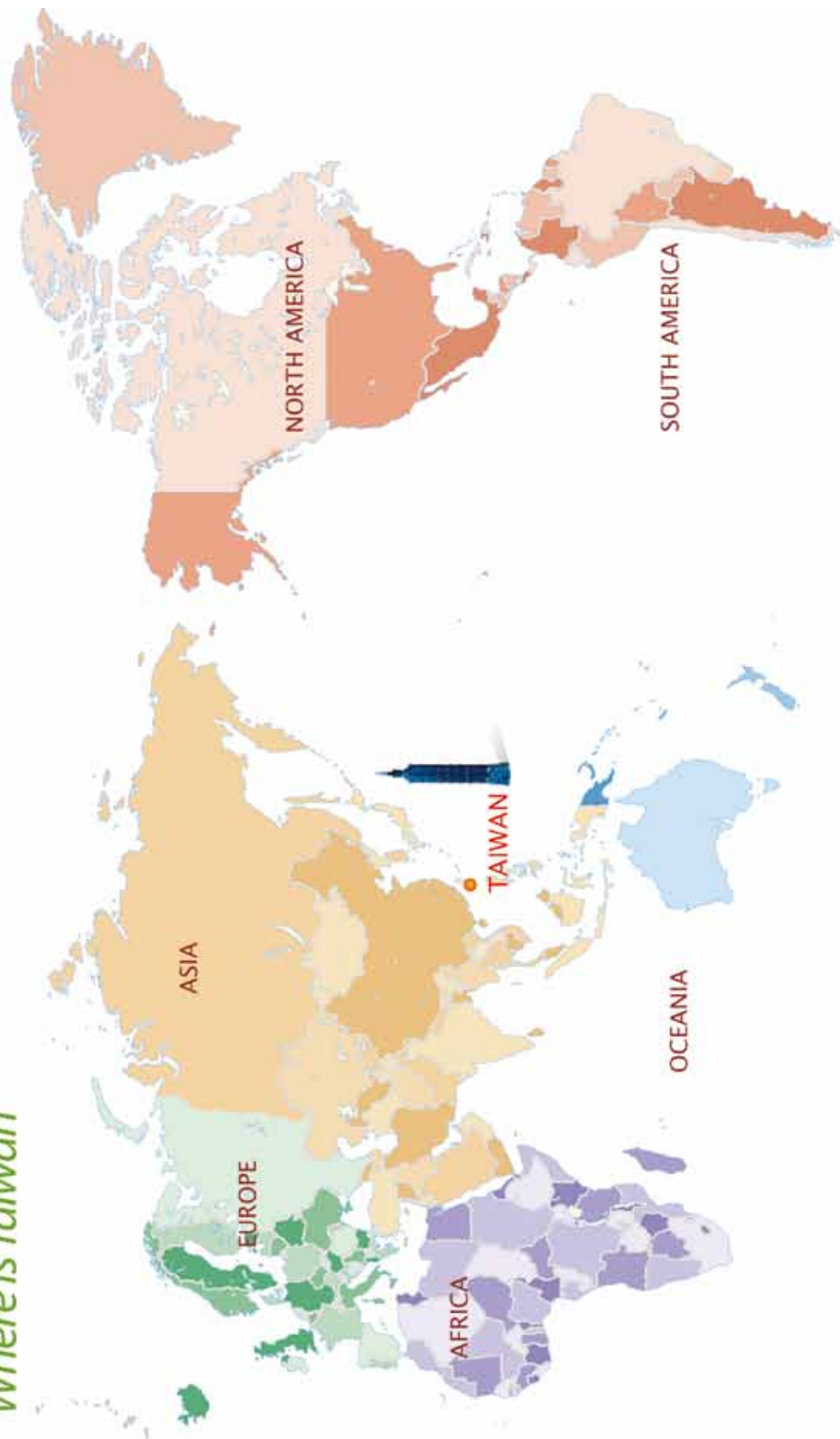
Education in Taiwan

2013

2014



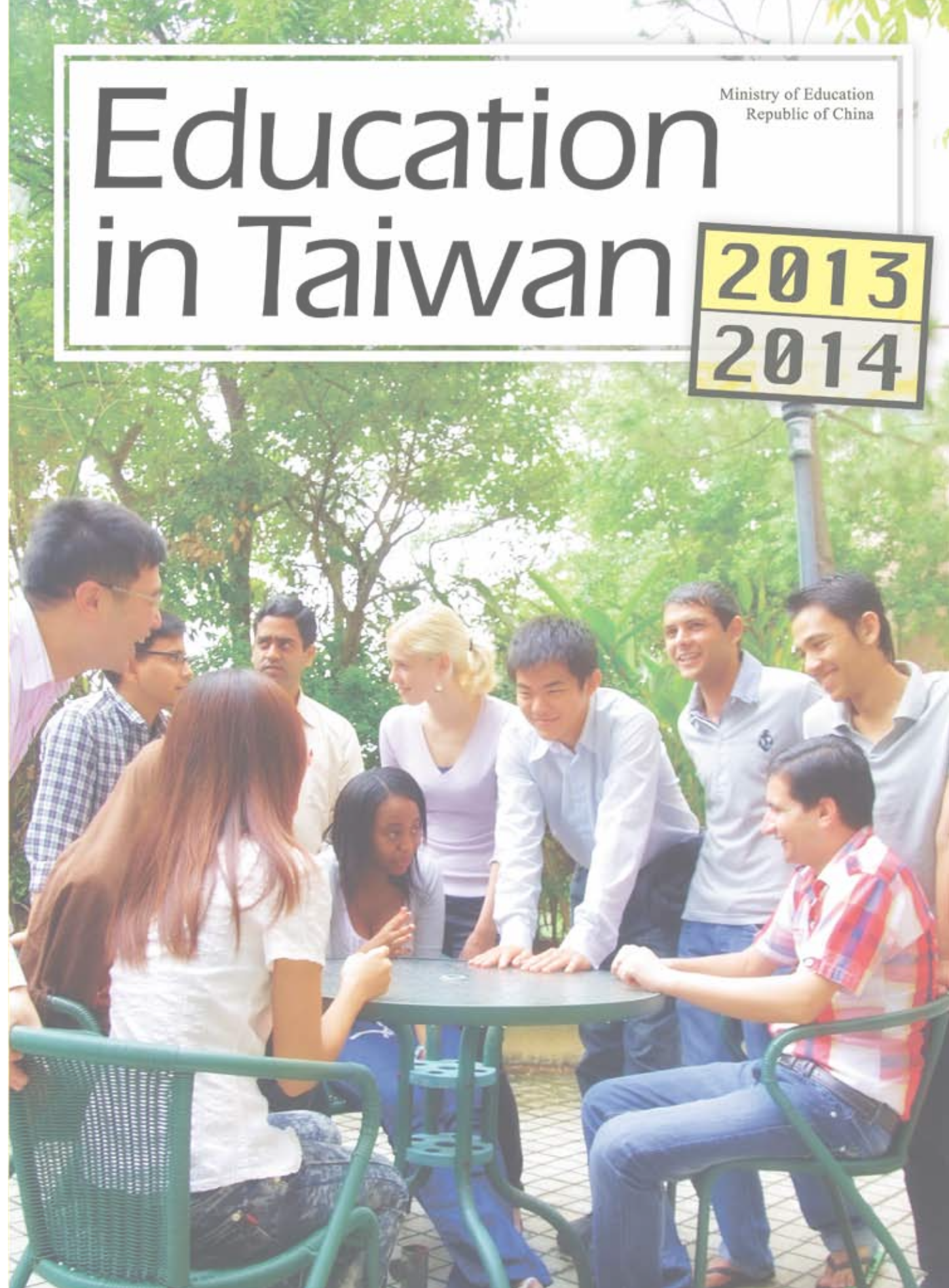
Where is Taiwan



Education in Taiwan

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2014



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Words from the Minister...



Bring education to a new level through cultivating excellence

As part of the restructuring being undertaken by the Executive Yuan, on January 1, 2013 the Ministry of Education has implemented a new law which incorporates the Sports Affairs Council and National Youth Commission, their staff, and the affairs they handle within the Ministry. This organic integration will create a team which will promote national education, athletic and youth affairs with tremendous force. The restructured organization is concise, flexible and effective, which conforms perfectly with the restructuring goal. Several areas of government

are consolidated into a single window, and further integrating our strengths in education, athletic affairs, and youth affairs in this way will improve our international competitiveness. New horizons for education are being opened up, building on the foundations past policies have put in place.

The Ministry of Education has proposed 12 key policies to promote steady improvement of the quality of education. These key policies are to: publish a white paper on cultivating excellence targeting the nurturing of highly-skilled people, and

establishing world-class universities and research centers; implement 12-year basic education; implement Early Childhood Education and Care Act to ensure quality preschool education; promote Phase 2 of the Technological and Vocational Education Reform Plan to shorten the gap between school and work; improve the quality of higher education and promote the export of the higher education industry; train mentors and make arts education available to everyone; build a lifelong learning society, and promote family education, and senior citizen education; promote e-learning, and establish sustainable campuses; build friendly and healthy campuses, and implement gender equality, and moral education; strengthen assistance for the disadvantaged, and protect the rights of disadvantaged students to an education; create diverse learning environments for youth and increase their core competitiveness; and construct a quality sports environment and obtain better results in international competitions.

Human resources are a nation's foundation. They are also the key to elevating a nation's competitiveness. Taiwan ranks 13th in the Global Competitiveness

Report 2012 published by the World Economic Forum (WEF), for strong performance in higher education and innovation, and Taiwan ranks 7th in the World Competitiveness Yearbook 2012 published by the IMD. This improved ranking is attributed to Taiwan's educational ranking. Taiwan also ranks 20th in the Prosperity Index published by the British think-tank, Legatum Institute. The ranking they give Taiwan's education is 4th. These rankings are all testimony to the world's recognition of Taiwan's efforts in education. They also encourage us to focus even more on cultivating skills and excellence in Taiwan. Drastic changes are taking place in Taiwan and around the world. Globalization, decreasing fertility, global warming, the digital age and an aging society have greatly impacted education, and the government needs to respond immediately. The Ministry of Education will create a blueprint for cultivating excellence for the next 10 years, based on the cultivation, retention and recruitment of highly-skilled people, with the goal of developing our ability to compete in the international community and to establish a firm footing for the nation.

Education is the foundation of the nation: it exerts a profound influence on national development and on the lives of its people, and requires long-term strategies. It is also closely associated with the happiness index of people in Taiwan. In the future, the Ministry of Education will continue to take an innovative approach and encourage conduct that invokes a sense of happiness, and that allows students to develop appropriately, gives parents peace of mind, allows teachers to do their best, allows society to be clearly aware of the growth and progress achieved in education, and that establishes education as the cornerstone of the nation.



Dr. Wei-ling Chiang
Minister of Education
September 2013

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 from 6 years to 9 years in SY1968, to include junior high school; in SY2014 the period will be extended to 12 years to cover senior high school) senior high school three years, age 15-18; 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 life-long learning courses give the general public an opportunity to extend their learning experience.

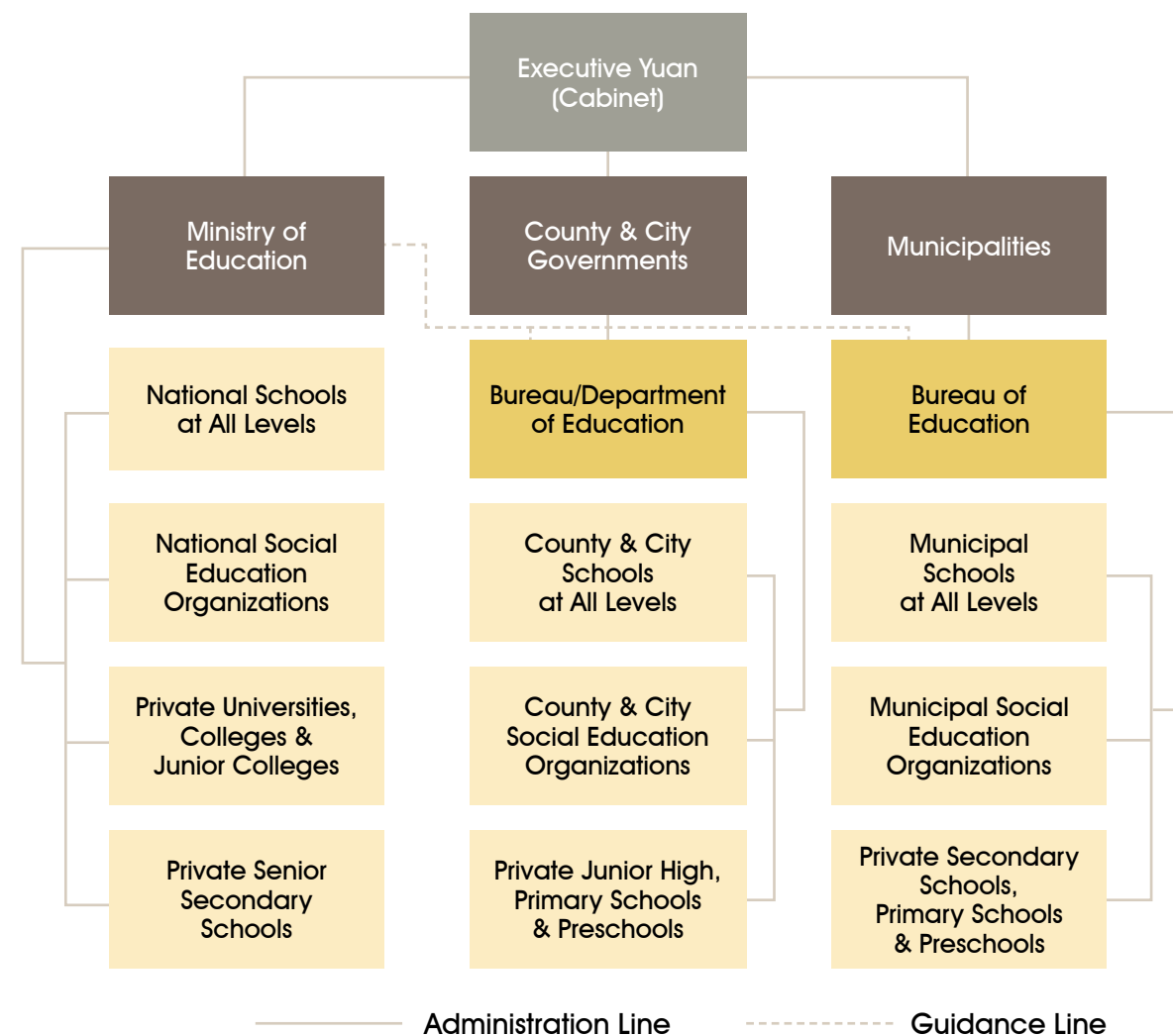
Currently the total number of schools at all levels (including preschools) is 11,495, making for a distribution ratio of 318 schools per 1,000 square kilometers. The total number of students is nearly 5.01 million, an average of 215 students per 1,000 in the general population. The total number of teachers is about 300,000, meaning each teacher teaches an average of 17 students. In recent years the density of schools has increased, while the number of students per teacher has decreased, and the total number of students at the college level or above has increased. At the same time, the literacy rate of the population 15 years old and above reached 98.3% at the end of 2012, of which 71.3% had an education level of senior high school or higher.

Different stages of education ought to focus on different aspects of development. Therefore we hope to achieve “healthy and happy growth for pre-schoolers”, “a happy and lively learning experience for elementary school students”, “balanced and well-rounded development for



junior high school students”, “increased general knowledge for senior high school students”, “development of basic skills for vocational high school students”, “professional knowledge acquisition for university students”, “professional skills nurturing for vocational college students”, “independent research skills for graduate students”, “lifelong learning for the general public”, and “cultural adaptation for new immigrants”. ■

The Education Administration System 2013



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 high 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. Compulsory education will be extended to twelve years in SY2014.

Senior High School and Vocational Education –

This category includes senior high schools and vocational high schools and consists of three years of schooling. Senior high school includes “ordinary senior high schools,” “comprehensive senior high schools,” “magnet senior high schools,” and “experimental senior high schools.” Vocational high schools offer a special curriculum with general high school courses as well as classes in practical skills, classes in industry-related subjects, and cooperative education programs, all designed in line with the various needs of students for a balanced vocational education.

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 vocational high schools.

Teacher Education Programs –

The teacher education system, comprised of multiple providers, serves to screen potential teacher candidates and establish a pool of prospective teachers. Teachers who teach in preschool, primary school, junior high school, and senior high school are trained in universities of education 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 Associate Degree offered by technical colleges 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.

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.

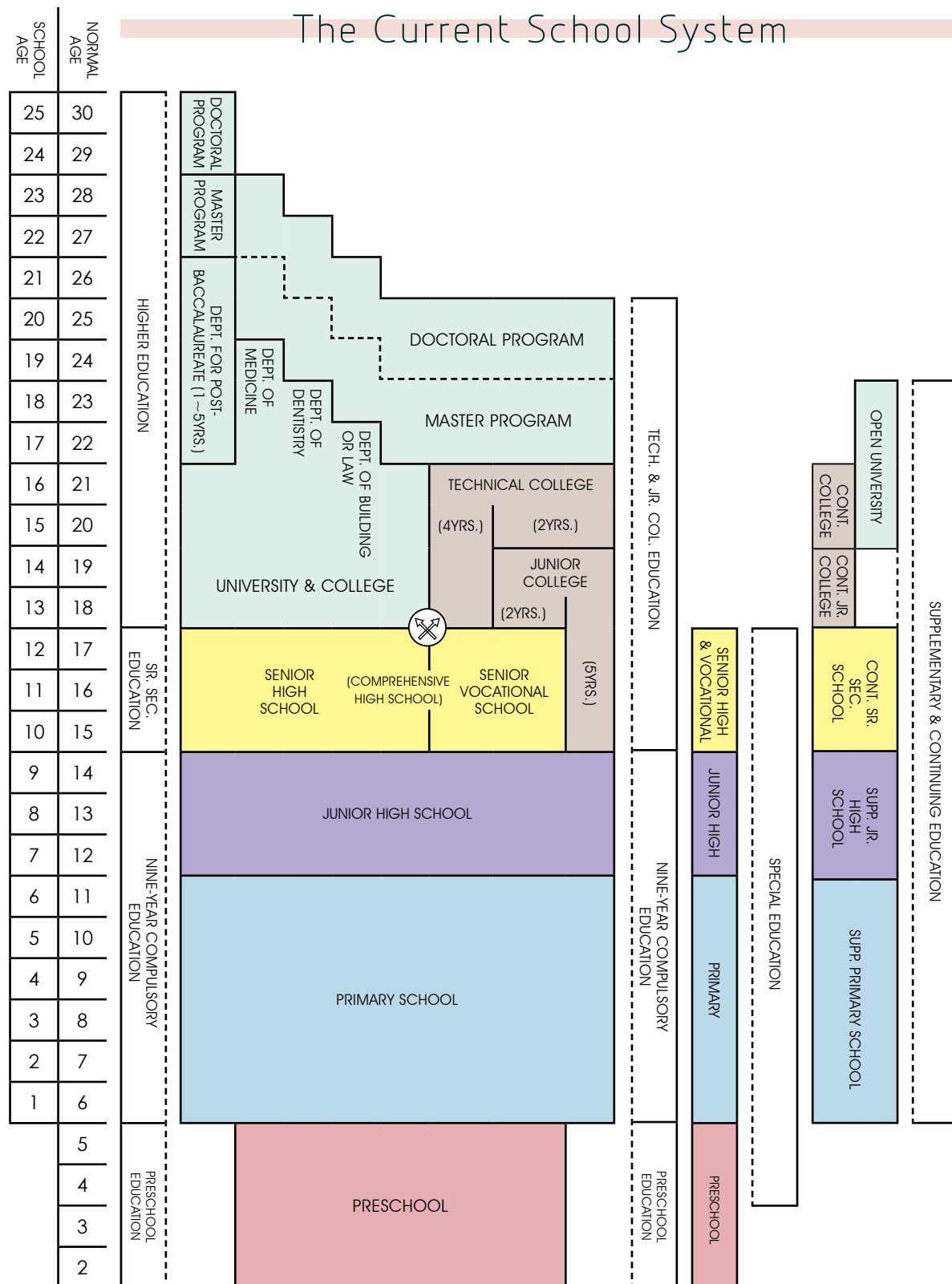
Special Education –

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.

Supplementary and Continuing Education –

Supplementary and continuing education institutions provide extensive and comprehensive learning opportunities for the general public. This kind of education can be divided into general supplementary education, continuing education, and short-term supplementary education. ■

The Current School System



Education Reform



A Establish White Paper on Talent Cultivation to Actively Engage in Talent Cultivation and Recruitment

Experts from industry, government, academic and research fields are invited to form the advisory committee for the White Paper on Talent Cultivation. Their interdisciplinary knowledge and experience will be integrated and comments will be collected from all fields on topics such as 12-year Basic Education (K-12), college education, technological and vocational education as well as internationalization and global deployment of human resources. The White Paper on Talent Cultivation has been written and will continue to receive future funding to implement the action plans in the white paper to actively engage in talent cultivation and recruitment.

B Promote 12-year Basic Education to Strengthen Diverse and Appropriate Development for Students

Aptitude-specific development is the core belief of the 12-year Basic Education. Junior high school students may receive education with appropriate development and balanced focus on all subjects so that they may fully develop their potential in appropriate educational facilities after graduation. Meanwhile, evaluations are conducted at schools to ensure the school's performance, to increase the quality of the schools within a community, and allow each and every child to develop appropriately to reach the future that they deserve.

C *Implement Early Childhood Education and Care Act to Create Quality Preschool Education*

Nurseries and kindergartens have been integrated in order to establish a comprehensive preschool service system that covers both education and care to realize the policy with young children at the center and their welfare as the priority. To comply with the Early Childhood Education and Care Act, which stipulates quality, popularized, affordable and adjacent educational and care facilities as its service mission, the government established a Development Plan for Quality Educational and Care Services to assist with the overall adjustment in preschools. Public preschools will be increasingly operated in the format of non-profit preschools to increase the number of affordable preschools and satisfy parents' needs for their children's education and care. The environment and equipment of the education and care facilities will also be improved to give young children a safe and comfortable learning environment.

D *Shorten the Gap between School and Work and Build Quality Human Resources*

In order for school to make a seamless connection with industry, the industry promoted Phase 2 Reinvention Program for Vocational and Technological Education as well as Model Technological University Program to improve the overall competitiveness of technological and vocational education. Promote courses that are directed toward practical experience to strengthen students' learning and career experience in school as well as fundamental abilities in basic industrial technology based on work-oriented learning. This will provide corporations with the innovative talents they need to improve industrial technology and increase the employment rate of the graduates. Meanwhile, cultivate professionals with international mobility and interdisciplinary skills to secure Taiwan's advantage among the global and Asian Pacific regions, which will ultimately improve the return on investment in human resources.



E *Enhance and Internationalize the Quality of Higher Education*

To build a solid teaching and research foundation in the universities, evaluation mechanisms are planned and improved to encourage universities to develop diverse characteristics and improve operational efficiency. International students are encouraged to pursue degrees or study Chinese in Taiwan to increase the number of international students in Taiwanese universities and to heighten the degree of internationalization in higher education. Public and private colleges and universities are encouraged to send students with outstanding academic performances to overseas universities to study or intern in overseas corporations. Students with potential will thus gain additional opportunities to conduct international exchanges and collaborations. The country will thus gain professional talent with a global perspective and practical experience.

F *Deepen Teacher and Arts Education to Create Mentors and Citizens with Artistic Strengths*

Promote the White Paper on Teacher Education and establish a teacher education system that is based on professional standards and the idea of teacher education. Enhance the teacher in-service education mechanism to elevate their professional knowledge and skills. Conduct extensive evaluations of teacher's professional development to help teachers reflect on and improve upon their teaching methods, and keep advocating for the inclusion of teacher evaluation in the Teachers' Act. Establish communication mechanisms for administrative organizations of arts education at all levels and formulate mid- to long-range plans for aesthetic education. Use arts education to cultivate citizens' sense of culture and cultivate exemplary teachers on the foundation of aesthetic education.

G *Build a Lifelong Learning Society and Promote the Year of Family Education, 2013*

Deeply establish community education with local characteristics and update the hardware and software in social education institutions. Improve the functions with features and service quality of public libraries to provide the public with diverse learning opportunities and the enjoyment of lifelong learning in languages and reading. As the population aging, senior citizens learning centers were established in all townships and villages throughout the country. Universities and colleges are also encouraged to transition into Senior Citizens' Active Lifelong Learning Universities to create multiple learning channels for seniors. The promotion of the Year of Family Education, 2013 is divided into four seasons, including cherish family values, friendly family interaction, generational cultural heritage and marriage management to advocate family values.

H *Integrate Assistance for Education for Disadvantaged Students and Bring about Social Justice and Care*

Provide multiple educational assistance to protect disadvantaged students' right to education. Implement the regulations and enforcement rules for the Special Education Act to guarantee the rights of students with physical and mental disabilities. Implement regulations related to the education of indigenous people



and promote educational assistance for the children of new immigrants. Balance the development of education in urban and rural areas and strengthen the priority education zone program to eliminate the urban-rural gap and distribute educational resources reasonably. Promote supplementary education to subsidize after-school care for disadvantaged students and improve their academic performance.

I Promote E-learning and Establish a Learning Environment High in the Clouds

Increase the efficiency of the bandwidth for educational and academic networks as well as the quality of the wireless internet on school campuses. Classroom and research material can be shared through an academic online network or through establishing inter-school video learning. Provide students and faculty with quality cloud resources and service they need to develop a new e-learning model that is student-centered and build a digital and healthy school. Develop the next generation online learning courses that are open to the public to provide them with lifelong learning opportunities that are fair and voluntary. Establish a joint venture collaboration model to promote the input of private resources for mutual development.

J Build a Friendly Campus to Promote Students' Physical and Mental Health

Promote positive teaching methods and increase teachers' knowledge and skills in counseling in hopes of eliminating incidences of physical punishment and create a campus atmosphere that is friendly and values human rights. Actively advocate the legislative efforts of the Student Counseling Act to establish a sound school counseling system that promotes proper life values and gender equality as well as holistic care and development, and ultimately free school campuses from gender discrimination. Keep students and school campuses from bullying, gangsters and drug abuse. Improve school health and sanitation, promote student health and development and build healthy personalities and characters.



K Cultivate Youths' Creativity and Shape Their Values

Cultivate diverse intellectual ability and creativity of students in senior high schools and vocational high schools and leadership among female college students to improve their self-recognition and passion for public participation. Conduct Taiwan International Design Competition to connect the design creativity of Taiwanese students with international design education. Increase youth participation in policy making and establish youth volunteer centers and a network for youth volunteer services and increase their international experience, knowledge and skills. Establish an information platform for learning through serving, conduct training for talent related to learning through serving and continue to promote youth travel programs to build a friendly environment for youth travel.

L Enhance Sports Development to Improve Citizens' Health and Obtain Results at International Competitions

Bring health and vitality to Taiwan and improve physical fitness and quality of life by increasing the number of people who exercise regularly. Improve students' physical fitness, care for women's right to exercise and encourage seniors to participate in outdoor activities. Develop the habit of healthy living and popularize multiple national sports. Obtain better results in international competitions and actively promote international and cross-strait sports. Implement the regulations and support measures for Sports Industry Development Regulation to promote its development. Enhance public sports facilities at all levels, build the bike path network to give citizens a quality sports environment. ■

Compulsory Education



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 will further extend it to 12 years in SY2014, which will help 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.



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 will be adopted in SY2014, a new landmark for our education system.



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.

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 improve the teacher supervisory system and follow through with remedial instruction.

With increasing globalization in recent years, many nations are experiencing a growing income gap between the wealthy and the poor as well unequal resource distribution between town and country. Geographical factors and rapid changes in society can lead to uneven distribution of educational resources, causing an educational imbalance between town and country and depriving minority groups of equal access. To solve these regional education issues and bridge the resource

gap between different locations, we are working to put the following into practice: reasonable distribution of educational resources, equality in educational opportunity, and realization of equal education and a just and fair society.

Another key strategy is the idea of social care and assisting in the education of children from economically disadvantaged families. Currently there are 3,147 public senior high schools, vocational high schools and junior high schools as well as elementary 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. ■



Reading Empowers Tungmen Students

The diligent efforts of educators in Tungmen Primary School in Hsinchu City's East District in cultivating students' reading habits have finally paid off, as the school received the "Reading Rock School" Award conferred by the Ministry of Education in 2012.



The whole story began with a fairy-tale like library. Tungmen's cabin-shaped bookshelves and colorful desk sets spread around inside the library have successfully created a cozy reading environment for kids.

"We've mapped out a complete system to develop students' interests such as parent-kid reading, 10-minute morning reading, newspaper reading, e-learning and more," says Principal Huang Mei-hong.

Reading courses are arranged once a week. Certain books are also designated for students in different grades. Such measures are aimed at allowing students from disadvantaged families to have access to more cultural stimulation.

In particular, the morning reading activity is especially welcome among students. "Some students say that the morning reading draws them to school," says Huang.

Instead of a conventional approach, Tungmen's teachers have tried more diverse methods by introducing multi-text reading and cooperative learning into the classroom.

A supportive circle consisting of the administrative units, teachers' communities, parents and exclusive courses has also been established to allow students to explore a new world at their own pace.

In addition to these widely acclaimed achievements in reading, Tungmen has also set up a toy library suitable for various ages, a butterfly biological zone and an art exhibition and a 3,000-meter running event before graduation.

In the future the school will continue its reading courses while at the same time putting more emphasis on students' moral education, notes Principal Huang. ■





Rubik's Cube is Not Just for Fun

*Chang Wan-ting, 14, Sophomore,
Tainan Jiansing Junior High School*
*Yang Cheng-yuan, 13, Freshman,
Tainan Jiansing Junior High School*

In May 2013 four students aged between 13 to 18 won a Gold Award in the I.C.T and Multimedia category at the International Invention Innovation & Technology Exhibition for their brainchild – a Magic Cube with a Quick Response Code.

The QR-Magic Cube is the outcome of an innovative idea that combines a QR code and Rubik's cube. Using a smart phone or tablet PC to quickly scan the QR code on the surface instantly turns the cube into a navigator or a key. The cube can be used as a gift or as a bundled giveaway for government units or companies.

"QR code is usually printed on handbills for business purposes," says Chang Wan-ting, a sophomore at Tainan Jiansing Junior High School. "People usually throw them away without even noticing the QR code on it."

They therefore tried to combine a QR code with a Rubik's cube, the worldwide popular toy, to turn it into a marketing tool as well as a fun toy for all ages. The two students' two elder brothers joined in later as the idea matured.

The team encountered their biggest challenge when they tried to make the cube scannable while at the same time allowing it to rotate smoothly. "We failed the first time," says Yang. "But we stuck it out to the end by trying different approaches."

"We have spent a lot of time on the invention, starting from a wild idea and up until the finished product," says Chang. "Participating in the competition helped us develop persistence, which I believe will remain a lifelong virtue," says the young inventor. ■



Senior High School



Senior high school 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 high schools can be divided into "ordinary senior high schools," "comprehensive high schools," "magnet senior high schools," and "experimental high schools." Students who graduate from junior high school or have an equivalent education level can gain admission to senior high school through methods such as examination-free entrance, application, recommendation and screening, and registration and placement. 160 credits are required for graduation.

Senior
High
School

A. Promoting 12-Year Basic Education:

1. 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.

2. To allow junior high school education to become more adaptive, creative, active, superior and quality-driven, and to enhance the quality of high school and vocational high school 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.

3. Key objectives for the year 2012~2013: Promote the "Implementation Plan for 12-year Basic Education" approved by the Executive Yuan and ensure that it is completely and effectively carried out.

B. 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 high school students, and there are also science talent cultivation plans and domestic and international exhibitions to stimulate interest and learning in the sciences.

2. Key objectives for the year 2013:

(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 high school students.

(ii) Plan to host the 26th International Olympiad in Informatics in 2014.

(iii) Continue supporting secondary and elementary education projects in science and cultivation programs for scientific talent.

(iv) Set up science programs in senior high schools and monitor the effectiveness of the programs.



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

1. The main goals of the third 5-year plan to "Improve Second Foreign Language Education in High Schools", launched in 2010, include:

(i) Encouraging and 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 chose to enroll in a second foreign

language, a number which ballooned to 108,166 by SY2011. In SY2011, ten colleges and universities applied to offer 33 advanced placement foreign language classes for high school students, which is 21 more classes than were offered in SY2008.

3. Key points for the year 2013~2014:

Continue encouraging schools to teach more foreign languages and offer more foreign language classes in order to cultivate talent and increase international competitiveness in the area of languages.

Vocational high schools serve to cultivate technical personnel with professional knowledge and practical skills, and to help students lay the foundation for their future careers. To meet the rapidly-changing demands of students and industry, the following programs have been adopted:

Vocational
High
School

Vocational Schools

Vocational education is credit-based, with 160 credits required for graduation. Curriculum planning focuses on meeting the needs of the rapidly-changing industry. Graduates can choose to continue with studies at a university of technology, technical college or two-year junior college, to enter the job market, or to start one's own business.

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," changing the hour-based system into a credit-based system. Students can graduate after completing 150 credits in 3 years.

Practical Skills-Based Curriculum

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.

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





Eco-friendly Yet Shining: a Fish Scale-made Dress Wows the Audience

Lin Li-hsin, 18, Senior, Department of Facial & Hair Beautification, Kaoyuan Vocational High School

A bunch of students aged between 18 and 19 took their interpretation of the term “eco-friendly chic” and fabricated it into a ballet dress made of waste mullet scales, winning the runner-up spot in the national vocational high school students’ project competition this year.

Living near a fishing harbor and seeing lots of discarded fish scales, Lin Li-hsin, then a senior studying in the Department of Facial & Hair Beautification, felt the impetus to recycle and make the most of them.

Lin teamed up with classmates Chuang Tsu-yi, Wu Pei-chi, Yang Yu-hsuan, Ke Chin-yao, Ling Yu-wen, Wu Ching-wen and Li Yi-hsuan to further develop the idea. They found that the scales of jumping mullet reflecting a delicate radiance in the

sunshine were a lot like a ballet dancer pirouetting in the water.

After gathered a desired quantity of materials, Lin and her classmates first cleaned, dried, trimmed and ground the scales. Then, they applied their nail art painting skills to do some painting.

The winning work underwent several failures before they came up with a satisfactory finished product. “It’s time-consuming and took a lot of labor, as we had to trim the different-sized scales to the same size,” said the students, “not to mention the smell of the scales.”

But the most challenging part came during the painting process. “We tried crystal nail with nail polish, acrylic lacquer with nail polish, and finally adopted a nail-painting spray gun with nail polish that dries quickly and can apply color evenly on scales.

“The spirit of teamwork and the chance to see other creative works were the most rewarding parts of this experience,” said the team. ■

Seeing his school club instructor rush in and out to answer calls on a fixed-line phone inspired Lu Yu-yung to invent a utility that can answer a phone call through a cell phone or other appliance with no extra charge. The idea won him and his team a gold medal in the category of Telecommunications at the 2012 Invention & New Product Exposition (INPEX) in Pittsburgh, Pennsylvania.

EZ CHAT, as the name suggests, allows people to chat effortlessly simply by connecting to any electronic products through Bluetooth. Thus, within a range of up to 90 meters, according to the team, people can pick up phone calls or call out via a fixed-line phone to save fees.

“Many people have had an experience where phone rings just as they are about to leave or return home, and then it suddenly stops ringing when you rush to answer it,” says Lu. “If you have EZ CHAT installed at home, you can easily answer the call from outside the house,” he says.

Lu teamed up with his peers Li Yu-feng, Pan Kuan-yao, Tsai Jen-kai and Lin Chih-chiang to design a data interconnection bridge after 13 months’ effort. In addition to the convenience, EZ CHAT also helps to avoid the risk of bacterial inter-infection,” adds instructor Yang Chen-che.

“The most challenging part during the invention process was consistency in modifications and the testing of programs,” recalls the team. “We also had to reinvent the circuit design several times due to failures.”

However, the students believe that the best invention is one that makes life better, and they eventually conquered all obstacles and won the gold medal at widely-acclaimed INPEX.

“Winning the competition has brought us huge sense of accomplishment and made us more confident in everything we do,” say the young inventors. ■



Remote Chat Utility Makes Communication Easier

Lu Yu-yung, 16, Freshman, Chung Shan Industrial & Commercial School

Higher Education



Taiwan enjoys excellent global competitiveness in spite of limited land and natural resources. According to the World Competitiveness Yearbook 2012 published by the International Institute for Management Development (IMD) in Switzerland, Taiwan ranked seventh overall in global competitiveness among 59 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 2012, Taiwan ranked ninth in “Higher Education and Training.” Taiwan’s human resources provide highly-qualified workers in sufficient supply to the labor market and brings 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 SY2012, there were 162 universities and colleges and 1,355,290 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 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 to conduct evaluations of universities. This evaluation 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 examines 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 fourteenth among 133 countries in innovation in 2012. 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 to 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:

1 Taiwan is reaching out to the world

Seven years after the plan started, 10 of the universities subsidized by this plan are ranked in the world's top 500 universities as well as the world's top 100 universities in the global university rankings (UK's The Times and Quacquarelli Symonds, QS). In addition, eight schools are ranked among the 500 schools in Shanghai Jiao Tong University's Academic Ranking of World Universities 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.

2 The quality of students continues to improve

Top universities in Taiwan have instigated reforms in their general education systems and interdisciplinary programs. Currently, there are 85,072 students enrolled in interdisciplinary programs. The universities are also fulfilling their social responsibilities, as seen in actions like support of disadvantaged students.

There are currently a total of 17,072 disadvantaged students enrolled in colleges and universities, a figure growing at an average rate of 139% annually.

In addition, the top universities have also responded to public outcry at poor higher education quality, promising to improve the learning environment and boost student motivation to enhance the quality of university students.

3 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 grown by 131%, and income from intellectual property rights has increased by 216%. This momentum will in turn stimulate more innovations and increase contributions to society.

4 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. More than 50,000 foreign scholars have visited Taiwan, and nearly 50,000 foreign students are studying in Taiwan's top universities. On average, almost 450 international conferences are held in top Taiwanese universities each year, thereby broadening the horizons of Taiwanese students.



Vocational and Technological Colleges and Universities

The institutions in this category include junior colleges, technical colleges, and universities of technology, accounting for a total of 91 schools. Junior colleges are divided into 2-year programs and 5-year programs. Technical colleges and universities of technology can admit students for associate degrees, bachelor degrees, and masters degrees, while universities of technology can also accept Ph.D. students.

In accordance with government policy, the key points for development in these schools are:

1 Implement multiple-route admissions

Vocational and technological colleges and universities recruit students through separate examination and enrollment systems:

(1) 5-year junior colleges recruit graduates of junior high schools. Entrance methods include examination-free entrance, application and drawing lots, and placement.

(2) The 4-year colleges/universities and the 2-year junior colleges employ the following methods:

- a screening by skill;
- b recommendation;
- c registration and placement;
- d The Star Plan, which is designed to balance the gap between urban and rural areas and support disadvantaged students in remote areas;
- e application using the Subject Competence Test for a given year and other written reviews that may be beneficial for the review.

(3) 2-year colleges accept the graduates of 5-year and 2-year vocational schools through several methods:

- a recommendations of students with outstanding skills;
- b registration and placement;
- c individual recruitment.

2 Enhance teaching quality:

promotion of government programs, enhancement of teaching quality, and adoption of a practical



approach towards teaching:

(1) Implement the Program for Promoting Teaching Excellence for vocational and technological colleges and universities, the goals of which are:

- a Enhance professional teaching skills;
- b Strengthen curriculum design;
- c Strengthen student motivation;
- d Set up teaching evaluation systems;
- e Implement and/or improve all areas related to teaching quality.

(2) Strengthen teaching and learning abilities

- a Offer subsidies for instructors to gain work experience in public and private firms.
- b Recruit from industry to enhance teaching.
- c Promote off-campus internships.

(3) Encourage students to participate in various competitions

Since SY2010, outstanding students have been able to apply for airfare subsidies to take part in international competitions and exhibitions.

(4) Encourage professional certification

Instructors and students are encouraged to obtain professional certification to improve teaching quality and enhance students' competitiveness in the job market.



3 Promote evaluations of vocational and technological colleges and universities

Each school is evaluated as an integral unit every 5 years to improve quality of education.

4 Promote cooperation between the industry and academia to cultivate talent

Encourage interaction between academia and industry; design specific courses or curricula to meet the needs of industry personnel.

(1) Collaboration between industry and academia
Develop vertical education systems, i.e., 3 in 1 (vocational high schools + vocational colleges + enterprises) and 4 in 1 (vocational high schools + vocational colleges + enterprises + employment training centers) programs in various combinations of education plans:

3+2 3 years in vocational high school and 2 years in 2-year junior college;

3+2+2 3 years in vocational high school, 2 years in 2-year junior college, and 2 years in a 2-year



technical college/university completion program);

3+4 3 years in vocational high school and 4 years in a technical college/university;

5+2 5 years of junior college plus 2 years in a technical college/university completion program

(2) Masters Degree Program for Industry Professionals

(3) "Final Mile" Program

(4) Second-Baccalaureate Program

5 Emphasize innovation and research / development

To encourage collaboration between schools and industry, the government offers subsidies to schools that establish regional cooperative work-study centers and promotes the "Industrial Region Work-Study Program", with the goal of improving the national economy and contributing to society.

6 Launch international partnerships and exchanges

To cultivate international talent, the government encourages schools to establish an international environment, including internationalized campuses, curricula, and administration systems, and promote global cooperation and exchanges, including international collaboration in research and teaching, teacher and student exchanges and other collaborative programs.

7 Develop technological university paradigms

Guide technological universities to build the research and development environment for industry and academic innovations and bring about the cultivation of talent and intellectual properties in this area. Establish diverse paradigms for the characteristic development of vocational and technological colleges and universities to encourage seamless collaboration between the schools and industry and strengthen the foundation of industry and technology. ■



Lai Rou-jun, 22, a graduate of the Hwa Hsia Institute of Technology's Department of Applied Cosmetology

As the saying goes, a newborn calf fears not the tiger. The first time Lai Rou-jun participated in the Asian Hairstyling & Make-up Competition in 2012, she outperformed some 40 other contestants to claim the title in the banquet hairstyle group.

Then a senior in the Department of Applied Cosmetology, Lai derived her idea for the winning hair design from S-shaped wave hair and C-shaped hair, both representative Las Vegas hairstyles calling for demanding skill.

Lai incorporated the two features into a Japanese bun hairstyle that she was good at, creating a unique hybrid of both Japanese elegance and avant-garde pop art for the Japan contest session. Later Lai developed another style which mixed

sharp-pointed images with a balanced fan-shaped base in the finals in Hong Kong.

Seeing excellent works from various countries has lent Lai a peek into diverse aesthetics. "For instance, contestants from Japan tend to seek various levels of simplicity and elegance, while competitors from Hong Kong strive for creative effects that highlight their skills," said Lai.

A keen observer like Lai takes every chance to analyze the characteristics and variations in every work and to learn from them. "I hope to create more visual effects that have not been tried yet, and therefore lead the way in the industry," says the ambitious titleholder.

In instructor Shih Mei-fang's opinion, students' creative thinking and open-minded attitudes are priceless treasures. "No matter how great the idea may be, a robust foundation of skills is still necessary for a quality outcome," says the teacher. "Continuous effort and practice might be lonely and frustrating, but is essential for students who wish to embark on a hairstyling career." ■



Hung Ting-wei was only a graduate student when he captured a gold medal at the Food & Hotel Asia 2012 Imperial Challenge in Singapore, beating out other eight teams from Singapore, Shanghai, Beijing, Hong Kong, Korea, and Malaysia.

Touted as the Olympics of Chinese culinary arts, the Challenge is held once every four years. In the 2012 edition, the criteria for the competition were elevated to a new height. Contestants had to prepare and serve 35 sets of dishes in four and a half hours, as opposed to the former requirement of 10 sets. A set is defined as a meat dish, seafood, vegetables, snacks, and a cold dish, plus six side dishes.

To be well prepared for the contest, Hung spent nearly a year collecting representative Taiwanese food ingredients and practicing his skills. The winning menu centered on health and included duck breast rolls, black tuna, sponge cucumber noodles, and dragon beard candy.

"We incorporate local ingredients into our dishes, in the hope of pushing Taiwan's culinary arts onto the international stage," said Hung.

Equipped with speed and substantial cooking skills, Hung and his team outperformed other competitors to bag the Gold Award at preliminaries and the Gold with Distinction at competition finals.

Hung has participated in various international competitions, holding to the belief that only through consistent practices and effort can one forge his skills and broaden his horizons.

A frequent winner in international contests, he says he wants to combine theory and practice more seamlessly. "Instead of becoming a copycat, I would like to become a real culinary artist who possesses skills, art, and — last but not least — morals." ■

Lifelong Education



A | Lifelong Learning Promotion: The 3-3-1 Initiative

To cultivate the habit of lifelong learning, nurture citizens that thrive on learning, and thus build a lifelong learning society, from 2010 onwards the Ministry of Education has promoted the 3-3-1 initiative. This policy encourages citizens to exercise at least 30 minutes a day, learn for 30 minutes a day, and perform one good deed a day. The active promotion includes:

1. The trial issue of lifelong learning cards
2. The election of lifelong learning role models.
3. Encouraging the practice of a good deed daily.

B | 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, in the process encouraging lifelong learning institutions to establish systematic curricula so as to foster professional skills among the general public.

C | Promotion of Open University Education

Taiwan has two Open Universities, 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 40,000 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.



D | "Learning Hometown – Sustainable Community" Project

To promote lifelong learning, the Ministry of Education has worked to promote "Lifelong Learning Neighborhoods" throughout the country, allowing these neighborhoods to become lifelong learning environments that provide opportunities for participation and growth, thus fulfilling the vision of lifelong learning that everyone can learn anytime. A team of 14 people made up of representatives from various governmental institutions as well as experts serve as a professional coaching team of counselors. In 2011, the "Learning Hometown – Sustainable Community" project was launched with 4,408 training sessions and seminars, and 126,576 participants. The program continued in 2012 with 3,094 training sessions and seminars and 55,633 participants. In 2012, 97 community learning posts were established, offering courses such as arts and culture, eco-leisure and local industrial improvement. The communities are able to establish the learning system by providing the public with participatory and learning channels for lifelong learning and the means to contribute what they have learned through revitalizing existing space.

E | Multi-functional Lifelong Learning Center Pilot Projects

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, 15 elementary schools were chosen in SY2011 to be the sites of lifelong learning community centers; from Dec. 2011 to Mar. 2012 these 15 community centers were evaluated with eight elementary schools added in SY2012 to assist in their growth and sustainability and offer a learning platform for community members.

F | Oversight of Short-term Cram School

The number of short-term cram schools stood at 18,799 as of Mar. 5, 2013. The Ministry of Education has delegated the oversight of these cram schools to local governments, a job which is included in the local education authorities' scope of evaluation and supervisory work. Public safety lectures and inspections are also carried out annually. A "National Cram-School Information System" database is now being set up to allow the public to look up relevant information.



G | Community Colleges

76 community colleges in 2011 and 76 community colleges in 2012 as well were subsidized for offering the public educational institutions for lifelong learning, raising public awareness of critical social issues and encouraging the public to take part in community education. 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.



H | Advocate Family Values and Promote Family Education

An aging society, low fertility, high divorce rate, interracial marriages, single parent and restructured family are impacting the demographics of Taiwan. The sense of values is also tilting toward individualism. Conflict in fragile marriage relationships and the lack of parenting education for parents are becoming major factors in child abuse and juvenile crimes. 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 Law as the blueprint. The regulations are intended to connect

central and local departments in promotional efforts. In addition, the Ministry established an implementation plan for the Year of Family Education, 2013. The aims are to cherish family values, friendly family interaction, generational cultural heritage and marriage management to advocate family values, conduct related programs and activities and help citizens establish a healthy homeland.

I | Promotion of Elderly Education

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. 12 years from now (2025), the elderly are expected to constitute 20% 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, and to protect the rights of the elderly to learn, since 2008 the Ministry of Education has set up "Senior Citizen Active Learning Centers" as well as "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. The project is focused on improving opportunities for the elderly to participate in society and lifelong learning, and offering them an adaptive and friendly learning environment.

J | 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 central and local public libraries 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.



K Update the Hardware and Software in Social Education Institutions to Create Diverse Learning Fields with Quality

The Ministry will guide the national social education institutions to develop mid-term development plans. These institutions may establish greater utilization of their organizational structures through cross-industry alliances, collaboration with schools and the infusion of corporate capital, which will hopefully improve the features, functionalities and service qualities of the national social education institutions. Marketing activities will be held regularly on multiple subjects to encourage the public to visit national social education institutions and experience the fun of learning. In addition, the Ministry has also been conducting relocations. The relocation plan for National Taichung Library started in 2012 and the relocated library started test operation on May 15, 2012. The official opening was on June 3. (The library was renamed National Library of Public Information on January 1, 2013.) The National Museum of Marine Science and Technology (Preparatory Office) test operated the

Regional Exploration Hall on June 30, 2012 and the Marine Theater was inaugurated on February 1, 2013. Other administrative and research facilities will be fully open in 2013.

L 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. In 2009 this effort was transformed into a charitable education project and assisted event, and in 2011 it was further transformed into a lifelong learning education foundation.

M Promote Native Language Education to Increase Citizen's Native Language Skills

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 based on the principle of equality. The Ministry will continue to maintain the electronic dictionary for native languages, conduct certification programs, establish online 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



The Special Education Act was amended in 2013 to enhance the development of special education and move toward the goal of taking care of both gifted and disabled students. The emphasis is on both quality and quantity in education, and protecting these students' right to a proper education. A report published in 2011 laid out the rules for implementing adaptive teaching and developing the full potential of these students to enhance the quality of special education.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has announced that all governments should adopt the concept of inclusive education. All students should be permitted

to study in public schools except for those who have special individual conditions. Inclusive education means that students should be placed in a least restrictive environment (LRE, i.e., in public schools near the students' homes, so that they may attend classes with peers of the same age, and receive appropriate support from the government). As of 2012, 93.37% of preschool disabled students in Taiwan are attending regular public schools. The figure is 87.19% for elementary schools, 84.44% for junior high schools and 73.06% for senior high schools.

The budget for special education has increased from NTS 5.876 billion in 2002 to NTS9.051 billion in 2013. The percentage of the total education budget allotted to special education rose from 3.84% to 4.58%. In 2012, the number of disabled students in secondary and elementary schools was 103,864, while that of gifted students was 31,792. There were 11,521 disabled students in universities.

Key Achievements During 2002-2012 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.
12. Establishment of special education evaluation system so as to increase the efficiency and effectiveness of special education.



In the Next Decade, We Hope to Take the Following Measures to Improve Special Education:

1. Continue amending and putting into practice applicable laws.
2. In line with the integration of kindergartens and nurseries, to extend special education to children as young as two years of age.



3. Strengthen the promotion of inclusive education in junior high schools and elementary schools.
4. Establish a roadmap for disabled students in the 12-year Basic Education system.
5. Encourage universities to set aside places for disabled students in its entrance screening or hold separate entrance examinations for disabled students.
6. Establishment, in phases, individualized support systems for disabled students in universities.
7. Continue with the program for gifted students.
8. Actively improve accessible facilities on campus so as to give disabled students equal rights to education. ■

Sports Affairs



A Overview

The Sports Administration of the Ministry of Education was established on January 1, 2013. The administration integrated sports resources from schools and society and drafted the White Paper on Sports Policy with the vision of healthy citizens, exceptional athletic skills and energized Taiwan as well as the mission of developing healthy, exceptional talent and creating pleasant sports experiences. The administration also plans the directions in which to guide the development of sports policies and prepare the sports environment.

b Key Policies and Achievements

Popularize and diversify national sports ▶▶

1. Promote the sports island program with Exercise Stimulus Program, Express Sports Pleasure Exercise Program, Advisory Project for Sports Organization Establishment and Healthy and Sustainable Sports Island Project to promote regular exercise among the general population and improve citizens' physical health and quality of life.

2. Improve students' physical fitness. Promote the Inclusionary Program for Physical Fitness in School Admissions and Physical Fitness Instructor Cultivation Program. 264 senior high schools and vocational high schools as well as 69 universities, colleges and junior colleges have taken physical fitness into consideration for student enrollment in SY2012. In addition, physical fitness exam stations were established to coordinate with the 12-year Basic Education. 85 stations will be established in 2013. The number of stations will increase to 150 in 2014.

3. Continue to care for women's right to exercise. Guide local governments to integrate private resources and hold multiple community recreational activities. Encourage women to exercise.

4. 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.

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

6. 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.

7. Establish counseling and management mechanism for highrisk outdoor sports and emphasize sports safety for the public.

Obtain better results in international competition ►►

1. Prepare for the 17th Asian Games, 2014 Incheon: Conduct three-stage athlete training program in accordance with the Training Program for Athletes Attending the 17th Asian Games, 2014 Incheon to

improve the athletes' strength and potential for winning medals in Incheon.

2. Continue to promote Baseball Revitalization Program: Promote Base Revitalization Program. The program period lasts from 2010 to 2013 and the goals are to increase the number of base level baseball teams exponentially and place within the first 5 in the 2013 World Baseball Classic.

3. 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.

4. Establish a sound full-time sports coach system: Establish the touring 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. Integrate the old and new systems for the evaluation of full-time sports coaches. Conduct regular visits to check the services of full-time sports coaches, emphasize the transportation of talent and continuous training results.

Develop the sports industry ►►

1. 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.

2. 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.

Actively promote international and cross-strait sports events ►►

1. Continue to guide and promote sports organizations in Taiwan to hold international tournaments: Promote international exchange in sport; 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.

2. Actively prepare for the 2017 Universiade in Taipei: Assist with the operation of the Department of Sports, Taipei City Government, amend the six-year preparation plan and obtain approval, speed up preparations for the 2017 Universiade in Taipei and determine the sports categories with higher possibility for medals to help with the operation of program preparation, facilities arrangements and athlete training.

3. Continue to cultivate talent in international sports affairs: Implement 2013 Cultivation Program for Professional Talent in International Sports Affairs, conduct courses for cultivating talent in international sports affairs and provide internship opportunities in Taiwan and overseas. For those who have completed the training program with exceptional performance, additional advanced training should be provided in order to meet the need for volunteers and manpower during preparations for the 2017 Universiade.

4. Establish harmonious and reciprocal cross-strait exchange on sports: Conduct cross-strait exchanges and visits for sports professionals based on the Olympic model to increase mutual understanding. Invite the Chinese Taipei Olympic Committee to reinforce promotion of the Olympic model and conduct cross-strait discussions between the two Olympic Committees to establish mechanisms for communication and establish harmonious and reciprocal cross-strait exchanges on sports.

Build a quality sports environment for the public ►►

1. Enhance public sports facilities at all levels. It is anticipated that 32 civil sports centers and 390 sport facilities of all types will be built between 2010 and 2015. 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.

2. Establish the bike path network: \$1.2 billion NTD 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 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.

3. Conduct a comprehensive plan for establishing a national sports park: In order not to affect the athletes' regular training, the renovation of the National Sports Training Center will be conducted in phases and in different regions under the principle of building first and demolishing later. Supervise and monitor the progress of National Shooting Training Base – Kungshi Shooting Range in hope of providing shooting facilities that meet international standards and qualify as facilities for shooting competitions.





Successful Bid for the 2017 Universiade

On November 29, 2011, after Taiwan successfully held the World Games 2009 in Kaohsiung and the Deaflympics in Taipei, Taipei City successfully obtained over 50% of the votes during the voting by International University Sports Federation (FISU) in Brussels, Belgium and became the host city for the 2017 Summer Universiade. The scale of the Universiade is second only to the Olympics and is thus nicknamed Junior Olympics. The successful bid for the 2017 Summer Universiade will help improve Taiwan's status and reputation

in the international community. It is also a reward for years of effort in the international sports community.

The 2017 Universiade in Taipei will be held from August 19 to 30, 2017. Currently, 17 sports categories are included, including 14 mandatory and 3 selective categories. 64 sports facilities are planned for the competition. The newly built facilities include the Taipei Dome, the basketball stadium and tennis center through BOT. 61 facilities will be renovated. ■

Youth Development Affairs



A. Youth Career Counseling

1. Promote research on youth development strategies

Formulate policies and regulations on youth development. Integrate resources from all fields to promote youth development.

2. Establish the system and standards for youth career development

Establish the system and standards that target youth career development and planning to supplement shortcomings in the current system, including career development research or the development of evaluation tools, training for seed teachers for career counseling and establish an information platform for career counseling. In the future, career counseling will be extended from universities, colleges and

junior colleges level down to senior high schools and vocational high schools as well as junior high schools to fully implement 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.

B. Youth Public Participation

7. 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.

1. Action program to promote youth community involvement: The Ministry has subsidized 262 youth group action programs with various characteristics from 2006 to 2012 and encouraged 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 heritage and care for the disadvantaged.

2. Campus forums: Since 2005, youth experts and ambassadors have been invited to share their experience in social participation and public affairs with youths in universities, colleges and junior colleges, senior high schools and vocational high schools to encourage youths to devote themselves to public affairs by face to face talk.

2. Promote youth involvement in policies

Actively construct platforms that will promote

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.

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 youth advisory committee, assist universities, colleges and junior colleges in forming and promoting autonomous organizations to increase the opportunities for youth involvement in policy-making.

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

2. 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.



3. Assist universities, colleges and junior colleges to develop student autonomous organizations: Conduct various seminars, training, competitions and observations for autonomous governance 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.

1. Conduct Global Youth Service Day focus 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 for outstanding youth volunteer groups to honor exemplary volunteers.

2. Establish regional youth volunteer centers and reinforce the organizational connection and integration of local resources. Conduct basic and special training for youth volunteers to give lectures in teams.

3. Establish youth volunteer participation and promotion committees. 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

7. Reinforce youth international involvement

Develop diverse proposals for youth volunteer overseas service. Encourage youth volunteer groups to serve overseas through educational training and funding. Conduct youth international affairs workshops and strengthen youths' knowledge and skills in international volunteering through courses and practical training in international affairs and international volunteering. Promote special loans for youths to experience life overseas to help them fulfill their dreams of living overseas through backpacking, short-term study and working holidays.

2. Promote international and cross-strait youth exchange

Expand the international and cross-strait exchange network for youths. Promote mutual visits between the officials of Taiwan and Israel. Invite 20 college students with volunteering experience from each country to participate in Taiwan-Israel Youth Exchange Delegation. Strengthen the promotion of memoranda of understanding or collaboration programs on youth affairs among friendly nations such as UK and South Korea to deepen relationships and friendships with these countries. Invite international youth leaders and youth organizations to visit Taiwan. Subsidize youth participation in international and cross-strait youth conferences or program activities. Continue to operate the website for youth international exchange information, iYouth, and provide information on studying abroad, working holidays, overseas internship, international volunteering, conferences and activities as well as training and seminars to increase the channels and opportunities for youth to participate in international affairs.

3. Promote learning through services

Schools at all levels are encouraged to make program proposals to promote learning through services and continue to integrate resources and service division. The accumulation of experiences



will strengthen future development. Establish an information platform for learning through services to compile good examples of learning through services and related teaching materials for members to query and utilize. Help community organizations and schools at all levels to conduct seed teacher training related to learning through services. Encourage universities, colleges and junior colleges to lead in a customized manner nearby junior and elementary schools to promote learning through services. Conduct national seminars on learning through services to promote exchanges on domestic and international experiences with learning through services and to award role models and promotional staff for exemplary performance.

4. Promote youth travel

Promote a youth travel program to encourage the young people to get to know themselves, experience life, develop adaptability and the ability to react through travel learning experiences. In addition to improving self understanding and development, this program will also help youths travel throughout their native land. They will understand Taiwan better and start to recognize and take responsibility for this land. Youth travel is combined with charity issues to encourage youth to evolve and grow through altruistic acts. Meetings will be held for youths to share their travel experiences, including experts in traveling Taiwan, and increase the influence of role models and create the trend of youth travel in Taiwan. ■

Education Expenditures

The government has demonstrated the importance it attaches to educational development by increasing the education budget. With 12-year Basic Education to take effect in 2014, President Ma Ying-jeou announced on December 28, 2011 the Compilation and Administration of Education Expenditures Act, which increased the percentage of funds allotted to education expenditures from 21.5% to 22.5% of the national budget, which should add NT\$20 billion to the current education budget, testament to the government's devotion to the promotion of 12-year Basic Education. The new policy took effect on January 1, 2012. In addition, the Ministry also appropriated a large budget to assist minorities and those who live in remote areas.

❖ 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 2012 fiscal year, the figure has since reached NT\$ 851.34 billion, or 6.06% 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 2012, when funding for private institutions reached 27.03% of the education budget; public schools meanwhile enjoyed 72.97% of the budget.

Looking at the breakdown of each education level, in SY2011, the total education budget was NT\$ 716.7 billion, of which preschool education accounted for 5.17%, compulsory education accounted for 39.25%, senior high school education accounted for 15.16% (senior high schools 10.20%, vocational high schools 4.96%),



higher education accounted for 39.81% (junior colleges 0.88%, universities and colleges 38.93%), and 0.62% went to other institutions. ■

Teacher and Art 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. 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. The establishment of Department of Teacher and Art Education will integrate resources from the educational arms of local and central governments, together with teacher-training colleges/universities and institutions of primary and secondary education, so as to train teachers for all educational levels.



2. 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.

3. 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.

4. The implementation of the Teacher Professionalism Standard and the Teacher Professional Performance Standard for teachers at all educational levels to encourage teachers to enhance their teaching skills and professional knowledge.

5. 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.

6. 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.

7. 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.

8. 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.

9. The Ministry will promote a comprehensive teacher evaluation system and apply the results toward 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.

10. 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.

11. 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.

12. 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.

13. The central government, local government entities, teacher-training colleges/universities and local schools will form a partnership to train primary school teachers. This four-way partnership is expected to provide vertical

integration of teacher supply and professional training.

14. The Ministry will coordinate with the full implementation of 12-year basiceducation 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

Teacher's training is the core of educational quality while arts education is the key to cultural quality. 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 mid- and long-range plans for aesthetic education;
- 3.** Encourage industry-academia collaboration;
- 4.** Integrate arts and aesthetic education with faculty cultivation. ■



Study in Taiwan

The Ministry of Education 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 has increased to 64,558 in 2012, a significant increase from 2006, when international student enrollment was only 26,488.

The MOE established the Bureau of International Cultural and Educational Relations (BICER) in 1947 to promote international academic and cultural exchange, along with providing international students wishing to study in Taiwan with assistance, especially with their government scholarship applications and information about Taiwan. In order to promote Taiwan's international education exchange programs and to integrate the cross-strait educational affairs, the MOE has re-organized its former Bureau of International Cultural and Educational Relations, the Mainland Affairs Division and the Commission of Overseas Chinese Education Affair to become the Department of International and Cross-strait Education as of January 1, 2013.

In addition to efforts made to create an internationalized environment for academic study, Taiwan is an ideal study destination for several reasons. According to the Foundation for International Cooperation in Higher Education of Taiwan (FICHET), these reasons include the fact that Taiwan has a highly democratic government within



a Mandarin-Chinese environment, its rich cultural heritage, its advanced technology and its breath-taking travel destinations and sights.

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 eight national parks showcasing 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 renown for their warm, welcoming and hospitable nature towards international visitors and students. This has become Taiwan's international 'trademark'. On the following pages are two stories about international scholarship students, currently studying in Taiwan.

Scholarships

The Taiwan Scholarship

In 2011, two government agencies, the Ministry of Education (MOE) and the Ministry of Foreign Affairs (MOFA), jointly initiated the Taiwan Scholarship Program to encourage outstanding international students to undertake degree programs in Taiwan.

The different types of Taiwan Scholarships include:

A. MOFA Scholarship

- ❖ Recipients are from countries which have diplomatic relations with the Republic of China (Taiwan), or from countries specified as diplomatically favorable by MOFA. The scholarship includes:
- ❖ Round-trip economy-class direct-route international airfare plus a monthly stipend of NT\$30,000.

B. MOE Scholarship

- ❖ Recipients must be from countries other than those specified under the MOFA Scholarship.
- ❖ Waiver of tuition and certain fees if a recipient studies in an "Association of Taiwan Scholarship Program School". The MOE awards each recipient per semester up to NT\$40,000. If the total amount of these fees exceeds NT\$40,000, the remainder of all costs shall be covered by either the recipient, or the recipient's college, whereas over NT\$40,000 are the sole responsibility of the recipient. Tuition and academic fees do not include any of the following: administration fees, thesis advising fees, insurance premiums, accommodation, Internet access, all of which are payable by the recipients.
- ❖ Each recipient will receive a monthly stipend of NT\$15,000 for undergraduate degree studies and NT\$20,000 for postgraduate degree studies.

Huayu Enrichment Scholarship (HES)

The Huayu Enrichment Scholarship (HES) was established by the MOE to encourage international students to learn Mandarin Chinese in Taiwan. While offering language and culture study opportunities for Mandarin Chinese and Taiwanese cultures at universities and colleges with affiliated Mandarin Chinese Language Training Centers, this program also aims to assist scholarship recipients in acquiring Mandarin Chinese language skills and competencies. This, in turn, will increase international students' appreciation of Taiwan. The Huayu Enrichment Scholarship is awarded by Republic of China (Taiwan) Representative Offices or Embassies based on merit. A monthly stipend of NT\$25,000 is offered to recipients for a maximum period of one year. ■



Taiwan: Paradise in My Eyes

Diego Gonzalez, 24
Graduate of Tamkang
University with a Master of
Arts Degree in International
Affairs and Strategic Studies



"Taiwan as a whole is like a paradise to me," says Diego Gonzalez without exaggeration. "Taiwan has many pluses, like security; honest, nice, friendly people; delicious food; beautiful places to visit; and excellent public transportation as well," he said.

The 24-year-old was born in Colombia and spent his childhood in the US and Colombia before settling down in Nicaragua. Inspired by friends' positive opinions on the safety, hospitality of the people, and well-established educational system in Taiwan, Gonzalez started his Chinese lessons at National Taiwan Normal University in 2010, then began work on his master's degree in September 2011.

Having just graduated from Tamkang University with a Master of Arts Degree in International Affairs and



Strategic Studies, Gonzalez considered studying in Taiwan a rewarding experience.

In Gonzalez's opinions, Taiwan is a great place for study. Experienced teachers provide a quality education, and the infrastructure of the educational institutes is great. "Well-equipped classrooms, libraries with abundant collections, private rooms if required, and around-the-clock operation section are all helpful for students," he said.

"The cost of education in Taiwan is the same or slightly more expensive compared to any universities in Latin America, but the quality of education of Taiwan is much higher than in many countries in Latin America," Gonzalez points out.

To balance study and life, the school regularly planned trips for students at a very low cost. "The arrangements gave us the opportunity to know different places, meet new people and have fun in Taiwan," he says.

Gonzalez is now looking for a job. "If I don't get one in a short time, I would like to continue my studies in a Ph.D. program in Taiwan," he says. ■



Taiwan's Well-grounded Educational System Makes it an Ideal Choice for Study

Sharon Chin, 24

Senior, Department of Radio and TV, Ming Chuan University

Sharon Chin, currently a senior in the Department of Radio and TV at Ming Chuan University in Taipei, says she has benefited greatly from the well-founded educational system in Taiwan.

"I was firstly driven by my deep interest in Mandarin to come to Taiwan," says Chin, a Malaysia born overseas Chinese. Grown up in a multilingual environment, Chin had developed a special inclination towards Mandarin and therefore decided to sharpen her proficiency in a Mandarin speaking country.

Taiwan outshone others and became Chin's destination through because of the excellent faculties and the free atmosphere in society compared to other similar cultures, according to Chin.

"We receive very serious training at school," said Chin. "In addition, some courses are even directly taught by

people who are already involved in the industry." Chin is particularly positive about this facet of the arrangement here in Taiwan, saying such a device enables students to know the exact situation in an industry.

In addition to outstanding academic achievement, Chin is also impressed by the care and attentiveness shown by instructors. "Teachers always care for their students, giving them a helping hand whenever it's needed, no matter whether it's about studies or about a future career."

As Chin's Mandarin has improved, her life in Taiwan has also been enriched. It is daily life here that makes Taiwan more fascinating to her. "It's safe and convenient living here," notes Chin, adding that people in Taiwan may not know how precious this is for people like her.

Having gradually built up her life circle here, and with her eyes on the prospect of higher salaries than what she might find in her hometown in Malaysia, Chin also expresses hopes that she might be able to stay in Taiwan after she graduates. "If I could find a job soon, I would love to stay in Taiwan," she says. ■

Vision

Human resources is the key to national development and the cultivation of talent is the critical link to Taiwan's rise among nations. President Ma has made the following remarks several times. "Active cultivation and recruitment of talent is the fifth pillar to increasing Taiwan's competitiveness." "Regardless of financial status, each and every child has the potential of growing to be a pillar of the nation." "The major imbalance between the cultivation of talent and industry's needs is a great future threat." These statements stress that human resources are the most significant resource for the nation and the key to the nation's future development.



based on firmly established roots with focuses on a 12-year Basic Education, recruitment of overseas talent, competitiveness of higher education and vocational development. The hope is to formulate concrete directions and strategies and return to the most fundamental holistic education to solve the talent issues in Taiwan from the perspective of cultivating, retention and recruitment of talent while considering the needs of national development and industry.

The Ministry of Education's vision is to cultivate outstanding and innovative talent to improve international competitiveness. That vision encompasses three meanings, including creating a quality educational environment and cultivate talent with international competitiveness; encouraging the public to exercise, live healthily and honor Taiwan with exceptional athletic skills; cultivating youths to become leaders in innovation and reform. After organizational restructuring, the Ministry of Education is better able to combine the strengths of education, athleticism and youth to cultivate quality and innovative talent for Taiwan from a comprehensive, broad and diverse perspective to increase Taiwan's visibility and competitiveness in the international community. ■

Therefore, the Ministry of Education aspires to make every student a talent and has collaborated with various departments and put forth the White Paper on Talent Cultivation in May 2013 to address the issue of major gaps between school and work. In 2012, the Ministry invited experts from the industry, government, academic and research fields to form an advisory committee and established three divisions, National Basic Education, University and College Education, Internationalization and Deployment of Global Human Resources as well as Vocational and Technological Education. The committee drafted its White Paper on Talent Cultivation based on the principle of development

Statistics

General Information

	Total Population (million)				Life Expectancy (year)		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	42.2	2,385	87.7
1990	20.4	27.1	66.7	6.2	71.3	76.8	164.7	8,124	92.4
1995	21.4	23.8	68.6	7.6	71.9	77.7	274.7	12,918	94.0
2000	22.3	21.1	70.3	8.6	73.8	79.6	326.2	14,704	95.6
2005	22.8	18.7	71.6	9.7	74.5	80.8	364.8	16,051	97.3
2009	23.1	16.3	73.0	10.6	76.0	82.3	377.5	16,359	97.9
2010	23.2	15.6	73.6	10.7	76.1	82.6	428.2	18,503	98.0
2011	23.2	15.1	74.0	10.9	76.0	82.6	464.0	20,006	98.2
2012	23.3	14.6	74.2	11.2	-	-	474.3	20,386	98.3

Summary of Education at All Levels

SY 2012-2013

Unit : Person

	No. of Schools (school)	No. of Teachers	No. of Classes (class)	No. of Students	No. of Graduates in 2011	No. of Students Per 1,000 Population
Total	11,495	301,990	144,711	5,007,274	1,217,508	214.76
Preschool	6,611	45,004	-	459,653	...	19.71
Primary School	2,657	97,536	56,399	1,373,375	285,628	58.90
Jr. High School	740	51,880	27,466	844,884	309,159	36.24
Sr. High School	340	37,159	10,110	402,688	128,502	17.27
Sr. Voca. School	155	17,166	8,932	369,432	109,863	15.84
Jr. College	14	1,738	2,353	101,424	19,205	4.35
Uni. & College	151	48,446	32,528	1,254,066	296,375	53.79
Special Edu. Sch.	27	1,827	640	6,885	2,184	0.30
Supp. & Cont. Sch.	798	1,137	5,979	181,171	63,610	7.77
Open University	2	97	304	13,696	2,982	0.59

Gross Enrollment Rate and Net Enrollment Ratio by Level of Education

Unit : %

School Year	Total		1st Level (Primary)		2nd Level				3rd Level (Tertiary)	
	Gross	Net	Gross	Net	Junior		Senior		Gross	Net
1976-77	69.61	67.57	100.65	97.54	90.21	77.33	56.54	43.17	15.40	9.97
1981-82	71.95	69.52	101.11	97.59	97.71	84.41	68.03	52.58	16.71	11.47
1991-92	82.41	78.74	100.99	98.70	100.23	91.70	90.28	72.93	32.37	20.98
2001-02	89.07	82.29	99.66	98.19	99.25	93.53	99.66	88.21	62.96	42.51
2006-07	95.33	88.55	99.54	97.77	99.48	96.65	98.79	91.31	83.58	59.83
2007-08	96.05	89.26	100.82	97.79	99.13	96.86	98.23	90.72	85.31	61.41
2008-09	95.52	89.70	100.70	97.74	99.36	96.83	99.11	91.65	83.18	63.76
2009-10	95.25	89.93	101.40	98.01	98.84	97.47	99.12	92.35	82.17	64.98
2010-11	95.60	90.45	99.68	97.97	101.80	97.45	98.89	92.73	83.77	67.27
2011-12	95.45	90.56	100.37	97.88	101.02	97.52	99.11	93.24	83.37	68.27
2012-13	95.55	90.77	101.44	97.79	99.67	97.82	98.33	93.15	84.43	69.90

Number of Students Per Teacher at All Levels

Unit : Person

School Year	Total	Pre-school	Primary School	Jr. High School	Sr. High School	Sr. Voca. School	University	College	Junior College	Special Edu. Sch.
1976-77	29.90	32.66	36.04	25.94	23.16	22.70	11.42	16.22	20.00	6.65
1981-82	27.25	26.10	31.79	22.97	22.99	22.50	13.53	11.92	20.79	5.24
1991-92	24.22	15.83	27.20	21.23	22.29	21.28	14.82	11.38	19.35	3.72
2001-02	19.71	12.44	18.60	15.67	19.41	19.18	19.60	20.17	20.56	3.58
2006-07	19.30	10.60	17.86	15.70	19.29	18.41	19.93	18.63	21.01	3.79
2007-08	19.03	11.02	17.31	15.23	19.11	18.70	20.25	18.55	22.73	3.84
2008-09	18.76	10.69	16.74	15.08	18.91	19.01	20.47	18.81	23.65	3.96
2009-10	18.49	10.77	16.07	14.90	18.73	19.08	21.03	19.35	26.13	4.11
2010-11	18.18	12.57	15.26	14.31	18.58	18.69	21.25	19.81	26.74	3.91
2011-12	17.90	12.72	14.78	13.74	18.53	18.29	21.52	21.10	27.69	3.83
2012-13	16.58	10.21	14.08	13.00	18.29	17.83	21.86	21.32	28.34	3.77

Overseas Students in R.O.C.

Unit : Person

Year / School Year	2007	2008	2009	2010	2011	2012
Total	30,150	33,065	39,042	44,776	57,166	64,558
Subtotal of International Students	27,738	30,067	34,285	37,177	41,885	43,957
Studying for a Degree	5,259	6,258	7,764	8,801	10,059	11,554
Overseas Compatriot Students	10,861	11,426	12,840	13,562	14,045	15,204
International Exchange	1,441	1,732	2,069	2,259	3,301	3,301
Studying Mandarin Chinese	10,177	10,651	11,612	12,555	14,480	13,898
Subtotal of Overseas Chinese Students	2,412	2,998	4,757	7,599	15,281	20,601
Mainland China Students (Studying for a degree)	-	-	-	-	928	1,864
Mainland China Students (to take short-term courses or attend meeting)	823	1,321	2,888	5,316	11,227	15,590
Short-term Courses	1,146	1,258	1,307	1,604	2,265	2,265
Overseas Compatriot Youth Technical Training Classes	443	419	562	679	861	882

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	6,213	4.52	3.65	0.87
1980-81	2,055	1,671	384	46,430	4.43	3.60	0.83
1990-91	11,052	9,088	1,964	171,668	6.43	5.29	1.14
2001	17,464	12,997	4,467	293,712	5.95	4.42	1.52
2006	21,586	15,887	5,699	376,375	5.74	4.22	1.51
2007	21,644	16,052	5,592	393,134	5.51	4.08	1.42
2008	23,169	16,941	6,228	400,132	5.79	4.23	1.56
2009	23,921	17,986	5,934	377,529	6.34	4.76	1.57
2010	24,598	18,460	6,138	428,186	5.74	4.31	1.43
2011	27,605	21,016	6,589	464,009	5.95	4.53	1.42
2012	28,742	20,972	7,770	474,269	6.06	4.42	1.64

Reading, Math and Science Scores of 15-year-olds
on the PISA 2009

Rank	Reading			Rank	Mathematics			Rank	Science		
	Country	Avg.	SE		Country	Avg.	SE		Country	Avg.	SE
1	Shanghai-China	556	80	1	Shanghai-China	600	103	1	Shanghai-China	575	82
2	Korea	539	79	2	Singapore	562	104	2	Finland	554	89
3	Finland	536	86	3	Hong Kong-China	555	95	3	Hong Kong-China	549	87
4	Hong Kong-China	533	84	4	Korea	546	89	4	Singapore	542	104
5	Singapore	526	97	5	Taiwan	543	105	5	Japan	539	100
6	Canada	524	90	6	Finland	541	82	6	Korea	538	82
7	New Zealand	521	103	7	Liechtenstein	536	88	7	New Zealand	532	87
8	Japan	520	100	8	Switzerland	534	99	8	Canada	529	90
9	Australia	515	99	9	Japan	529	94	9	Estonia	528	84
23	Taiwan	495	86	10	Canada	527	88	12	Taiwan	520	87

SE: standard error

Trends in International Mathematics
and Science Study 2011

Rank	Eighth Grade Science			Eighth Grade Mathematics			Fourth Grade Science			Fourth Grade Mathematics		
	Country	Avg.	SE	Country	Avg.	SE	Country	Avg.	SE	Country	Avg.	SE
1	Singapore	590	4.3	Korea	613	2.9	Korea	587	2.0	Singapore	606	3.2
2	Taiwan	564	2.3	Singapore	611	3.8	Singapore	583	3.4	Korea	605	1.9
3	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

SE: standard error

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

Year	2009	2010	2011	2012	2013
Total	28G 16S 4B 3H	26G 14S 9B 10H	27G 15S 6B 3H	28G 12S 6B 5H	...
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	Thailand	Taiwan	Israel	India	Indonesia
No. of Participants	15 Countries	16 Countries	16 Countries	21 Countries	20 Countries
Medals	7G 1S	5G 1S 4B 6H	3G 4S 1B	6G 1S 1B	5G 3B
Rank	2 nd	A team 1 st B team 4 th	2 nd	2 nd	Nil
International Mathematics Olympiad					
Host Country	Germany	Kazakhstan	Netherlands	Argentina	Colombia
No. of Participants	104 Countries	96 Countries	101 Countries	100 Countries	97 Countries
Medals	1G 5S	1G 3S 1B 1H	2G 4S	1G 3S 2H	2G 4S
Rank	11 th	19 th	8 th	14 th	8 th
International Chemistry Olympiad					
Host Country	England	Japan	Turkey	U.S.A.	Russia
No. of Participants	67 Countries	68 Countries	70 Countries	72 Countries	73 Countries
Medals	4G	2G 2S	3S 1B	3G 1S	3G 1S
Rank	1 st	4 th	8 th	2 nd	1 st
International Physics Olympiad					
Host Country	Mexico	Croatia	Thailand	Estonia	Copenhagen
No. of Participants	68 Countries	82 Countries	84 Countries	82 Countries	83 Countries
Medals	3G 2S	5G	5G	5G	3G 2S
Rank	4 th	3 rd	1 st	2 nd	...
International Informatics Olympiad					
Host Country	Bulgaria	Canada	Thailand	Italy	Australia
No. of Participants	83 Countries	84 Countries	82 Countries	82 Countries	80 Countries
Medals	2G 2S	1G 3S	3G 1S	3S 1B	1G 2B
Rank	Nil	Nil	Nil	Nil	Nil
International Biology Olympiad					
Host Country	Japan	Korea	Taiwan	Singapore	Switzerland
No. of Participants	56 Countries	60 Countries	58 Countries	59 Countries	62 Countries
Medals	2G 2S	4G	4G	3G 1S	1G 3S
Rank	4 th	3 rd	2 nd	3 rd	7 th
International Earth Science Olympiad					
Host Country	Taiwan	Indonesia	Italy	Argentina	...
No. of Participants	14 Countries	19 Countries	26 Countries	17 Countries	...
Medals	4G	3G 1S	3G 1S	3G 1S	...
Rank	1 st	1 st	1 st	1 st	...
International Junior Science Olympiad					
Host Country	Azerbaijan	Nigeria	South Africa	Iran	...
No. of Participants	45 Countries	33 Countries	40 Countries	27 Countries	...
Medals	4G 2S	4G 2S	6G	6G	...
Rank	2 nd	1 st	1 st	1 st	...

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

Annual Papers and Rank by Nationality in SCI

Year Country	2008		2009		2010		2011		2012	
	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank
U.S.A.	345,483	1	345,248	1	338,985	1	354,486	1	408,703	1
China	113,742	2	128,164	2	135,415	2	157,545	2	182,199	2
England	92,792	3	94,041	3	92,956	3	97,834	3	113,387	3
Germany	87,958	4	90,069	4	88,451	4	93,541	4	107,608	4
Japan	79,878	5	79,234	5	72,860	5	76,099	5	85,893	5
France	64,992	6	65,722	6	63,645	6	66,283	6	74,311	6
Italy	50,754	8	52,075	8	51,413	8	53,476	8	64,789	7
Canada	54,163	7	56,343	7	54,808	7	57,263	7	63,646	8
Spain	42,396	9	44,683	9	44,693	9	49,095	9	56,422	9
S. Korea	35,662	12	38,776	12	39,834	11	44,718	11	51,680	10
Taiwan	22,756	16	24,521	16	23,829	16	26,648	16	27,178	17

Annual Papers and Rank by Nationality in EI

Year Country	2008		2009		2010		2011		2012	
	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank	No. of theses	Rank
China	137,153	1	174,307	1	206,099	1	251,977	1	235,930	1
U.S.A.	101,130	2	99,235	2	123,774	2	128,389	2	112,952	2
Japan	37,154	3	41,297	3	44,097	3	45,864	3	39,158	3
Germany	26,327	4	29,273	4	32,515	4	36,185	4	33,064	4
India	17,891	9	20,820	8	25,040	6	31,693	5	31,159	5
S.Korea	20,515	7	21,850	7	24,339	8	27,150	7	26,188	6
England	23,738	5	24,172	5	26,709	5	28,285	6	25,736	7
France	21,484	6	22,383	6	24,366	7	26,437	8	24,077	8
Italy	16,390	11	17,249	11	19,049	11	20,358	11	19,524	9
Canada	17,940	8	18,826	10	20,129	10	21,023	10	19,024	10
Taiwan	17,483	10	18,869	9	20,302	9	22,819	9	18,269	12

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WEBSITE ►► <http://www.edu.tw>

For more information, please call:

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