

Higher Education



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

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 2016, Taiwan ranked seventeenth in “Higher Education and Training.” Taiwan's human resources provide highly-qualified workers in sufficient supply to the labor market and bring positive benefits for industry innovation.

Universities, Colleges and Junior Colleges

Higher education institutions in Taiwan include 2-year junior colleges, 5-year junior colleges, and universities. Like most countries, the study period is 4 years for an undergraduate university degree, 1 to a maximum of 4 years for a master degree, and 2 to a maximum of 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 SY 2016, there are 158 universities, colleges and junior colleges, totaling 1,309,441 students.

Reforms in teacher training have played an important part in the expansion of higher

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

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

Although Taiwan's higher education system has gained recognition for its achievements in many areas, tuition still remains very reasonable. Tuition is about NT\$58,726 (US\$1,817) dollars per year at public universities, and about NT\$109,944 (US\$3,402) dollars at private universities. College tuition stands at only 10~20% of the national per capita GDP, considerably lower than that of many other countries, which in some cases is over 30%.

The Ministry of Education and several universities have jointly established the Higher Education Evaluation and Accreditation Council

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

Another of Taiwan's significant achievements is in the area of "Innovation." In a report from the World Economic Forum (WEF), Taiwan ranked eleventh among 144 countries in innovation in 2016. While universities are pursuing for innovation, university students in Taiwan exhibit abundant creativity. To encourage students to unleash their creativity, the Ministry screens and selects outstanding students to study abroad under sponsorship by the government. In recent

years, students from Taiwan have been making their mark in international design competitions such as Germany's iF Awards and Red Dot Award every year.

More Signs of Progress in Education

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

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



universities in the global university rankings (Quacquarelli Symonds, QS). In addition, seven schools are ranked among the 500 schools in Shanghai Jiao Tong University's Academic Ranking of World Universities in 2016 and their ranks improved year by year. This is a sign that the subsidized schools have inspired themselves to meet international benchmarks and rise up to international competition with the top schools in the world.

B The Quality of Students Continues to Improve

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

For example, National Taiwan University offers 183 open courses which have accumulated more than 10 million CTRs so far and are awarded The Outstanding Site Awards in 2014 and educator Award for Excellence in 2015 by Open Education consortium. National Sun Yat-Sen University has established "COLlegiate Learning Outcomes Assessment "COLA" for long-term follow-up survey and has accumulated 7,582 person-times taking the survey so far, implementing a mechanism for guaranteeing students' learning results and quality as well as establishing a support system for students and teachers. In addition, the number of foreign teaching staff and researchers hired by

A Taiwan is Reaching Out to the World

Looking at various international assessments, as of the end of 2016, 11 universities subsidized by this plan are ranked as top 500 universities in the world as well as the world's top 100



top universities in Taiwan has increased from 339 in 2010 to 420 in 2015 for improving the overall teaching and research quality. As for shouldering its social responsibilities, top universities doing their parts by offering educational opportunities for disadvantaged students. Since 2011, the total number of students admitted through star admission is 12,842, making up more than 10% of the total numbers of students admitted via various channels.



grown to 4.103 billion dollars, a proof that Taiwan universities promote industrial innovation and make contributions to the society through research and development.



quality talent," "strengthening the innovation and entrepreneurship system," "promoting locally linked development" and "pushing the international development of higher education." Mentoring the "practitioners," "entrepreneurs," "social carers" and the "international talent" of

the future will lead to the allocation of higher education funding being even better able to address the study achievements of each student, create value from higher education, value the achievements of each young person and lead the force for creativity in society. ■

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The University is Becoming a Place for Innovation in Business

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

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Campuses Play Host to the World

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

of teachers and students while broadening the horizons of Taiwanese students.

From about 2006, the Ministry of Education has been promoting plans called "Aim for Top Universities," "Promoting University Teaching Excellence Projects," "Developing Technological Universities Paradigms," use special-case funding to subsidize universities, to make universities develop top-notch research, excellent teaching model and cooperation between business and academia according to their own characteristics. In order to deepen and improve the competitiveness of Taiwan's talent, the Ministry of Education thus plans to launch the "Higher Education Root Program" from 2018 in order to promote the four aims of "cultivating strong

Vocational and Technological Colleges and Universities

A

Administrative Structure of Technological and Vocational Education

The highest authority in our country's educational administrative system is the Executive Yuan, which includes the Ministry of Education managing nationwide education work. The Ministry of Education has formed a Department of Technological and Vocational Education which is responsible for nationwide technological and vocational education affairs and directly oversees and guides universities of science and technology, technology colleges and junior colleges. The education departments

of municipalities are responsible for supervising secondary technological and vocational education affairs. The Ministry of Education's K-12 Education Administration supervises national senior secondary schools, junior high schools affiliated to them, and private senior secondary schools outside of the municipalities. County and city education departments are in charge of supervising the vocational education affairs of county or city senior secondary schools and the technological education affairs of junior high schools in their jurisdiction.

B Secondary technological and vocational education

Taiwan's secondary technological and vocational education is a general so-called senior secondary and junior high technological and vocational education and includes technological education of junior high schools, skill-based senior secondary schools, vocational education departments affiliated to general senior secondary schools, and comprehensive senior secondary schools.

1 Characteristics of secondary technological and vocational education development

- 1 Complete structure and system.
- 2 More students at private schools than at public schools.
- 3 Adaptive school system and subject courses.
- 4 Special classes oriented toward employment.

2 Key points for strengthening secondary technological and vocational education

- 1 Suitable concern for disadvantaged students.
- 2 Exam-free admission and specialty enrollment.
- 3 Actively improve the quality of teaching.
- 4 Promote the evaluation of technological and vocational schools.
- 5 Cultivate quality technological talent.
- 6 Pay attention to industry-academia creative research and development.



C Higher technological and vocational education

Higher technological and vocational education in Taiwan is divided into junior colleges (2-year and 5-year), technical colleges and universities of science and technology as follows:

1 Junior colleges: junior colleges are divided into two categories depending on the duration of their curriculum, two years or five years. The two-year schools have a day session, an evening session (continuing-education department) and continuing schools, while the five-year schools only have daytime classes. The two-year schools recruit students from skill-based senior secondary schools, comprehensive senior secondary schools graduates or with the same education level. The five-year schools are attended by junior high school graduates or students with qualifications of the same level. Graduates from the schools receive an associate degree.

2 Technical colleges and universities of science and technology: technical colleges and universities of science and technology are established according to the "University Act" for nurturing highly specialized professionals and vocational talent. Technical colleges and universities of science and technology may recruit students for associate-degree programs, bachelor

programs, master degree programs and doctoral degree programs. For the associate-degree programs, the source for the students and the obtaining of degrees are the same as mentioned above for the junior colleges; the bachelor programs are divided into four-year and two-year programs, and all have a daytime study program, a continuing education department and a continuing school (for the two-year program), while each school also has to set up admission guidelines for work experience and years of experience, and set up a class for those already employed.

1 Characteristics of Higher Technological and Vocational Education

- 1 Flexible study and return change: there needs to be the possibility for flexible switching vertically and horizontally between study systems, while channels must be kept open for those who want to return to study. Studying youths and people who already entered society should be able at any stage to find ways of studying on a level suitable for their personal situation.
- 2 Private schools should be excellent and active: private schools are an important force in the development of Taiwan's technological and vocational education system, as they realize an even closer integration between technological and vocational education on the one hand and business on the other.
- 3 Multiple school departments in close touch with industry: in addition to junior colleges, technical colleges and universities of science



and technology (including graduate schools), the higher technological and vocational education system also includes continuing education departments, special classes for working people and continuing schools, showing the diversity and flexibility of such education.

4 Excellent effectiveness of industry-academia cooperation: the technological and vocational education system emphasizes cooperation between industry and the academic world, and pays attention to students responding to the combined needs of education and business, so students can find employment immediately after graduation.

5 Practicality and usefulness of schooling results: technological and vocational education give the most weight to the practical and useful spirit, there are multiple channels of admission such as special achievement-based admission, recommendation and screening-based admission to encourage talented students with technological superiority to continue their studies.

6 Fruitful results at international competitions: a characteristic of technological and vocational education is "learning from doing," so by doing, the students accumulate experience as theory and practice are equally important.

2 Key Points to Strengthen Higher Technological and Vocational Education

- 1 Take care of disadvantaged students.
- 2 Admission amount control and multichannel admission.
- 3 Actively raise the quality of teaching.
- 4 Launch the evaluation of



technological and vocational schools. ⑤ Cultivate quality technical talent. ⑥ Value creative industry-academia research and development. ⑦ Develop exemplary universities of science and technology. ⑧ Launch a phase 2 of the technological and vocational education reform. ⑨ Develop international cooperation and exchanges.

D The Vision for Technological and Vocational Education

Secondary and higher technological and vocational education should emphasize studying with practical action as its main element, offering the abilities necessary for practical work in the job market and linking up with typical local industries, cultivate relevant talent to promote local development and march toward the international scene, exchanging experiences and cooperating with the technological and vocational education systems of other countries. In addition, the education must also take root downward, implement the professional knowledge and curiosity of elementary and junior high schools in order to raise the attractiveness of the technological and vocational sector. The description is as follows:

① To expand professional interest downward: Article 9 and Article 10 of the "Technological and Vocational Education Act" clearly state that the curriculum outline of elementary and junior high schools needs to include professional

knowledge and exploration, and that visits by junior high school students should be organized to businesses. In order to implement professional exploration education, junior high schools can organize skills education in cooperation with technological and vocational schools or professional training institutions for carrying out professional knowledge education.

② Strengthen professional capabilities by practical orientation: The European Union and the United Nations Educational, Scientific and Cultural Organization (UNESCO) promote learning with work as the main focus. This type of learning focuses on technical practice, and its core spirit stands close to professional practice. In other words, this type of learning integrates the resources of business and strengthens the concept of businesses and schools shaping talent together. They can organize technological and vocational education together to make students understand what practical abilities are necessary, and they will supply the students with high-quality and highly relevant professional abilities.



③ Localize technological and vocational education and continuing education: the promotion of localized technological and vocational education should link up with local industry in order to cultivate the kind of talent needed by local industry, which will invigorate the development of local industry.

④ Reach out into New Southbound Policy countries and move on to the global scene: international exchanges and cooperation in technological and vocational education can develop separately from the national, local and school levels. On the national level, one needs first to collect and analyze information systematically about the area or country one wants to communicate with before establishing concrete cooperative relations. At the local level, the scale is rather small, so exchanges can begin from the characteristics of local industry. As to the school level, the main emphasis should be on encouraging local students to learn to move on to the global scene, expand their field of vision and develop their latent capabilities. In addition, it is possible to establish "qualification structures," using the index of study results as a tool to link with different qualifications and degrees, express the mutual standards, levels and results in a transparent way, which will benefit the student to learn from each channel and seek international employment or advanced professional learning. Since 2017, the

Ministry of Education has responded to the "New Southbound Policy" by expanding its training of technological and vocational talent from the relevant countries, encouraging bilateral exchanges, launching a special class for "New Southbound Policy Countries' Industry-academia Cooperation Class for Overseas Students," "Short-term Technological Training Classes for Overseas Youths from New Southbound Policy Countries," "Technology Teacher Training Classes for New Southbound Policy Countries," and the All-English degree learning plan. Young students from the New Southbound Policy countries are being accepted with the excellent domain of domestic technological and vocational schools to accompany the country's development in order to cultivate the necessary talent. In addition, there is a plan for subsidies to be expanded for technological and vocational schools to organize international cooperation and improve the foreign language ability of students, Southeast Asian languages and industry courses, international trade and business elite intensive training courses, accept domestic students and at the same time train them in the languages of New Southbound Policy countries, professional English, global views, business management and trade abilities, and other professional knowledge needed by industry, in order to become the vanguard of our country deepening roots in Southeast Asia. ■

Huang Yueh-min

Vice president of Office of International Affairs,
National Cheng Kung University

2017/2018
EDUCATION
In Taiwan

“We All Work Together to Help International Students with What They Need.”

Helping all international students in the university, Office of International Affairs of National Cheng Kung University (NCKU) is where foreign students go to whenever they have questions or problems. The office handle a variety of works, including counseling, accommodation, course registration and any other that international students may encounter.

“Basically, we work together with other offices in the university,” said Huang Yueh-min, vice president of the office.

Huang said that besides administrative works, they work with staff from other offices to provide international students with all the things they need help with.

“We have counseling for students who are under pressure or cannot adjust themselves to a new environment; we also have a committee to help them with relationships and gender-based issues,” the vice president said.

The questions that are asked most frequently are the ones about visa, courses and cultural differences. Huang said the office and student organizations hold events such as Culture Day and International Cuisine Festival for international students to introduce local students their hometowns’ food and cultures, vice versa.

However, he said, a problem often faced by some foreign students is the coverage of health insurance. Though students coming from foreign countries are under the insurance of the



university, nevertheless it is still insufficient to cover the cost of major surgery operations.

“There was a student from Vietnam who got seriously disease and couldn’t afford the medical treatment, and their student association held fundraising events to help cover the fee, which induced a charity donation activity” said Huang.

Since Colleges of Engineering and Management provide more international programs, they are ranked top 2 in terms of international populations. Many of them stay in the same fields in their career after they graduate and a large number plan to work in Taiwan to get practical training.

With affordable education fee and opportunities to work with people from a variety of industries, Taiwan is one of the best destinations for those who seek study abroad experiences. In addition, on-campus Mandarin Language Learning Center is there to help international students who are interested in the language in a more effective way at NCKU.

“Our goal is not only to cultivate students in academic area but also stress the necessary hands-on training so that they can gain more real-life experiences,” said Huang. ■

**Kevin Yeh**

Dean of Office of
Public Affairs,
Shih Hsin
University

“We Work Together to Create the Environment to Help International Students Find Their Place Here in Taiwan”

Office of Public Affairs has a major role to play in the lives of exchange students in Shih Hsin University. Whether it's a new student or an existing one, the Office of Public Affairs handles all kind of issues when it's related to its international students.

“Making them feel at home is the most important and critical task for us. Many students face cultural shocks when they stay here for longer. We try to communicate with them and indulge with them in activities that include both local and international students to come together and share some quality ice breaking time. Help them connect and make new friends.” said Kevin Yeh, Dean of Office of Public Affairs.

“We have counseling group for students who feel homesick, financial aid and even student meal coupons for students who might have financial trouble during their stay in Taiwan,” continued the Dean.

“Majority of our students come from Malaysia, Singapore, Hong Kong or Macau. We also have students coming from Eastern Europe. We have alumni in Malaysia, Hong Kong and Macau with a strong association that help promote our university in their respective countries. We also receive funding and assistance from our alumni for underprivileged international students.” said Kevin Yeh.

Most of the queries from students are about visas, courses and cultural differences. Students also enquire about housing, food, and scholarships. Dean Yeh said the university often

holds events to promote cultural exchange and International cuisine exchange. To help local students learn more about international culture as well as to give international students the feeling of home here in Taiwan.

When asked if the Office of Public Affairs has ever come across any difficult situation while handling all the international students, Dean Yeh said once they had a student from Malaysia who was diagnosed with acute pneumonia but the Office of Public Affairs acted quickly and together with the Ministry of Education, provided all the necessary assistance to the student and he was finally able to recover and graduate in the right time. Dean Yeh said it was a critical time for everyone in the university but they overcame it with constant effort and perseverance.

Shih Hsin University is known for its Communication and Journalism Department. They excel at what they do when it comes to mass communication. Most of the exchange students come to find out more about their courses during their exchange time and some even stay back after graduation. Dean Yeh said some students go back to their countries and after graduation come back to pursue a higher degree in Shih Hsin University which the university considers is a very huge achievement.

With affordable education and ample opportunities to work with people from diverse culture and background, Taiwan offers its students one of the best experiences of studying abroad. Taiwan is constantly trying to improve its existing norms but updating itself regularly which is widely appreciated by international students. In addition, Mandarin education is also very attractive to students who like to learn about different cultures with depth and enjoy mastering skills of several languages aside from their own native language.

“Our motto is to make sure our students feel safe and comfortable during their stay here as they would feel in their homes” concluded Dean Kevin Yeh. ■

