

EDUCATION

IN TAIWAN

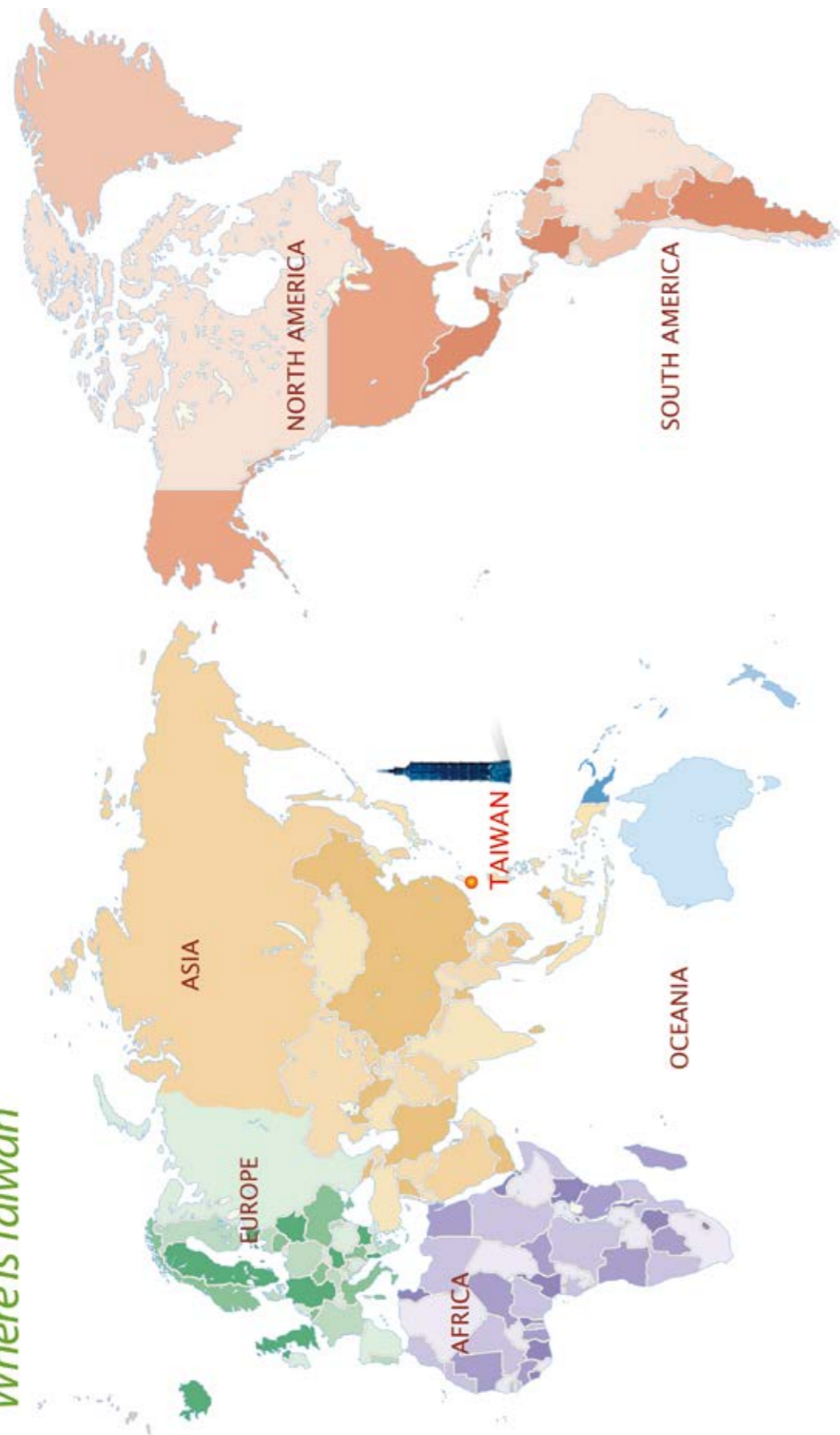
Ministry of Education
Republic of China



2023
|
2024

Education is not the filling of a pail, but the lighting of a fire.
—William Butler Yeats

Where is Taiwan



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EDUCATION in TAIWAN 2023-2024

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An Overview

I Introduction

As one of the Executive Yuan's subordinate agencies, the Ministry of Education (MOE) is the highest supervisory body for Taiwan's education. The MOE's mission is to enhance education in the country (including preschool education, basic education, technical and vocational education, higher education, lifelong education, special education, teacher education, arts education, digital education, technological education, environmental education, diverse education and international talent cultivation), as well as to promote sports and youth development affairs, and improve the general quality of education so as to increase competitiveness as a country. The

MOE is led by the minister of education, who is supported by two political deputy ministers, one administrative deputy minister, and one chief secretary. The MOE comprises eight departments, three administrations, along with the other subsidiary agencies. Together, they are committed to ensuring the quality of education in Taiwan. The MOE also supports municipal, county, and city governments in educational affairs.

II SDG 4

"Quality Education" is the UN's Sustainable Development Goal 4 (SDG 4), which aims to ensure inclusive and equitable quality education for all. SDG 4 is to make sure that by 2030, there

will be equitable and high-quality education available to all children at the primary and secondary levels that generates learning outcomes regardless of gender, vocational education that is equitable and affordable, no disparities between genders, and equal access to quality higher education.

III Major Education Policies at Present

1 Action Plan to Address the Trend of Fewer Children

To address the issues arising from Taiwan's sub-replacement fertility rate, reduce the financial burden on parents, and implement the policy of "Childcare Support for Children Aged 0-6," the Executive Yuan on January 29, 2021, announced the amended "Action Plan to Address the Trend of Fewer Children" whose three main objectives are extending affordable educare services, reducing tuition and fees, and doubling childcare allowances, in order to achieve such goals as "more vacancies," a "lighter burden," and "more allowances." This is the most comprehensive childcare support in Taiwan in years.

2 Curriculum Guidelines of 12-year Basic Education

The new curricula kick-started in SY2019



center on students and emphasize situated cognition, integration, exploration, and hands-on experience. Students are encouraged to take the initiative, engage the public, and seek the common good. With the vision in mind of "accomplishments for every child - nurture by nature and lifelong learning," students will acquire the knowledge, competence, and attitude needed to adapt to life and handle challenges in the future.

3 The New Southbound Talent Development Program

The MOE has based its "New Southbound Talent Development Program" on "The New Southbound Policy." This program provides quality education, bilateral training for professionals, and bilateral exchanges between the youth academics and students. In the meantime, it aims to promote cooperation in education between Taiwan and its Southbound Policy partners as a means of deepening bilateral relations.

4 Bilingual 2030

The Bilingual 2030 policy is aimed at cultivating the nation's bilingual talents. Proficiency in English would help local talent broaden their worldview and enhance communication skills in an international environment. To that end, the policy presents a multifaceted approach,

including the establishment of bilingual benchmark schools and colleges, English instruction in certain disciplines at senior secondary schools or below, and the production and broadcast of online English programs.

IV Future Prospects

The COVID-19 pandemic has posed many challenges for the education sector. To lower the impact of the pandemic, allow students to learn in a healthy environment, and ensure the quality of education, the MOE implements the relief and stimulus program for anti-COVID measures on campuses as well as online learning measures. Furthermore, the MOE continues to expand its

affordable education and care service, accelerate digital teaching implementation, and utilize talent from various disciplines, promoting policies including “The Digital Learning Enhancement Plan for Grades 1-12,” “National Key Fields Industry-University Cooperation and Skilled Personnel Training,” and “Industry-Academia Cooperation/Collaboration Project 2.0.” ■



Ministry of Education



SDG 4



Educational System

In Taiwan's current education system, students may study for up to 20 years, which includes six years of primary education, three years of junior high school, three years of senior secondary school, four years of bachelor education, one to four years for a master's degree, and two to seven years for a doctoral degree.

comprehensive education and care. The combination of preschool education and care into one administrative system allows for a strategy that centers on children and prioritizes children's welfare.

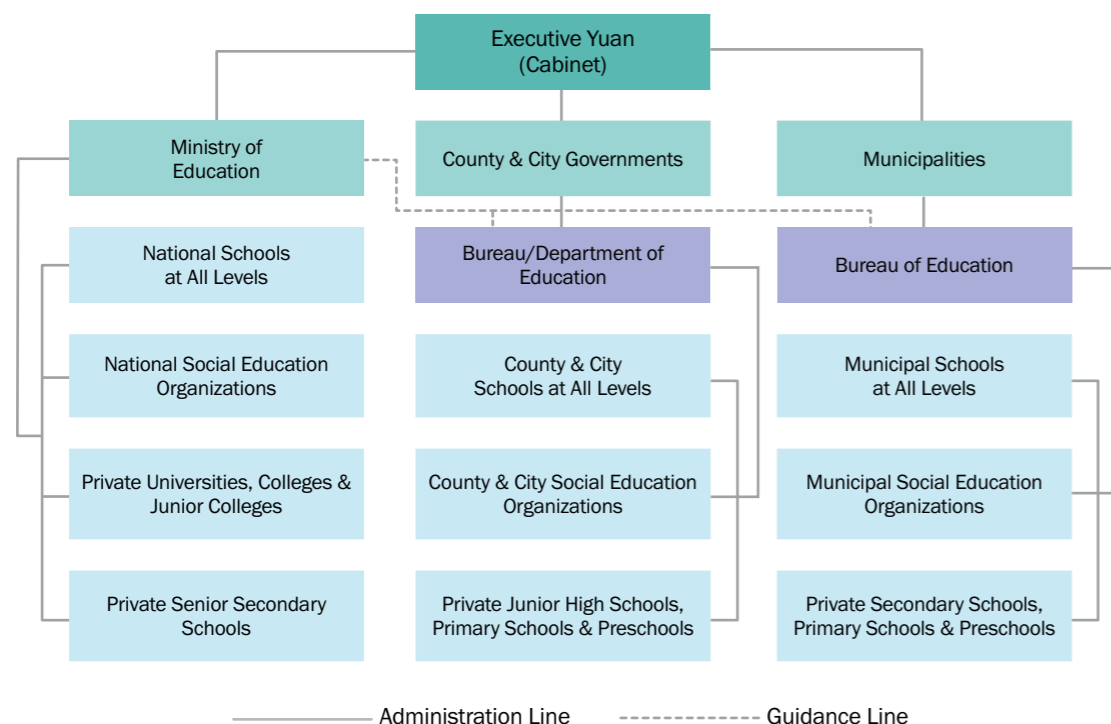
I Preschool Education

In the past, preschool education consisted of “kindergartens” and “child care centers,” which were under the jurisdiction of different competent authorities. Since 2012, kindergartens and child care centers have been consolidated into preschool, and children from the age of two to pre-elementary school are able to receive

II Compulsory Education

The nine-year compulsory education system, of which six years are for primary education and three years are for junior high school, was put into effect in SY1968. In order to offer more diverse development opportunities for junior high school students, technical 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.

The Education Administration System



III Senior Secondary Education

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

IV Junior College Education

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

V Teacher Education

The teacher education system is comprised of diversified, well-resourced, and selecting

methods. Teachers who teach in preschools, primary schools, junior high schools, and senior secondary schools are trained in universities that cultivate teachers. These institutions are also responsible for providing professional development and guidance for local educators. As of February 1, 2018, the training of teachers uses qualification tests before conducting internships and selects a necessary number of students through exams with just the right qualities, thus implementing an education training system.

VI University, College and Graduate School Education

The maximum study period for bachelor's degree candidates (including universities, colleges, universities of science and technology, and technical colleges) is four years (the Post-bachelor Second Specialty Program is one to two years, while the two-year bachelor's degree program is usually two years), and internships can last half a year to two years depending on the needs of the subject. For master's degree



candidates, the study period is limited to one to four years, and for doctoral degree candidates the range is two to seven years.

VII Special Education

Pre-tertiary level special education is divided into three stages: preschool, compulsory education, and senior secondary education. The special education stages provide education at corresponding stages and schools providing special education may set up special education classes. Independent special education schools may also be built to accommodate students with multiple disabilities that require special support. To best meet the educational needs of special education students, the education stages, assignment students to classes and grades, settings and ways of implementing education, courses, teaching materials, and teaching and assessment methods must always incorporate flexibility. And adaptability, individualization, socialization, accessibility, and inclusion must all be part of providing special education and associated service measures.

VIII Arts Education

The goals of arts education are to cultivate artistic talent, enrich the spiritual lives of citizens, and elevate cultural levels. 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.

IX Supplementary Education

Supplementary education aim to supplement citizens' factual knowledge about life, raise educational attainment, transfer practical skills, cultivate sound citizens, and help society to progress. This education system offers supplementary compulsory education, supplementary advanced education, and short-term tutorial education: all citizens who are past school age but have not received the nine years of basic education shall receive supplementary compulsory education. Citizens who did receive the nine-year basic education may receive supplementary advanced education. Those who wish to improve their factual knowledge and life skills can also receive short-term tutorial education. ■





Preschool and Compulsory Education

I General Information

The infrastructure of a country and the development of its economy are dependent on 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 nine years in SY1968.

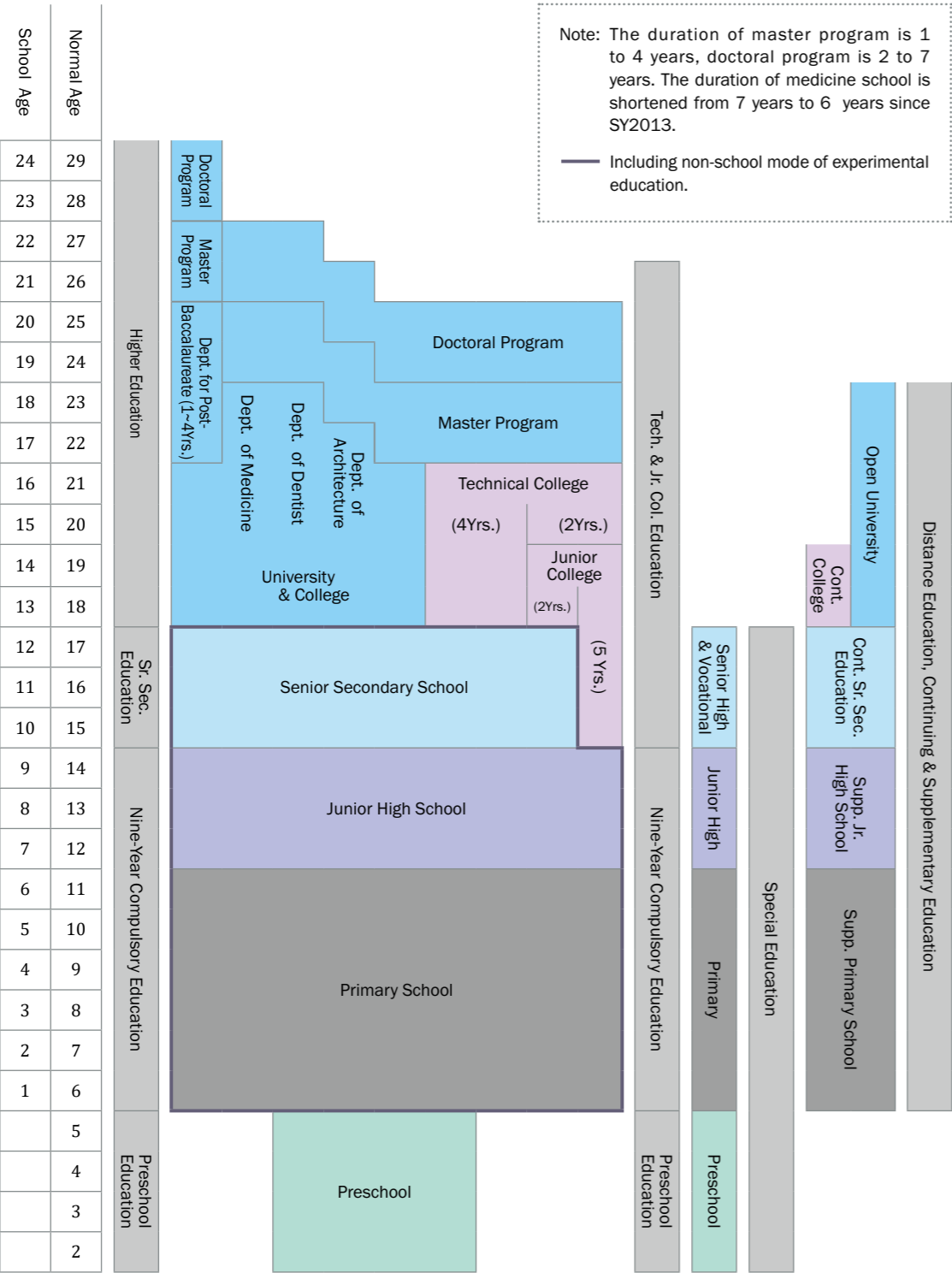
In accordance with current trends and to provide young children with good preschool education, the Early Childhood Education and

Care Act was promulgated on June 29, 2011 and became effective on Jan 1, 2012.

II Preschool and Compulsory Education Structure

The Early Childhood Education and Care Act is a revolutionary move in our preschool system. After the Act took effect on Jan 1, 2012, kindergartens and child care centers were redesignated "preschools," in which children from the age of two onwards are given complete and thorough education and care until they enter

The Current School System





elementary school. This act integrates both the education and the care of young children into a single administrative system, putting into practice a toddler-centered strategy that focuses on the children's best interests. Taiwan is also the first country in Asia to integrate the two systems. On April 26, 2017, the "Statute for Preschool Educators" was announced, clearly stating the rules for training, qualifications, rights and interests, administration, and appeals and dispute settlements in order to safeguard the rights of our country's preschool educators.

Kick-started in SY1968, Taiwan's nine-year Compulsory Education system is mandatory, free, and obligatory. Citizens from the age of six to 15 are legally required to receive education. The compulsory education is divided into two stages — the first six years at the elementary school level and the latter three in a junior high school.

III Preschool and Compulsory Education Policies

In line with the Executive Yuan's "Action Plan to Address the Issue of Fewer Children," the MOE implements the policy of "Childcare Support for Children Aged 0-6" and has attained its goal of adding 3,000 classes to public preschools within eight years (between 2017-2024) ahead of schedule in 2022, marking the biggest increase throughout the years. As a result, in SY2021, combined student capacity at affordable public and quasi-public preschools could exceed 470,000. Since August 2022, parents have paid no more than NT\$3,000 per month; there have been more benefits for families with two or more children; children from low- and middle-income families enjoy exemption from school fees; and childcare allowances have been doubled to

NT\$5,000 per month without a cap on the number of children in the family. These measures are to reduce the childcare burden on parents and to increase the overall enrollment rate.

To enhance teaching effectiveness at elementary and junior high schools and promote effective learning, the MOE continuously helps local governments improve the quality of curricula and professional development mechanisms for teachers. Through subsidies, local governments hold seminars for teachers, develop flexible courses at schools, helping schools implement curriculum guidelines while providing innovative teaching. Teachers are encouraged to join professional learning groups to reinforce teaching knowledge and skills.

The MOE provides tuition and miscellaneous fee exemption, bursaries, stipends, and other measures to assist underprivileged students with enrollment and protect students' right to education. It promotes study aids for elementary

and junior high school students to reduce academic gaps. Additionally, through the six tasks of "international testing trend development," "competency teaching and assessment enhancement," "promoting technological teaching and assessment," "promoting student competency-enhancing learning activities," "reinforcing help for underprivileged students," and "tracking and guiding students with lowered



At Waishe Preschool, children grow and learn through nature's rhythms

Interviewee: **Chang Shu-o**
Principal, Waishe Nonprofit Preschool



motivation,” the MOE hopes to increase students’ learning abilities, reinforce help for underprivileged students, and improve students’ ability to work with information.

Social development has caused the population of the cities to grow, while businesses and people continue to move out of remote areas. The local economy in these areas has slowed down, jobs are hard to find, and children are often left to the care of grandparents. Education is where the values of social equity and social justice should be embodied. To enable each and every child to enjoy equal opportunities of adaptive development, the president promulgated on

December 6, 2017, the “Act for Education Development of Schools in Remote Areas.” The Act specifies the length of a full-time teacher’s service, a flexible mechanism for hiring acting teachers and contract-based teachers, rewards and incentives to encourage long terms of service, methods of recruiting teachers and guidance counselors where they are needed, the importance of simplifying the administrative burden on schools, professional development opportunities nearby for the teachers, a supply of diverse learning resources for the students, and the provision of necessary facilities and equipment to schools in order to safeguard the students’ right to education in remote areas. ■



K-12 Education Administration



With over 40 years of experience running the Ci-Xin Waldorf School in Yilan County, the Ci-Xin Children Education Foundation is dedicated to promoting Waldorf education, which is based on the philosophy of Rudolf Steiner, the founder of anthroposophy. By founding the Waishe Nonprofit Preschool, the foundation aims to provide parents with an affordable preschool education option and to understand children’s development in-depth.

The Waishe Nonprofit Preschool has the four core values of “equal and mutual respect,” “professional consolidation,” “public-private cooperation,” and “community interaction,” providing an authentic, simplistic, and warm learning environment that values nature. In line with Waldorf education principles, the school’s education focuses on “rhythms and repetition” as well as “role models and imitation” at the

preschool stage and does not teach children to read, write, and do math.

At Waishe, children enjoy ample time and space to develop their creativity within a routine of fixed rhythm. The school provides a learning environment that imbues children with a sense that the world is good and nurtures children’s senses as well as relationships based on love, respect, and care.

The curriculum at Waishe follows the theme of the four seasons, allowing children to feel how the weather and environment changes throughout the year through circle time, stories, festivals, and walks within the community. The school also combines Taiwan’s traditional holidays and events such as the Lantern Festival, spring outings, Dragon Boat Festival, graduation, Mid-Autumn Festival, and Winter Solstice to let children experience life and local cultures,

helping them find a sense of belonging and security.

As the school is located within the Linkou Forest Reserve and close to several farms, nature is easily accessible, and in spring, children join students from Waishe Elementary School on outings and hikes while in summer, they pick and dry silvery wormwood under the guidance of teachers to make fragrant sachets for Dragon Boat Festival. In the past three years, considering the time and space for children's activities were greatly restricted due to COVID-19, teachers at Waishe take children out for walks at least twice a week not only for exercise but also to help them learn about the neighborhood they live in.

Since its founding, Waishe has encouraged parents' participation in school activities, holding three to four parenting seminars every year in addition to holiday, gardening, or handicraft workshops for parents, allowing the school to share its education beliefs and methods and stimulating interaction between families. The school has received much support from parents who expressed appreciation for the chance to grow with their children within nature.

"Over these two years, as the world goes through the COVID-19 pandemic and confronts



viral variants, I am glad my child and I can be immersed in the nurturing environment of Waldorf education. We grew and matured within nature, shirking the pursuit of convenient, advanced material life and trying our best to return to what's authentic," a parent wrote to the school. "Though we cannot completely escape our reliance on modern technology, we have transformed a part of our desire for material and results into spiritual peace and natural coexistence. This has helped us enhance our adaptability in a changeable and anxious environment." ■



Senior Secondary Education

Senior secondary schools are designed to cultivate the minds and bodies of the youth, to foster healthy civic awareness, and to lay a sound foundation for academic research and professional training in later years. Senior secondary schools in Taiwan include "general senior secondary schools," "skill-based senior secondary schools," "comprehensive senior secondary schools," and "specialized senior secondary schools."

Students who graduate from junior high school or have an equivalent education level can gain admission to senior secondary schools through methods such as open admission and

specialty enrollment. Beginning from August 2014, the 12-year Basic Education is provided in two phases. The first phase is the 9-year National Education, which is based on the Primary and Junior High School Act and Compulsory Education Act and applies to citizens aged six to 15. National Education is universal, obligatory, compulsory, free of charge, government-run in principle, school district-based, with open admission and single-type schools that offer general education. The second phase is the 3-year Senior Secondary Education, which is based on the Senior High School Education Act and applies to citizens

aged 15 years or above. Senior Secondary Education is universal, voluntary and non-compulsory, free of charge, government- and private-run, with generally open admission and various types of schools that offer general and vocational education. This chapter focuses on Senior Secondary Education.

I Supportive Measures for New Curriculum Guideline Implementation at the Senior Secondary Education Level

1 Regulation Research, Amendment, and Introduction

- A. As the implementation of the new curriculum guidelines reaches its third year, the MOE shall continuously review the laws in effect as well as conduct research and make amendments.
- B. For SY2022, 95 senior and vocational high schools were approved as pioneering



schools. The MOE assists these schools with developing and implementing the new curriculum guidelines.

2 Course and Teaching Improvement

- A. The MOE promotes the Senior and Vocational High School Enhancement Aid Program, which encourages schools to establish and promote professional groups for teachers by providing schools with resources. This is done in the spirit of the new curriculum guidelines to reinforce teachers' professional competency in teaching, elevate teachers' ability to teach flexibly, help teachers develop and improve courses, and cultivate students' core competencies.
- B. By promoting work circles and subject centers through senior high school courses and integrating local governments' course promotion teams, the MOE develops teaching materials and syllabi, builds professional development groups for teachers nationwide, and promotes region-based joint course preparation mechanisms, which have researcher teachers and seedling teachers lead teachers in jointly preparing courses in various districts.

3 Faculty Size and Ability Acquisition

- A. The MOE continues to replenish the number of teachers needed in senior high schools to promote the 2019 Curriculum Guidelines so schools have enough teachers with specific expertise.
- B. According to the "Senior High School Organization and Staffing Standards," the MOE approves the adequate number of faculty members and encourages schools to actively and flexibly recruit teachers according to actual needs. To enhance course quality and provide students with



adaptive education measures and diverse learning opportunities, the MOE also subsidizes schools in remote areas for recruiting substitute teachers and administrative staff members, having teachers elsewhere review elective courses, and other purposes.

4 Facilities and Infrastructure

- A. To improve and enhance teaching and internship infrastructure needed for the 2019 Curriculum Guidelines at schools, the MOE established the "Directions Governing MOE K-12 Education Administration Subsidies for Senior Secondary Schools to Improve Educational and Practical Training Facilities and Equipment" and assists schools with building professional classrooms, designing learning environments required for elective courses, and providing autonomous learning spaces and equipment for students.
- B. With funds provided through the "Improvement of Taiwan Academic Network in Senior Secondary Schools

program" under the Forward-looking Infrastructure Development Program's Digital Infrastructure plan, the MOE improves high school campus' network infrastructure and increases the overall bandwidth at schools. Schools receive subsidies to increase their network bandwidth to 300 Mbps and update information equipment and learning tools needed for teaching.

II Promotion of the Senior and Vocational High School Enhancement Guidance Program

- 1 Through the "Directions Governing MOE K-12 Education Administration Subsidies for Expenses Arising from the Equal Access to Adaptive Education and Community Education Resources for Senior Secondary Schools Implementation Plan," the MOE connects universities within communities and junior high school education resources to form adaptive learning communities designed around geographical locations, social circles, and ease of commute. This creates an education environment for adaptive learning to offer students diverse and ample learning opportunities, bridging the gap between urban and rural education.



Additionally, the MOE promotes junior high school teachers' ability cultivation and joint course preparation development, holding "academic exploration" and "career exploration" courses and activities to provide adaptive learning opportunities for senior and vocational high school students within communities, thus achieving adaptive development goals. In SY2022, 297 senior high schools received subsidies.

- 2 The Senior and Vocational High School Enhancement Aid Program, by providing resources, creates counseling and professional growth mechanisms to stimulate members' potential as well as enhance schools' overall performance and strength development. This way, students may enroll in schools close to home, develop within adaptive courses with less pressure on academic advancement, and increase competency, helping steadily develop 12-year Basic Education. In SY2022, 255 schools received subsidies.

- 3 The Vocational High School Enhancement Guidance Program helps technical high schools adopt the new curriculum guidelines and continue improving existing education resources. It guides schools in examining and expanding course analyses and achieving transformation and innovation in course implementation, thus improving the quality of schools' services, teaching, and student learning and attaining the technical and vocational education goal of practicality. In SY2022, 197 schools received subsidies.

III Science Education and Science Talent

- 1 Organizing and participating in domestic and international mathematics and science competitions:

A. Organizing national senior secondary school mathematics, science, and information subject competitions as well as science fairs for elementary and junior high schools. The goal is to foster an



appropriate attitude and concept about science among the students, to inspire interests in scientific research, and to improve the pedagogy and its effectiveness in senior high schools.

B. Training and preparing students to participate in international Math and Science and in the Regeneron International Science and Engineering Fair. Establishing an incentive system.

- 2 Subsidizing "Science Education Projects for Elementary and Junior High Schools": To improve science education in primary and secondary schools, in SY2022, 61 schools received subsidies for their efforts in science education research, promotion, training, and extracurricular assistance.
- 3 "Projects of Scientific Research Training for Senior Secondary School Students" provide school-year-based subsidies for high schools to foster talent in science, discover students with potential in science, and cultivate future scientific researchers.
- 4 Opening "science classes" in high schools: Designing and offering science courses where students can learn to do research on their own and be creative. The goal is for students to not only develop scientific expertise but also humanism, and ultimately,

become high-quality workers in science and technology who help our country enhance national competitiveness.

- 5 Organizing the selection mechanism and entrance examination for France's "Classes Préparatoires aux Grandes Ecoles": Between 2006 and 2022, 53 high school students were sent to Classes Préparatoires aux Grandes Ecoles in France as an academic exchange between Taiwan and France.
- 6 Planning science education tours for girls' schools and students: Outstanding, young female science award winners are invited to high schools to speak to the students so as to spark the students' interest in basic science, to encourage them to learn more about science and plan for a career in scientific research, and to inherit the spirit and accomplishments of their female predecessors.

IV Second Foreign Language Education and International Awareness

- 1 The main goals of the "Program of Promoting Second Foreign Language Education at Senior Secondary Schools" are as follows:

A. Encouraging and subsidizing senior secondary and higher education schools to participate.

B. Creating an effective promotion mechanism for the second foreign language education system.

C. Creating a second foreign language learning environment. ■



K-12 Education Administration



Students learn through practice, practice through learning in Practical Skill Program

Interviewee: **Chou Ku-yu**

Teacher, National Xinying Industrial Vocational High School



Centered on students and based in schools, the Practical Skill Program emphasizes students' diverse and adaptive development by creating a strong foundation in practical skills training and highlighting each school's strengths. The educational goal of the program is to hone students' basic professional skills in various subject groups and teach skills applicable to employment, allowing students to prioritize career building while still getting their education.

Curricula under the Practical Skill Program are designed to focus on specific skills each school year. Courses are practical, and students are guided to take skill evaluations and obtain certifications needed for work.

The program is an extension of technical education at the junior high school level under

12-year Basic Education with the objective of realizing "learn through practice, practice through learning." Not only are schools engaged, but businesses also actively join to help nurture in-demand entry-level technical talent in various industries.

In the Practical Skill Program, schools plan career experience courses for students to visit businesses in person. Working professionals are also introduced to join course instruction, reinforcing the connection between schools and industries so students can learn professional knowledge and skills currently in demand within the industry.

The National Xinying Industrial Vocational High School offers the program in four departments under four subject groups. Each department has

comprehensive professional equipment, teaching space, and faculty and provides students with remedial teaching, learning aid, career development, instruction by working professionals, certification awards, interdepartmental transfers, and Star Plan quotas.

The school also offers students academic, skill-based, physical, and service-based clubs for students to learn diverse knowledge and skills through group activities and teamwork. Furthermore, considering that the school, its students, and their parents share close relationships in education, the school's counseling office serves students as well as parents in an effort to consolidate resources at school and at home.

One of the Practical Skill Program's biggest strengths is the interdisciplinary knowledge students are able to gain while learning. Students can expand the scope of their education and vision in the program while discovering their interests and talents.

By getting a head start in accumulating practical experience, students in the program



also develop an interest and passion for learning through hands-on courses. As they learn valuable skills and explore their talents, they also grow confidence and drive, forging a path that leads to their dreams.

Talent cultivation must be geared toward industry demands, and businesses nowadays prefer diverse, agile, and passionate employees. Therefore, while practical training is important, students' character and health, as well as often-overlooked skills such as emotional management and interpersonal skills, are also essential and should be considered for inclusion in the curriculum. ■





Technical and Vocational Education

I An Overview

The MOE has formed a Department of Technical and Vocational Education that is responsible for technical and vocational educational affairs in Taiwan and directly oversees and guides universities of science and technology as well as technology colleges and junior colleges. The education departments of municipalities are responsible for supervising technical and vocational educational affairs in secondary schools. The MOE's K-12 Education Administration supervises national senior secondary schools, affiliated junior high schools, 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 technology education affairs of junior high schools in their jurisdiction.

Technical and vocational education in Taiwan is provided in both secondary and higher education. At the secondary level, besides technical and vocational courses that are taught in junior high schools, there are also skill-based senior high schools, as well as technical and vocational courses in general senior high schools and comprehensive senior high schools. At the higher level, there are junior colleges (two-year and five-year), technology colleges, and universities of science and technology (two-year and four-year). These colleges and universities may recruit students for associate-degree

programs, bachelor programs, master's degree programs, and doctoral degree programs.

II Development of Technical and Vocational Education

1 Secondary Education

A. Characteristics

- Complete structure and system.
- Students study in private schools is more than in public schools.
- Adaptive school system and subject courses.
- Job-oriented courses with hands-on training.

B. Key points to be strengthened

- Suitable concern for disadvantaged students.
- Open admission and specialty enrollment.
- Actively improve the quality of teaching.
- Promote industry-academia collaboration.
- Cultivate talent with high technical quality.
- Stress the creative research and development of industry-academia cooperation.

2 Youth Education and Employment Savings Account Program

To encourage general and vocational high school students to explore professional opportunities at work and internationally and to learn more about future goals, the MOE launched the "Youth Education and Employment Savings Account Program" in 2017. This project comprises two parts: the "Youth Employment Pilot Program" and the "Youth Experiential Learning Program." With the former, recipients will receive a monthly

subsidy of NT\$10,000 for no more than three years as a form of support in employment, education, or starting up a business. Applicants to the "Youth Experiential Learning Program" will have the opportunity to explore life's paths by volunteering and travelling.

3 Industry-Academia Cooperation Program 2.0

To combine technical and vocational education's academic advancement and employment channels, the MOE works with the Ministry of Labor and Ministry of Economic Affairs to expand and promote the "Industry-Academia Cooperation Program 2.0." The program has technical and vocational high schools, technical colleges, and enterprises work together, consolidating rewards and resources while providing incentives such as funding and student scholarships and stipends to encourage technical and vocational high school students to enroll in technical colleges and become employees, achieving the goal of having enterprises and schools jointly cultivate talent.

4 Higher Technical and Vocational Education

A. Characteristics

- Flexible study and recurrent education: there needs to be the



possibility for flexible switching vertically and horizontally between school systems, while channels must be kept open for those who want to return to school. Both the youth and those who have already entered the workforce should be able at any stage find ways of studying on a level suitable for their specialized skills.

- ii. Private schools should be excellent and active: private schools play an important role in the development of Taiwan's technical and vocational education system, as they realize an even closer integration between technical and vocational education on the one hand and business on the other.
- iii. Multiple school systems in close touch with industry: in addition to junior colleges, technical colleges and universities of science and technology (including graduate schools), the higher technical and vocational education system also includes continuing education departments, in-service education programs and continuing schools, showing the diversity and flexibility of this kind of education.
- iv. Practicality and usefulness of schooling: technical and vocational



education give the most weight to the practical spirit. There are multiple means of admission, such as special achievement-based admission, and recommendation and screening-based admission, which encourage talented students with technical superiority to continue their studies.

- v. Outstanding performance in international competitions: a characteristic of technical and vocational education is "learning from doing." Hands-on practice enables the students to accumulate experience, as theory and practice are equally important.

B. Key points to be strengthened

- i. Care of disadvantaged students
- ii. Admission quota control and multichannel admission
- iii. Actively raise the quality of teaching
- iv. Launch the evaluation of technical and vocational schools
- v. Cultivate talent with high technical quality
- vi. Stress the creative research and development of industry-academia cooperation
- vii. Promote the "Sustained Progress and Rise of Universities in Taiwan" and develop the diverse characteristics of schools
- viii. Encourage universities to implement their social responsibility decisions
- ix. Establish incubators for regional industries and technologies to promote cooperation between academia and industry
- x. Develop international cooperation and exchanges



III Future Prospects

Secondary and higher technical 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 local industries, cultivating relevant talent to promote local development and extension toward the international scene, and exchanging experiences and cooperating with the technical and vocational education systems of other countries. In addition, the education must take root, as well as implement the professional knowledge and curiosity of elementary and junior high schools in order to raise the attractiveness of technical and vocational education. The description is as follows:

- 1 To expand professional interest downward: Junior high schools can organize field trips and introduce the students to the workplace. They can also work with technical and vocational colleges and training institutions to open new courses.

- 2 To strengthen professional capabilities by practical orientation: The European Union (EU) 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 nurturing talent together. They can organize technical 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 To localize technical and vocational education and continuing education: the promotion of localized technical and vocational education should link up with local industry in order to cultivate the fit talent needed, which will in turn invigorate the development of local industry.

Industry-Academia Cooperation Program gives students hands-on training, work experience at enterprises

Interviewee: **Cheng Ching-min**

Dean, College of Technology and Engineering, National Taiwan Normal University



4 Reach out into Southeast Asia and move on to the global scene: international exchanges and cooperation in technical 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 that one wants to communicate with before establishing cooperative relations. At the local level, exchanges can begin from the characteristics of local industry. As for the school level, the main emphasis should be on encouraging local students to expand their international perspective and achieve fulfillment. Since 2017, the MOE has responded to the “New Southbound Policy” by expanding its training of technical and vocational talent from the relevant countries, encouraging bilateral exchanges, launching the “Industry-Academia Collaboration Program for International Students,” the “Short-term Program of Technical Training for Foreign Youths,” and the “Short-term Program of Enhancing Professional Skills for Foreign Youths” from New Southbound Policy countries. Young students from the New Southbound Policy countries are being

accepted within the excellent domain of domestic technical and vocational schools to accompany the country’s development in order to cultivate the necessary talent. In addition, the MOE rolled out “Credit Courses and Programs on Southeast Asian Languages and Industries,” “Professional Skills Improvement Training for Children of New Immigrants,” and “Southeast Asian Language Courses” that recruit domestic and international students. The students will have the ability in language of New Southbound countries, professional English, global views, business management and trade abilities, and other professional knowledge needed by industry so that they will be pioneers of cross-cultural exchange with New Southbound countries. ■



Technical and Vocational Education in
Taiwan Republic of China



The “Industry-Academia Cooperation/ Collaboration Project” had its origins in 2006. At the time the Ministry of Education (MOE) combined the education channels of technical high schools and colleges and worked with the industrial sector to provide a solution to issues in educational advancement for technical school students as well as the lack of human resources within the industry.

The program cultivates technical talent that met industry needs, forging an education model with a basis that encompassed student education and careers.

In 2019, under the MOE’s guidance, the Taiwan Casting Industry Association worked with National Huwei Agricultural and Industrial Vocational Senior High School, National Siluo Agricultural Industrial High School, and National Yunlin University of Science and Technology to establish the “Project of Intelligent Casting.” The program’s success led the association to propose doing the same in north Taiwan to cultivate casting talent.

National Taiwan Normal University’s (NTNU) Department of Mechatronic Engineering became responsible for the program, making the school

the first non-technology university to offer a Smart Casting Industry-Academia Cooperation Program.

To encourage students to participate in the Industry-Academia Cooperation Program 2.0, the full-time vocational high school students can receive a scholarship of NT\$5,000 per month, and the receiving time is equal to the period of their corporate internship.

The program also requires participating enterprises to hire students as employees rather than interns in order to ensure students' benefits and continued employment at the same enterprise. To ensure students are equipped with technical skills in-demand within the industry, participating schools are required to plan curricula specifically around required knowledge and skills.

To simplify the application process, the program consolidates the Ministry of Labor's (MOL) "Dual System of Vocational Training Program" and "Industry-Academia-Training Cooperation Training Program" as well as the K-12 Education Administration's "Career-oriented Program." Meanwhile, enterprises in the program receive training subsidies from the MOL, as well as extra points when the Ministry of Economic Affairs considers them for subsidies.

According to Cheng, NTNU admitted 34 students in the 2021, from the New Taipei City Municipal New Taipei Industrial Vocational High School, New Taipei San-chung Commercial and Industrial Vocation High School, New Taipei



Municipal Jui-Fang Industrial High School, Taipei Municipal Nangang Vocational High School, and Taipei Municipal Muzha Vocational High School. The Smart Casting Industry-Academia Cooperation Program's structure had students working at enterprises from Monday to Thursday and attending classes on Friday and Saturday.

One of the biggest challenges the school encountered while running the program was a gap in academic performance, Cheng said. Though students were first recommended by their high schools then interviewed by the Department of Mechatronic Engineering faculty and participating enterprises, the removal of an academic exam from the process meant their grades were not on par with students admitted to NTNU via college entrance exams.

Despite a prior understanding of the circumstances, instructors still faced difficulty teaching and had to adjust the content and teaching methods of courses. Still, some students had to exit the program after falling behind academically.

So far, NTNU has run the pioneering Smart Casting Industry-Academia Cooperation Program under the MOE's instruction twice, during the 2021 and 2023. As the school strives to help nurture talents in Taiwan and bridge the gap between academic studies and hands-on experience, it will continue working with the MOE to conduct the program with the goal of promoting local education, employment, and development. ■



Higher Education

I An Overview

1 Higher Education System

Taiwan has excellent global competitiveness in spite of limited land and natural resources. The key reason is its quality human resources and higher education. Higher education institutions in Taiwan include two-year junior colleges, five-year junior colleges, and universities. Like most countries, the study period is four years for an undergraduate university degree, one to a

maximum of four years for a master's degree, and two to a maximum of seven years for a doctoral degree.

2 Faculty and Students

The popularization of education has led to a rapid increase in the number of universities, colleges and students, although the figure has leveled off in recent decades. In SY2021, there were 149 universities, colleges and junior colleges, totaling 1,185,830 students. Reforms in teacher training have played an important part in the popularization of higher education.



Significant improvements in teacher quality can be attributed to policy adaptations and the newly implemented evaluation system. Currently, PhD degree holders account for over 80% of faculty in universities.

II Expenditure

To maintain competitiveness, Taiwan's government has invested more than US\$700 million in higher education annually over the past five years to encourage universities to enhance the quality of research and teaching. The results have been remarkable.

III Major Objectives

26 of Taiwan's universities were listed in the Quacquarelli Symonds (QS) World University Rankings 2022, with 10 listed among the top 500. Times Higher Education (THE) Ranking

2022 listed 43 universities in Taiwan, with seven universities ranking in top 500 in the past five years. According to the Essential Science Indicators (ESI) rankings in 2022, 52 universities in Taiwan entered the list of the world's top 1% of institutions (accounting for 32.7% of universities and colleges in Taiwan), spanning 20 research areas, which demonstrates that higher education in Taiwan is world-class.

To spur universities to develop their individual characteristics, the MOE has actively promoted diversity and flexibility in higher education. Universities must cultivate, retain, and recruit top



talent. Our international competitiveness will be increased by improving the quality of higher education and make great effort to diversify research areas. Bridging the gap between industry and academia and connection with local communities will enhance universities' competence in R&D and encourage them to adhere to their social responsibilities. With the more flexible multiple entrance program in place, higher education is an extension of the 12-year Basic Education. The entrance program has been

adjusted in order to adapt to self-directed and diversified learning. As the international competition for talent intensifies, the MOE has launched several projects to raise the overall quality of higher education and encourage the diversified development of universities:

- 1** Higher Education Sprout Project, equal emphasis on teaching and research: The government plans to invest NT\$83.6 billion over five years in this project as a way to encourage universities to develop their own characteristics and innovative teaching techniques. This will assist universities to establish first-class research centers, become more reputable in the global academic community within their forte, and enjoy wider-reaching influence internationally.
- 2** Yushan Project, incentives for top talent: The three measures under Yushan Project are "Yushan Fellows", "Flexible wage payments," and "10% Research Pay Raise for Full-time



Professors.” This Project offers salaries up to the international standard in order to attract the best professors from Taiwan and abroad. It also aims to foster scholars who will become the mainstay of higher education.

- 3** Industry-Academia Collaboration, better R&D abilities: To promote National Key Fields Industry-University Cooperation and Skilled Personnel Training. With the encouragement of industry-government-university cooperation, industries and universities will be able to collaborate and cultivate talent more orderly and effectively, including high-level scientific and technological talents in Taiwan’s critical sectors. As of 2022, 11 research colleges in 10 schools have been approved, spanning disciplines including semiconductor, smart machine, artificial intelligence, circular economy, and finance. “The Featured Areas Research Center Program” will continuously strengthen universities’ research energy, cultivate world-class talents in key fields, solve social issues, and enhance the reputation of international research.

- 4** An environment for global exchanges and global talent: This project is in line with the New Southbound Project and will strengthen collaboration and exchanges with the ASEAN countries and South Asian countries. Student exchange programs and short-term visits between countries are encouraged. Cross-country collaborative training programs between top universities and research institutions will increase international exchanges of talent.

- 5** Better enrollment and cultivation of diversity: In line with the general goals of national talent cultivation and the new high school curricula that emphasize personality cultivation, interdisciplinary training, and course diversity—university enrollment will take into account the student’s course-taking history. In addition to entrance exam results, more emphasis will be placed on what courses the student has taken and their extracurricular activities. The MOE will also establish a database of high school learning paths, promote specialized university



enrollment, and subsidize the College Entrance Examination Center to establish a new problem database and to develop a new integrated exam tool. The purpose is to make high school education more relevant to university enrollment.

nature. The allocation of expenditure must satisfy the learning needs of students. It is the responsibility of a university to manifest its own value and to create an innovative dynamic for the society. To help students acquire the core abilities needed in the future, educators must design diversified subjects and innovative research and take the needs of cross-generational cultures into consideration. Universities must set up mechanisms to have flexible governance and create a campus where a new generation of talent will be nurtured—talent that will become the mainstay of national development in the face of global competition. ■

IV Future Prospects

In the spirit of “connecting with local and global communities and creating a better future,” the MOE strives to fulfil the following objectives: innovation in education, enhanced connectivity with the public, individual characteristics, and social responsibility. Higher education institutions are encouraged to develop their own strengths and innovate teaching methods so as to follow the latest social trends and meet industrial needs. The methods must inspire students to learn and cultivate their general abilities both in school and in the workplace; that is, to nurture by



Taiwan Higher Education



EE professor encourages young engineers to dream big on global stage

Interviewee: **Chiueh Tzi-dar**

Dean of Graduate School of Advanced Technology, National Taiwan University



In December 2022, a graduate school was established to cultivate talents for the semiconductor industry at one of Taiwan's most prestigious universities.

The aim of the program is to marry industry practice with academic training to make up for the talent shortage in Taiwan's tech scene, according to Professor Chiueh Tzi-dar, dean of the newly founded Graduate School of Advanced Technology (GSAT).

69 experienced faculty members, internship opportunities at international tech giants, and chats with senior engineering practitioners from Intel are what made the GSAT at National Taiwan University stand out.

"Although the GSAT is an academic program, it is our goal for this program to keep up with the efficiency of private enterprises," said Professor Chiueh.

Local as well as foreign companies have offered internship experiences jointly with the GSAT. Students embark on their internship as Research and Development Interns, implementing hands-on what they've learned in school and at world-class companies such as TSMC, Micron, Vanguard International Semiconductor (VIC), and MediaTek.

"International mobility" is a concept reiterated by Professor Chiueh. In his opinion, tech talent in Taiwan must possess the ability to communicate

with international clients. The GSAT reinforces international collaboration among its coursework and internship, boosting student competitiveness on the global stage.

In addition to coursework and internships, the program also encourages students to hone their leadership skills. As pointed out by Professor Chiueh, one should aim high and strive to become a leader.

"It's a pity to be only one tiny cog in big corporate machines for your entire life. It is my belief that our students shall achieve more by taking on leadership responsibilities," he said.

While the GSAT program does not provide leadership lessons, the treasure trove of NTU has much to offer. The NTU Leadership Program offers training on leadership, boosting skills on communication, identifying problems, and coming up with solutions.

GSAT focuses on three key fields of study, which are IC Design, Semiconductor Devices, Materials, and Heterointegration, and Nanoengineering and Nanoscience. Approximately 100 students are expected to enroll each year, adding to Taiwan's tech powerhouses after they graduate.

Given the boom in demand for IC design, GSAT-trained talent is also anticipated to be in hot demand. Almost every product in our daily life relies on IC design, from consumer electronics, automobile, to clean technology such as smart electric grids.

"We value our international students," said Professor Chiueh. To break down the language barrier for international students, roughly 40% of courses are conducted in English. Currently, students from Lithuania, India, Indonesia, and Thailand are among the first batch of international students in the GSAT.

"We're confident that more students are coming from abroad to study in our program, as Taiwan continues to impress the world with its technology prowess," said Professor Chiueh.

The talent that GSAT is looking for are those with "a vanguard mindset who won't back down in the face of challenges," said Professor Chiueh. After all, as a novice researcher in advanced technology, there will be endless rounds of trial and error. However challenging, contributing to the advancement of human knowledge will be rewarding to those who make it to the end. ■





Lifelong Education

In the age of the knowledge economy, lifelong learning is the key to enhancing civic literacy, understanding, knowledge, skills, and national competitiveness. In order to promote lifelong learning, create a community-based learning map to foster trends of community learning and reading, and be prepared for an ageing society, the government has actively integrated resources among lifelong learning facilities, supported the development of community colleges, and created a learning system targeted at senior citizens. The importance of family education and the quality of social education institutions and libraries are also one of the focuses of lifelong learning, with the purpose of providing more public and diverse channels and opportunities for lifelong learning.

I Community Colleges: Subsidies and Incentives

The Community College Development Act took effect on June 13, 2018. Community Colleges are lifelong education institutions that enhance citizens' civil literacy and ability to participate in public affairs, help promote local public affairs, strengthen people's sense of local identity and regional vitalization, cultivate local talents, develop local culture and knowledge, as well as stimulate communities' sustainable development. There are 88 community colleges in Taiwan, with approximately 400,000 enrollments in recent years. The MOE subsidizes and incentivizes the operation of community colleges with an inspection, guidance, and

reviewing mechanism of the subsidies in place to ensure the effectiveness and steady development of community colleges.

II Lifelong Learning for Senior Citizens

By the year 2025, the number of people aged 65 years or above will account for 20.7% of the population, making Taiwan a “hyper-ageing society.” To ensure a learning system is in place for senior citizens, the MOE has helped local institutions to set up 370 senior learning centers nationwide. The services provide courses adapted to aging. The programs link local characteristics and contribute services. In addition to learning centers, 90 universities open their campuses to senior citizens, who enjoy access to the schools' resources and the opportunity to learn alongside youth. The MOE also subsidizes “leaders of self-directed senior citizens learning groups” that it trains to organize autonomous and self-service learning in 167 such groups regularly brings senior citizens in remote areas or rural-urban fringes and their family members a degree of education, helping to nurture a lifelong learning society.

III Family Education

The Family Education Act and stage 3 of the Mid-Range Plan for Promoting Family Education (2022-2026) attempt to increase professional manpower, strengthen resource integration, bolster social protection coverage, and improve the knowledge and skills of family education, the four major policy goals. All levels of government will coordinate in order to enforce the measures, strengthen family education practices, and realize the preventive function of family education.

IV Innovative Social Education Institutions and Libraries

1 “Phase II Plan of Intelligent Learning Service for All -- Technological Innovation Service Plan of National Social Education Institutions (2021-2024)” is the basis for the sub-projects the “intelligent museum” and the “intelligent library.” The sub-projects aim to connect 10 social education institutes under the MOE with intelligent technologies so that they can work together as “intelligent museums” and “intelligent libraries” to



integrate and share resources among national educational centers around Taiwan. To continue with the objectives and results of Phase I Plan, Phase II will apply the latest information technology to upgrade the services provided. Resources will be integrated on educloud so that users will enjoy easier access to information and customized services.

- 2 “The Plan of Optimizing Environment and Services of National Social Education Institutions (2021-2024)”: Upgrading buildings and ensuring public safety; maintaining a comfortable environment and friendly services; optimizing infrastructure and improving professional image; applying technology in new services and establishing a learning environment for people of all ages.
- 3 Science museums under the MOE will serve as future national bases of intelligent learning. The five museums under the MOE held the first “Taiwan Science Festival” in 2020 by integrating public and private

resources for popular science education. The purpose is to open up the possibilities of science education, to promote scientific thinking in people’s daily lives, and to improve scientific literacy.

- 4 To promote sustainable development of libraries and provide a high-quality learning environment, draw up the “Implementation Directions for National Central Library and Public Libraries to Improve Reading Quality with subsidy by MOE.” The “Southern Branch of the National Central Library and National Repository Library Construction Project (2018-2024)” and the “Plan to Construct a Cooperative and Shared Library System (2019-2024)” are also part of the greater plan for library improvement.

V Informal Education and Open Universities

There are two open universities in Taiwan: National Open University and Open University of

Kaohsiung. Enrollment is exam-free. Citizens aged 18 years or above can enroll in open universities as non-degree students. When they gain 40 credits, they can transform into full-time students, and there is no limit on the length of their study. When they gain 128 credits, they will be awarded a bachelor’s degree. An associate degree is awarded with 80 credits earned. There were 25,099 students in open universities in SY2021 (16,026 at the National Open University and 9,073 at the Open University of Kaohsiung). To encourage lifelong learning and recognize the results, as well as to promote the link between formal and informal education, the MOE has been issuing certificates for the completion of informal education curricula and learning achievements since 2006. Lifelong learning institutions are encouraged to offer integrated curriculum. Since 2017, certificates are awarded for digital courses, providing more course-taking choices.

VI Management of Supplementary Education Services

There are more than 17,000 supplementary education institutions (a.k.a. cram schools) in Taiwan. To help people look for information to choose cram schools, the MOE has created the “Information System of Supplementary Education Institutions in Municipalities, Counties and



Cities.” In addition, the MOE provides yearly subsidies and incentives for local governments to conduct inspections and organize training, which are included as part of the general education review in order to enhance management and guidance of cram schools.

VII National Language Education

- 1 The MOE has defined the phonetics and fonts of national languages in Taiwan and formed the “Committee for the Promotion of National Language Education” in order to discuss with other government agencies how to preserve national languages, reward the use of the languages, and organize promotion activities. More teaching resources for national languages will be established in the future.
- 2 With the implementation of the “Development of National Languages Act,” the transmission, revival, and development of the national languages have a legal basis. Local native language education is promoted with integrated resources nationwide. In addition to formal courses, there are also accompanying measures, such as Taiwanese Language Proficiency Certificate Examinations, national language contests, creative innovation incentives, learning websites, and the corpus of local languages. ■





Special Education

I Principles, Laws, and Funding

In order to allow citizens with disabilities and giftedness to receive adaptive education and fully develop their abilities, Taiwan has already passed the “Special Education Act” and relevant branch laws for diagnosis procedure, counseling services, appeal services, examination services, support services, interdisciplinary teams, education subsidies, and assistive educational devices. Taiwan is also upholding the spirit of equal opportunities present in the Convention on the Rights of Persons with Disabilities (CRPD) under the United Nations. The “Special Education Medium-term Plan,” passed on August 1, 2018, is based on inclusion and nurture by nature while the Special Education Act amendment in 2019 introduced the spirit of the International Bill of Human Rights. Taiwan promotes inclusive education and least restrictive environments while offering full support services under the concept of special education. In 2022, the MOE

set aside a budget of NT\$12.459 billion for special education, or 4.53% of the total education budget, which meets the 4.5% requirement under the Special Education Act. Of that sum, NT\$12.039 billion is devoted to education for students with disabilities and NT\$420 million for gifted education. In addition, municipal, county, and city governments have allocated NT\$32.9 billion for special education, accounting for 6.79% of the total education budgets for local governments, which meets the 5% requirement. The number includes the MOE budget for subsidies totaling NT\$34.43 billion, which includes NT\$30.1 billion in education funds for students with disabilities and NT\$4.3 billion for gifted education.

II Placement and Categories

Meeting global trends, the law in Taiwan clearly states that special education is moving toward inclusive education. To provide appropriate

special education, each level of government has set up a mechanism of Special Education Students Diagnosis and Placement Counseling. This serves to give a general appraisal of the student’s level of disability, learning ability, social adaptability, study achievements, family needs, will of the parents, and community factors so as to place the special education student to the appropriate school/class. The vast majority of students with disabilities study at regular schools (95%). Most of them attend the same class as those without disabilities by offering decentralized resource rooms, itinerant counseling courses, and special education programs. Only a few of them attend the centralized special education classes. The others (5%) who need specific support services choose to study at special education schools. In preschool education, compulsory primary and junior high education, and senior secondary education and higher education, special education services will be offered at each level. The 13 categories of special education are intellectual disabilities, visual impairments, hearing impairments, communication disorders, physical impairments, cerebral palsy, health impairments, severe emotional disorders, learning disabilities, multiple impairments, autism, developmental delays and other disabilities. There are six categories for gifted education: intelligence, scholarship, arts, creativity, leadership, and other areas.

III Schooling Opportunities

In respect to non-discrimination and equality of educational opportunity for students with disabilities, apart from the clear mention by the Special Education Act that nobody should be refused schooling and examination because of disabilities, the elementary and junior high school levels are compulsory. After the needs of

the students have been determined, they will be placed in the appropriate schools and classes. They will study further at senior high schools, vocational high schools, or junior colleges through adaptive counseling placement, open admission, or specialty enrollment. As for higher education, the MOE has added tests to the original channels, and rewards schools organizing their own separate admission exams for students with disabilities. Each type of admission exam offers related services, such as early entry, longer examination time, enlarged-type writing, Braille or voice playback for exam questions, Braille computers, transcripts for the answers, examination locations for limited amounts of students or on an individual basis, and other necessary services.

IV Numbers of Students and Classes

As of SY2021, there were 2,937 regular schools offering a total of 5,574 special education classes for students with disabilities, while 28 special education schools had 652 classes in total. The number of students in special education nationwide totaled 171,201, including 141,436 with disabilities; 14,747 enrolled in universities, colleges, and junior colleges; and 126,689 studying at the high school level or below



(including preschool). Of those, 122,095, or 96.37%, studied at regular schools and 4,594, or 3.63%, at special education schools. Of the 122,095 students at regular schools, 109,806, or 89.93%, attended regular classes, resource rooms, and itinerant classes, while 12,289 or 10.07% attended centralized special education classes. As for gifted education, there were 29,765 students below senior high level, with 412 regular schools having a total of 990 classes for gifted students.

V Individualized Support-Services

The core spirit of CRPD is participation and reasonable accommodation. CRPD provides that there should not be any differentiation, exclusion, or limitation in levels of disability. Since its implementation in SY2019, the Curriculum Directions (including implementation measures for special education) has incorporated “universal design” and “reasonable accommodation” in their basic concept. The courses are designed according to IEP, and schools shall provide assistive devices, the proper environment and

assessments, function-based behavioral interventions, and other supportive strategies and services according to students’ individual needs. Opportunities for students with disabilities to study with students without disabilities should be created in areas related to the individual’s special needs. In addition, Article 9 of the Enforcement Rules of the Special Education Act was revised and promulgated on July 19, 2020, to improve students’ rights of expression and participation, incorporating students with disabilities into IEP. On June 13, 2019, the “5-year Mid-Range Plan of Preschool Special Education” was announced with the purpose of helping preschoolers who need special education receive early care. In line with the spirit and requirements of CRPD, municipal, county and city governments should report their work plans on special education and provide accessible environments and support services.

Schools below the senior secondary level must work out IEP for the needs of students with disabilities, stating education resources and types of support they need. In SY2021, the number of professional services extended to assist special education totaled 150,882 person-

times. The services included physiotherapy, occupational therapy, language therapy, psychological counseling, hearing ability management, and social work. 25,893 students received daily-life and learning assistance on campus from special education professionals. 5,236 persons made use of 8,596 assistive educational devices helping with vision, hearing, movement shift and position, reading and writing, communication, computers and the like. Special books have been offered to students who are visually or learning impaired, including almost 6,911 books with large-size characters, 3,172 audio books, and 2,035 Braille books. In addition, the government and the schools offer scholarships, subsidies and cuts in study fees, and subsidized accessible vehicles or transportation fares, while funds have been earmarked to improve the barrier-free environment on campus.

For higher education, the MOE has urged schools to establish responsible offices and personnel for students with special needs. The MOE has also offered subsidies for the supportive staff, after-school tutoring, assistants for students with disabilities, teaching materials, and other supportive activities. Subsidies in SY2022 totaled NT\$577 million, helping more than 14,000 students. In addition, NT\$86.7 million was appropriated to 50 schools for the improvement of barrier-free campus and supportive services, such as teaching tools, braille materials, and audio books.

To help students with disabilities integrate into employment after graduation, universities and senior high schools provide career guidance and internships to prepare students for the workplace. The K-12 Education Administration’s employment guidance service centers will provide guidance and assistance for students who seek employment. Beginning in 2018, career guidance pilot programs for university graduates with disabilities have been implemented and



subsidized in six schools. The results will become examples for other higher education institutions to learn from. Representatives from the labor and social affairs departments are invited to introduce employment resources the students may apply for after graduation. Since 2021, the labor and social affairs departments have worked with universities and colleges in Taichung, Nantou, Yunlin, Chiayi, and Tainan in employment referral plans in order to help students find jobs via cooperation between the government, industry, and schools.

VI Future Prospects

In the future, whether in special education for students with disabilities or in gifted education, the principles of diversity and flexibility will be enhanced. The needs of students will form the basis, the students’ rights will have priority, and the students’ positive development will be of the highest importance. The MOE will continue to establish a positive and friendly education environment, broadening special education related professional teams and human resources, strengthening each type of special-education administrative support network, and implementing the transition work for each level of education in order to raise the academic quality of students and realize the aim of adaptive and suitable education. ■





Sports Affairs

I An Overview

The Sports Administration of the MOE integrates sports resources and affairs in schools and society. It issued the “Sports Policy White Paper” in June 2013. The action plan for the White Paper was completed in September and published in December. The White Paper sets out the vision of “Healthy Citizens, Athletic Excellence, and Vitality in Taiwan” with the core philosophy of Quality Sports Culture, Outstanding Athletic Performance and Prosperous Sports Industries as guidelines for sports development in Taiwan. An amended version was completed in December 2017, with the proposals in the action plan to be gradually put into practice to generate a pleasant sports experience, cultivate healthy, outstanding athletes, and move the entire nation toward a better sports environment.

II Key Policies and Achievements

1 Encouragement of Sports Activities in Schools

- A. The MOE continues to organize hearings for county and city governments, schools, and educators to promote the concept of physical fitness and help students develop the habit of exercising regularly.
- B. Physical education of Indigenous students: To help indigenous athletes unlock their potential, they will learn about health and stress management in such areas as medicine, nutrition, and doping. Sports science is used to monitor the indigenous student athletes’ physical changes and to document their physical and mental data.

- C. A better system of full-time coaches: Local governments should follow the National Sports Act by employing full-time sports coaches for schools that have sports talent classes, establishing a system for coaches to tour around schools, organizing training programs for new and current instructors, arranging unscheduled inspections of work progress, promoting exchange programs, and encouraging continued training.
- D. Sports injury prevention: To introduce the concept of sports injury prevention, the MOE has devised the “MOE Sports Administration’s Plan of Subsidizing Sports Injury Prevention Specialists in Schools.” To promote the concept, three strategies have been implemented and gradually expanded to senior and vocational high schools nationwide in order to protect the athletes: “sports injury prevention and management,” “establishment of regional medical service networks,” and “sports injury prevention education.”
- E. Organization of various student sports competitions and events: The MOE promotes the popularization of sport activities on campus and organizes various events such as relay races, aerobics, happy baseball, and running to increase opportunities for students to participate in sports. Through student sports competitions, potential student athletes are cultivated.

2 Popularization and Diversification of Sports for all

- A. To promote the “i Sports Taiwan 2.0 program” by organizing general sports activities, regular sports courses, training and job-matching for national fitness instructors, fitness exams, sports with a

local focus, and counseling services offered by county and city governments.” The MOE works with county and city governments to realize the vision of the Sports Policy White Paper: “sports improve your health and quality of life.”

- B. In reference to the World Health Organization’s “Global Action Plan on Physical Activity 2018-2030,” joint efforts with the Health Promotion Administration under the Ministry of Health and Welfare to “create an active society,” “create an active environment,” “create active people,” “create an active system” as a strategic target, integrate and promote all kinds of action plans, integrate professionalism and resources, make citizens use “health, sustainable lifestyles, love of sports” and help them achieve through health and fitness “a happy life.”
- C. To encourage women to exercise regularly, “Women’s Sports Participation Promotion White Paper” was proposed.
- D. Caring for seniors’ health, extending the age limit for physical fitness exams and encouraging seniors to participate in outdoor activities and develop the habit of exercise.
- E. Continuing to promote exercise programs for the disabled and the indigenous peoples, in order to protect their rights to do sports.



- F. Continuing to promote further study and evaluation systems of sports professionals to root deeply the human resources for national sport.

3 Better Results in International Competitions

- A. Establishing the training system for competitive athletes: The MOE promotes the enhancement of sports training according to sports science as well as a sports science-based support system, integrating school sports and competitive sports and strengthening the athlete selection and cultivation mechanism. Candidates for international competitions are chosen through a scientific and systematic training system. In addition to supporting athletes with training and award mechanisms through selection, counseling, and rewards, the functions of the National Sports Training Center will also be strengthened to improve international competitiveness.
- B. Sports care specialist certification: Sports injury prevention specialists provide services to people engaged in sports activities. They are professionals specialized in sports injury prevention, degeneration of physical functions,



emergency care, sports science, fitness, and health management. To provide a well-founded system, the “Sports Injury Prevention Specialist Qualification Verification Rules” were promulgated, providing a legal basis for verification and certification of sports injury prevention specialists. Between 2002 and 2021, 659 specialists have been trained and certified with the aim of continuing to strengthen sports science in support of athletes in Taiwan.

- C. Reinforcing competitive athlete cultivation performance with Gold Plan upgrade: With the foundation and success of the “Tokyo 2020 Olympic Gold Plan” in training three levels of elite athletes, the MOE made adjustments to the program and renamed it “Gold Plan for Olympics Preparation (Gold Plan 2.0).” This new program runs on a cycle of two Olympic Games and has training measures for five levels of athletes. Additionally, it considers the five factors including “Olympic Games performance,” “International competition performance,” “world ranking,” “physical fitness test,” and “training performance” in selecting elite athletes with gold medal potential for the 2024 Paris Olympics and 2028 Los Angeles Olympics, providing them with five levels of individualized and customized training schemes to build a team of potential gold medalists, strengthen athletes and Taiwan’s international competitiveness, and achieve the goals of meeting eligibility requirements and winning medals.
- D. Preparations for the 19th Asian Games in Hangzhou: The Asian Games had originally been scheduled for 2022 and were postponed to Sept. 23-Oct. 8, 2023. The Sports Administration in September



2020 initiated training programs, promulgating training and competition plans, with training split into three phases. Later, due to the postponement of the event, the training period was extended and continued. The Sports Administration will continue working with National Sports Training Center to provide guidance and administrative support for sports associations in Taiwan that organize Asian Games athlete training. The administration will help sports training teams with carrying out training and preparation work according to training plans so athletes may perform well at the Asian Games.

4 The Sports Industry

- A. In order to promote the development of the sports industry, loan credit guarantees and interest subsidies are provided for sports businesses to lower their operating costs. As of Nov. 15, 2022, the government had provided loan credit guarantees to 17 businesses, granting total of NT\$58,027,100. 10 businesses were granted credit guarantee fees

totaling NT\$251,426. Subsidies were granted to nine businesses, totaling NT\$2,118,649.

- B. A guidance plan is in place to help the sports industry innovate and help those interested in starting their own sports businesses. The “I Am a Sports Entrepreneur” competition is part of the guidance plan. As of Nov. 15, 2022, six teams had successfully started companies.
- C. Revenue from the sports lottery is used as Sports Development Funds, with the purpose of discovering, training, and caring for talented athletes and improving the national sports development.

5 International and Cross-Strait Sports Exchanges

- A. Hosting international sports events: The MOE counsels sports organizations in Taiwan to host international championships and invitational tournaments in order to fulfil the obligation of international members as well as enhancing the sports competitiveness and the profile of Taiwan.

- B.** Nurturing international sports affairs talents: The MOE trains and provides workshops to international sports affairs talents, enhances professional international sports competency courses, and assists local governments and sports organizations to participate in international sports affairs.
- C.** Establishing Cross-strait sports exchange mechanism: On the foundation of mutual benefit, respect and harmony, cross-strait sports exchanges are conducted via on-site visit and exchange activities in a healthy, respectful and orderly manner.



City and Country Construction – Sports for All Environment Program”: The main objective is to build “national sports halls” that include new types of gyms, aerobics rooms, training facilities for all ages, and badminton (all-use) courts in order to improve the basic fitness of citizens and reduce sports injuries. Roofed courts will be built, and existing facilities will be renovated so as to provide a convenient, quality, and safe sports environment. As of Oct. 2022, the MOE had approved 21 applications for “building/renovating national sports halls,” 166 applications for “improving existing sports facilities and building/renovating roofed courts,” one application for “building potential sports parks,” and 4 applications for “renovating national comprehensive sports halls,” totaling 192 approvals. ■



Sports Administration



Youth Development Affairs

The MOE's vision for youth development in Taiwan is “for the youth to care about the local communities with a global mind and to be able to find their own paths in life and become healthy citizens.” With this vision in mind, the MOE actively helps the youth in their career development, public participation, international participation, and learning. The objective is to guide the youth to develop competence in career, creativity, civic literacy, innovation, and global exploration. The measures taken include the following:

I Career Counseling

1 Career Development

In order to guide youth in the development of their future career, universities and colleges are subsidized to integrate internal and external resources and conceive various career support and development projects according to the characteristics of universities and needs of the students. This is so that youth can find their way as early as possible. To enhance the effectiveness



of career counseling services, career counseling departments and projects are set up as part of a supportive system. The number of Career Guidance Subsidy program participants in 2022 is estimated to reach 100,000.

2 Experiencing Diverse Workplaces

With youth employability as a core value, the MOE combines the strength of the public, private and third sectors to provide workplace experience in different fields. With a variety of micro-experiences and integration of information in the "RICH Workplace Experiential Network," the MOE helps young people to learn about and plan for their workplace experience and improve competitiveness by learning from doing. In 2022, 1,725 students participated in the program.

3 Empowerment of Innovative and Entrepreneurial Talent

The "U-start Innovative and Entrepreneurial Plan" aims to incubate campus entrepreneurs who have great innovative ideas and help them materialize. In 2022, 75 teams of students are trained and take part in the Intelligent Ironman

Creativity Contest, innovation seminars and workshops, international exchanges, and other activities on innovation and entrepreneurship. There have been more than 5,000 participants since the plan kick-started. The plan's objective is to encourage students to innovate and put their knowledge into practice.

II Public Participation

1 Participation in Policy-Making

Promoting the "Youth Policy—Let's Talk" project to empower youths with the competence to deliberate on public issues and participate in policy-making. The program invites youths to express their thoughts and creativity while participating in public issues via the "Open Government National Action Plan," which promotes principles of transparency, engagement, accountability, and eclecticism, so that youths may play a more active role in civic society. Between 2021 and 2022, the MOE plans to award 29 groups of youths for holding discussions about



public policies concerning mental health, which saw 1,683 youth and government participants.

2 Youth Volunteer Participation

To strengthen the resource exchange networks of public and private departments, to integrate government and private forces, to assist in promoting youth volunteering, to establish local networks of youth volunteer services, to organize youth volunteer training and empower volunteer competence, to promote diverse volunteer service, to subsidize youth teams to organize volunteer services, to organize national competitions for excellent youth volunteer teams, and to conduct award ceremonies to reward good results from volunteering as a way to manifest the social influence of the youth. In 2022, 27,069 youths participated in the program.

3 Social Participation

To organize the Youth Community Participation and Action 2.0-Changemaker Project, to nurture concern for public affairs among youth, to encourage young people to form groups, to convert the views, creativity, and enthusiasm of young people into concrete action, to involve the youth in local development, and to widen the influence of youth action. In 2022, 42 teams of participating youth received supportive funding. Universities, youth development foundations, and civil societies work together in the promotion of youth development. This provides multiple

channels and opportunities for social participation.

III International Exchanges and Experiential Learning

1 International Participation and Exchanges

Resources are integrated to promote diversified programs of international participation and exchanges so as to cultivate interest and competence in international affairs among youth. In 2022, the "Global Youth Action Plan" selected 20 teams consisting of 99 young participants to work online with 163 global organizations from 32 countries. In line with the UN Sustainable Development Goals, the Global Youth Trends Forum is organized for young people around the world to combine their efforts to address global issues. In response to the impact of COVID-19, in 2022 the Forum took place both physically and online. International youth organizations were invited to participate online, and 257 youths from 35 countries residing in Taiwan. Via livestreams, youths from Taiwan and other countries exchanged ideas. On Facebook and YouTube, as many as 5,055 viewers joined the event at the livestream's peak, increasing Taiwan's visibility in the world.





2 Youth Overseas Peace Corps and Learning from Service

Due to COVID-19, in 2022 youth overseas volunteer teams were encouraged to use their expertise to provide other countries with their services through digital and online venues. Working with universities, colleges, and non-profit organizations, the MOE also held cross-school or cross-organization training, workshops, lectures, including three overseas volunteer training workshops and two overseas volunteer exchange conferences for youths, which were attended by 304 participants. As the COVID-19 pandemic subsides in 2023, the MOE will re-launch its travel subsidy programs for overseas volunteering groups and work with civic societies, universities, and colleges to promote diverse service programs for youth overseas volunteers. Through events such as pre-travel training for youth overseas volunteers, youth representatives' audience with the president, and youth overseas volunteer experience sharing, the MOE aims to encourage youths to join overseas volunteer services.

3 Youth Travel

There are several designated spots around Taiwan to encourage youth to learn from travel. Cultural, tribal, ecological, rural, fishing village, volunteering, and physical activities allow them to experience local life and culture. Besides the travel spots, projects such as the "Touching Taiwan Youth Travel Program" and the "Youth Experiential Learning Program" encourage participants to self-reflect, learn and care more about their homeland, and cultivate adaptability in various regions. In 2023, more than 10,000 youths are expected to participate in these activities. ■



Youth Development
Administration



Teacher and Arts Education

I Teacher's Professional Training

The Teacher Education Law is formulated in order to train and educate qualified teachers for schools at the senior secondary level and below. For preschools, the goal is to augment the supply of teachers and enhance their professional expertise. The teacher education system is comprised of diversified training and selection methods. Potential candidates are recruited from teacher-training institutions and programs and colleges/universities that offer a teacher-training curriculum. These teacher training programs recruit qualified students at the undergraduate, masters, and doctoral levels. Eligible candidates must complete a curriculum that covers general courses, area of specialization courses, and professional education courses, after which they must attend a six-month practical education training; following that, if they pass the teacher qualification examinations, they will receive their official certification. Only candidates who have

obtained this certification are eligible to participate in screenings held by local governments for teaching positions at secondary schools, primary schools, and preschools.

Key policies and future plans:

- 1 Beginning February 1, 2018, qualification examinations are to take place prior to practical education training. A number of qualified students are selected via exams before they hone their teaching and educational skills in practical education training.
- 2 On Nov. 16, 2018, the MOE amended and promulgated the "Republic of China Directions Regarding Teachers' Professionalism: Stages of Pre-service Teacher Education and Criteria Governing Pre-service Teacher Education Programs," which applies to pre-service teachers since 2019 and students who choose pre-service training courses. It aims to establish a learner-centered training system that respects diversity, social care, and a global



view and is in response to the “Curriculum Guidelines of 12-Year Basic Education” and the “ECEC Curriculum Framework.” The directions center on the idea of professionalization in teacher education so as to raise the quality of teachers, aided by the publication of books about teaching in any discipline and integrated with evaluation of teacher education and verification of teacher qualifications.

- 3 According to the “Operation Directions Governing MOE Subsidies for Universities that Offer Teacher Training Programs to Vigorously Undertake Quality Teacher Education and to Develop Specialized Teacher Training Projects,” the MOE continues to encourage teacher education universities to vigorously advance teacher training and teacher professionalism and develop teaching characteristics with the school at their center and establish quality teacher training models.
- 4 The MOE established a “National Pre-Service and In-Service Teacher Integrated Database” and set up a mechanism to evaluate the supply and demand of teachers to adjust the number of teachers it trains and ensure teacher’s quality and appropriate quantity.
- 5 In order to entice talented people to enter the teaching profession and simultaneously stabilize the number of professional quality teachers in remote and special areas, the MOE will continue to plan the training of government-funded students and issue

teacher-training scholarships and study funding.

- 6 The MOE implements an evaluation system for university and college instructor training to ensure the quality of teacher-training courses provided by universities and that teachers adhere to the “Republic of China Guidelines Regarding Teachers’ Professionalism: Stages of Pre-service Teacher Education and Criteria Governing Pre-service Teacher Education Programs,” Curriculum Guidelines of 12-Year Basic Education, and the “ECEC Curriculum Framework.”
- 7 The Teachers’ Act was amended and promulgated on June 30, 2020, providing a legal basis for teachers’ professional development and in-service further training mechanisms. The incentives for teachers’ professional development are clearly defined in the act in order to strengthen their career development, encourage them to continue learning, enhance their teaching quality, and protect the students’ rights to education.
- 8 Promote a support system for the professional development of teachers, integrate each kind of teacher professional development plan and resources under the MOE, use a single window to subsidize each county and city government in a flexible and independent way, draw up complete development plans with counties and cities as their center, and ask universities that train teachers to collaborate with counties and cities and with junior high and elementary schools in order to promote local education counseling work. In addition, offer teachers during different phases of their career actual support for diverse, autonomous, professional development.
- 9 Link up the professional literacy of teachers with the content of the new curricula, have the teacher qualification exams accompany

the curricula outline adaptation tests, research and plan test questions, plan and organize advancement training classes for teachers already working in order to satisfy the needs of teachers for the implementation of 12-year Basic Education.

- 10 To raise the global and futuristic vision of potential teachers and enhance the international competitiveness of high-quality teachers, teacher education university are subsidized to send pre-service teachers overseas for teacher traineeships, and teaching internships and participation in the International Schweitzer Program, which aims to enhance pre-service teachers’ language abilities and multicultural literacy as well as promote educational exchanges between teacher education university and schools overseas.
- 11 Establish and maintain the operation of an “Educational Internship Information” platform, strengthen cooperation and exchanges between universities that train teachers and organizations which use education interns (secondary schools, primary schools, and preschools) and local educational administrative bodies, closely integrate teachers who direct and counsel interns with the interns themselves, incentivize the education internship bodies

to become professional development schools for cooperation with universities that train teachers.

- 12 With the implementation of the “Development of National Languages Act,” national languages have been incorporated into the SY2022 courses in line with Curriculum Guidelines of 12-Year Basic Education. The MOE began establishing guidelines for training and hiring Hokkien, Hakka, and Indigenous language teachers as well as training teachers of national languages (Hokkien, Hakka, Indigenous languages) since SY2020. Certificates will be awarded to those who complete the training. Training courses include pre-service training, postgraduate teacher education training courses, and in-service training courses for a second specialty.
- 13 According to the “Bilingual 2030” policy formulated by the Executive Yuan, the “Bilingual Teacher Training Project” is organized to train teachers for bilingual instruction at elementary and secondary schools. Universities are subsidized to set up bilingual education research centers to conduct pre-service teacher training and research on pedagogy and teaching materials for the training of all-English and bilingual teachers for elementary and secondary schools.



II Arts Education

1 Arts and Aesthetics Education

In order to meet the expectations in faculty cultivation and arts education, the MOE 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.

Cultivating students who have an “artistic cultivation and aesthetic literacy” is one of the important core elements of 12-year Basic Education and will turn Taiwan into an aesthetically competitive country. From 2014 to 2018, the MOE promoted the “First Phase Five-year Plan for Aesthetic Education,” with the three main focuses of “strengthening the aesthetics courses and experiences of the learner,” “creating an aesthetic campus environment,” and “raising the aesthetic capabilities of education workers.” The MOE also promotes the practice and research of aesthetic education and executes plans to experience the teaching of aesthetics courses in each phase of education as well as the campus aesthetic environment conversion plan. The ministry also establishes a cooperation system between cities, counties, and central government

departments, attracting private resources, cooperating between industry, officials and academics, and continuing to deepen and broaden the influence of aesthetics education in an intensive way.

The “Second Phase Five-year Plan for Aesthetic Education” from 2019 to 2023 has “Aesthetics is life, take root from childhood, integrate across disciplines, link up internationally” as its focus. It will integrate the establishment of an aesthetics education communication platform and management; strengthen the link between aesthetics courses at the central, local, and school level; expand a support system; raise the aesthetics level of education staff; and reinforce life aesthetics education through the linkage between the campus and the surrounding environment.

2 Arts Competitions and Promotions

Seven major arts competitions are held annually, with about 220,000 students participating annually. These include the National Student Competition of Music, the National Student Competition of Dance, the National Student Art Competition, the National Student Competition of Dramatic Art, the National Competition of Folk Songs for Teachers and Students, the MOE Awards for Creative Writing, and the Nationwide Students’ Picture Book Creation Award. These activities aim to promote

arts education, cultivate students’ interest in art and literature, and improve arts education in schools. In SY2021, to organize national student performing arts competitions, the MOE formed a task force in March, which met 12 times to discuss anti-COVID-19 measures and made 99 visits to 33 venues (including back-up options) for four competitions located in nine counties and cities for location scouting and anti-COVID-19 planning inspection. Erring on the side of caution, the task force visited 23 venues located in nine counties and cities between February and April 2022 while competitions were ongoing to confirm whether the events’ anti-COVID-19 measures met requirements. To allow competitions to be held smoothly and ensure student safety, the MOE drafted a performing arts team practice COVID-19 response plan for local governments’ reference as well as a finals COVID-19 response plan, guidance for protective measures, guidance for environment cleaning and disinfecting, competing student testing subsidy program according to rules promulgated by the Central Epidemic Command Center. The MOE also received a special budget for COVID-19-related measures.

In response to the suspension of group performing arts competitions for two years (SY2020 and SY2021), the MOE established and launched the online performance platform “Easy Show Time” ([https:// artshow.edu.tw/](https://artshow.edu.tw/)) as a supporting measure for teams to view and learn. By taking advantage of the internet’s reach, the platform provides a stage for students from the senior and vocational high school level to the elementary school level to perform, encouraging schools to film and upload in-person performances and learn from each other to enhance student performance. Apart from the online performance platform, the MOE worked with national venues and organized the “Arts Youth—National Student Performing Arts Event” and “Dancing a New Path—National Student



Dance Competition Awardee Performance Event” in September 2022. The events gather top-awarded performance teams across Taiwan from various competitions at national performance venues, facilitating national performing arts teams’ mutual learning and exchange while promoting arts education among general audiences.

3 Specialized Arts Education

To promote specialized arts education, schools can open specialized art talent classes from the third grade of elementary school to senior high school in accordance with relevant regulations. The purpose of an art talent class is to cultivate students who possess excellent artistic talent with professional art education. They are properly guided to present works in creative ways, and hopefully will contribute to professional arts education in the future. Art talent classes include such subjects as music, fine arts, and dance, among other subjects designated by the MOE.

To ensure the 2019 art talent curriculum is properly followed, the MOE has formulated accompanying measures, including training in laws and regulations, planning of teaching materials, course development, counseling groups, enrollment requirements, and individual guidance plans (IGP) for gifted and artistically talented students. These measures are to improve the teaching quality of art talent classes. ■





Digital, Technological and Environmental Education

I Technology Education

The MOE aims to promote technology education that is “prospective” or “pioneering,” especially in areas such as the humanities and social sciences, key industries, as well as interdisciplinary studies of the humanities and science. Important issues and topics will be discussed in classrooms. Students will be trained in innovative ways. The effectiveness of teaching and the cultivation of professionalism will be enhanced. Measures include promoting role models, establishing cross-school resources or promotion centers, training of prospective teachers, forming teacher networks, planning of courses/academic programs, developing teaching materials and teaching plans, establishing platforms for hands-on experience and teaching labs, linking industry with academia, and international exchanges. Normalization of measures depends on the nature of a measure. To comply with the national policies of technology

development and to cultivate the ability of human resource development as well as the training of professionals as needed by the industry, the MOE conducts some activities, such as conferences, presentations of results, and student competitions. The implementation focuses on:

- 1 Social Science Education Pilot Project: includes MOE Talent Cultivation Project for Digital Humanities-Phase II.
- 2 Science & Technology Education in Important Industries Pilot Project: developing talents in such areas as precision healthcare, energy technology, next generation mobile networks technologies, intelligent manufacturing, intelligent system-on-chip design, artificial intelligence, cyber security, and information software.
- 3 Interdisciplinary Education of Humanities & Science Pilot Project: developing talents for the XPlorer Project, e-Learning, iLink-hss Program, new engineering education method experimentation and construction project.

II Digital Education

The MOE has been devoted to promoting digital education in elementary and secondary schools. The Digital Learning Enhancement Plan for Grades 1-12, approved by the Executive Yuan for implementation from 2022-2025 includes the “Internet Access for Every Classroom, Online Learning for Every Student” policy that subsidizes learning tool use by teachers and students during lessons. The measures are as follows:

- 1 Digital Environment: Optical fiber and gigabit-capable cables have been fully applied as the backbone of campus internet (bandwidth 300Mbps-1Gbps) in 2022. Wi-Fi and intelligent teaching facilities are available in every classroom, complemented with campus smart network management systems, to support elementary and secondary school teachers and students’ need for digital environments that sustains teaching assistance as well as interactive, and innovative teaching.
- 2 Digital Resources: The “Education Cloud” website integrates learning resources and systems of the central government, local governments, and private sector. By logging in with the same account used for all education system services, teachers and students can access the nation’s cloud education resources, platforms, and systems. Another digital learning portal is built to consolidate learning materials and services from Taiwan and abroad suitable for all elementary and secondary schools in Taiwan in support of digital learning. The “Taiwan Adaptive Learning Platform (TALP)” provides adaptive diagnosis with the Intelligent Tutoring System and digital teaching materials for subjects and diverse issues, allowing for students’ personalized learning activities and teachers’ adaptive teaching.
- 3 Digital Teaching Application: Secondary and primary schools are encouraged to use

technology-assisted tools to develop innovative pedagogy that is personalized, adaptive, and self-directed, such as the Adaptive Learning website, applications of emerging technologies (AR/VR, AI) in teaching, and digital learning partners for students in remote areas.

- 4 Online Learning in response to COVID-19: To assist schools with online teaching, the MOE has published online teaching and home learning guidelines connecting the public and private sectors to assist schools with resources and services needed for implementing online learning. Mobile devices, IP sharers, and free prepaid SIM cards were offered to help students learn from home when schools are closed. Teachers, administrative staff, and parents were offered access to online training to help them get familiarized with online procedures so that they could assist students with learning from home.
- 5 From 2023 to 2025, with the implementation of the Forward-looking Infrastructure Development Program 2.0 and in view of the global trend of digital learning, the impact of COVID-19, and the age of the internet, the MOE will continue implementing the Elementary and Secondary School Digital Learning Improvement Program and provide learning devices for teachers and students, introduce AI-assisted personalized learning, help schools set up 5G mobile networks for online learning and teaching demonstrations, provide equitable learning opportunities for both cities and



rural areas, and promote sustainable educational development that is high-quality, inclusive, and fair.

III Environmental and Disaster Response Education

The MOE has been promoting environmental and disaster prevention education in schools. The five environmental topics included in the 12-year Basic Education Curricula include environmental ethics, climate change, disaster prevention and rescue, sustainable development, and sustainable energy resources. Measures have been taken to support local governments, schools, and civil society and to enhance students' environmental awareness. Details are as follows:

1 Environmental Education and Sustainable Campuses

Since 2022, the MOE has been implementing the "New-generation Environmental Education Development," policy's medium- to long-term plan through the seven strategies of strengthening the policy support system, reinforcing teachers' professional competency, promoting high-quality course development, optimizing learning and training environments, encouraging youth environmental action, developing local sustainability solutions, and connecting with international partners. In accordance with the five themes of



environmental education under the 12-year Basic Education Curricula, the MOE develops teaching demonstrations, organizes teachers' skill acquirement seminars, and school environmental education practical competitions, which are implemented by local governments' environment education group.

Since 2019, the Taiwan Sustainable Campus Project has actively encouraged schools to inventory and document their local environments and plan their environmental education curriculum around this information, in accordance with the 12-year Basic Education Curricula and the UN SDGs. The MOE also supports schools in upgrading/replacing facilities for environmental education and becoming exemplars of sustainability, so that schools with similar environmental characteristics can follow the demonstration.

2 Climate Change: Causes and Solutions

In response to climate change concerns and the greenhouse gas reduction issue, the MOE is devoted to cultivating interdisciplinary talent that specializes in adapting to climate change and producing supplementary course materials. In addition, the "Climate Change Creative Contest" is held annually to increase university students' understanding of climate change, decrease the damage, and adapt to it. The MOE will deepen the collaboration between industry and the international community. With the concept of "Living Labs," students are guided to reflect on environmental challenges and act accordingly.

3 Disaster Prevention on Campus: Enhanced Network and Management Skills

In accordance with the Disaster Prevention and Protection Act, the MOE has promoted disaster prevention training projects at every educational level. Each year, subsidies are granted to local governments and schools to prevent disasters from

happening on campus. The "Establishment of Resilient Campuses Against Disasters and the Application of Technology in Disaster Prevention Project" promotes campus safety and disaster prevention, as well as to increase awareness of disaster prevention and safety. In the future, in addition to disaster prevention training in elementary and secondary schools, the MOE will further subsidize schools for building specialized disaster prevention campuses and enhancing disaster prevention capabilities so that disaster scenarios can be simulated in classrooms and to develop teaching materials and tools customized to accommodate individual campus needs. Preschool, special education, and Indigenous teachers will also be incorporated into disaster prevention training and disaster prevention youth awareness.

4 Energy Transition: Solar Power on Campus

In line with the direction of Taiwan's energy transition, the MOE follows the Executive Yuan's renewable energy policy by encouraging public schools and institutions to adopt the PV-ESCO (solar photovoltaic energy technology services) model, where a school or institution does not need to appropriate a budget for power. All they have to do is lease their roofs to solar power operators, who will install rooftop solar power systems and take care of the maintenance afterwards. This an effective way of using vacant public space and generating income. Moreover, photovoltaic panels can serve as heat insulation as well as have a cooling effect on indoor spaces, reducing the energy cost of using air conditioners. Hopefully, this will help achieve the goals of energy security, green economy, and environmental sustainability. The cumulative goal is to reach 128 MW in capacity. For students to be able to play basketball outdoors in the summer heat, the installation of ground-based photoelectric courts has been actively promoted since 2018 to provide a comfortable space for teachers and students to play sports. The goal is to



reach 62 MW in capacity. In 2020, in line with the policy of "air conditioning in every classroom," the MOE promoted the installation of solar photovoltaic panels in primary and secondary schools and actively assisted in the installation of rooftop solar power generation equipment. The goal is to reach 324 MW in capacity.

5 Tree Planting & Tree Loving Education

The "Campus Tree Planting Program" has been promoted in four stages since July 2020: comprehensive inventory, tree planting planning, tree planting, and tree loving education. The tree planting program aims to create green belt spaces on campus. Through this program and by reducing the energy consumed by air conditioning, schools will become more comfortable environments for learning. The MOE and the Council of Agricultural Council (Executive Yuan) called on tree experts to evaluate the new spaces where native tree species will be planted and distributed more than 13,000 seedlings to over 700 schools nationwide from March to May 2021.

Promotion of the "tree-loving education plan" includes measures for creating a campus tree information platform, installing educational signs next to trees, drawing digital campus tree maps, and developing digital planting games. With the use of science and technology, both teachers and students will interact more often with trees and love them. ■



Diverse Education

I Education of Indigenous Peoples

In order to actively educate indigenous students about their own cultures, the MOE and the Council of Indigenous Peoples (CIP) helped promote the enactment of the Education Act for Indigenous Peoples and the implementation of the “Development Plans for Education of Indigenous Peoples (2021-2025).” The objective is to establish a comprehensive education system for the indigenous peoples in Taiwan.

1 Implementing the Amended Education Act for Indigenous Peoples

The Education Act for Indigenous Peoples was revised and promulgated on June 19, 2019, with

the formulation of the “Development Plan of Education for Indigenous Peoples” at its core. The plan, which was implemented in 2021, includes seven objectives: “establishing a comprehensive education system,” “a complete supportive system from government agencies,” “deepening ethnic education,” “enhancing teacher training,” “cultivating indigenous talents,” “lifelong learning for indigenous peoples,” and “expanding the target population for indigenous education.”

2 Experimental Education for Indigenous Peoples

A. School-type Experimental Education: As of 2022, the number of schools approved to provide experimental education for indigenous peoples is 38. The MOE will

continue to encourage and guide more schools with a special indigenous focus to join the project.

B. Experimental Education Class: In SY2022, subsidies were given to 15 schools to operate experimental education classes for indigenous peoples.

3 Development of Indigenous Curriculum

A. “Collaboration Centers for Indigenous Curriculum Development”: This project aims to develop a proper curriculum and a teaching guidance system for indigenous peoples. Assist teachers at experimental schools for indigenous peoples in the compilation of textbooks and materials suited to local characteristics. So far, five universities have set up collaboration centers for indigenous curriculum development on their campuses.

B. Subsidies for Teaching Indigenous Languages: In SY2021, 21 county and city governments processed the applications for subsidies to offer a total of 2,4712 indigenous language courses in 3,645 elementary and junior high schools.

4 Indigenous Peoples in Higher Education

A. Protecting Indigenous Students’ Rights to Higher Education: In SY2022, colleges and universities announced an admission quota of 13,153 for indigenous students. Colleges and universities are encouraged to offer specialized courses for indigenous students. In SY2022, there are 34 such courses across 22 universities.

B. “Indigenous Student Resource Centers”: In SY2022, Indigenous Student Resource Centers at 144 universities received

subsidies and employed a full-time staff. There are Regional Resource Centers at six higher education institutions in four regions to help those on campus share information, seek counseling, and exchange experiences, lending more support to indigenous students. In 2022, the MOE organized the first training program for the employees of Indigenous Student Resource Centers to increase their cultural awareness. There were five workshops in total. The MOE also launched a rewarding mechanism for these resource centers to encourage them to keep up the good work supporting indigenous students.

5 Training Indigenous Teachers

A. Promotion of teacher specialization in indigenous languages: In SY2022, 225 teachers specialized in indigenous languages were employed.

B. Government sponsorship of potential teachers of indigenous languages: Sponsorship of potential teachers is awarded according to local governments’ needs. In SY2022, 69 applications for government sponsorship were approved.

C. Programs for indigenous teachers:

- Indigenous teacher training course: Courses on Indigenous languages and cultures are available for potential Indigenous teachers (on



subsidies), regular potential teachers, and Indigenous students, while schools are encouraged to introduce elders from Indigenous tribes or individuals with relevant expertise to jointly teach courses. In SY2022, seven schools were approved to offer the course.

- ii. Postgraduate Indigenous language course for credit: Courses are available for current Indigenous language teachers, staff members, substitute teachers, promotional workers, and Indigenous individuals recommended by endangered language promotion organizations, who receive teaching certification upon completion. In SY2022, two schools were approved to offer the course.
- iii. Indigenous ethnic education secondary specialization course: In SY2022, two schools were approved to offer the course.
- iv. Secondary school Indigenous language teacher on-the-job training secondary specialization course for credit: In SY2022, two courses were offered.
- v. Elementary school language discipline Indigenous language course for credit: In SY2022, three courses were offered.



II Education of New Immigrants and Their Children

The “Nurture by Nature Project for New Immigrants (2020-2023)” aims to help the new immigrants adapt to the society and to improve their children’s learning results.

1 Improving Literacy and Language Proficiency

In 2022, the MOE subsidized local governments to offer 292 courses for adult new immigrants on basic education, teaching them the basic abilities of listening, speaking, reading, writing, and arithmetic.

2 Lifelong Learning for New Immigrants

In 2023, the MOE subsidized local governments to offer 39 New Immigrant Learning Centers established by county and city governments. These learning centers will organize lifelong learning courses and education activities according to the needs of new immigrants. They will also encourage residents to participate in activities to enhance mutual understanding and mutual respect for diverse cultures.

3 Multiple Patterns/Ways to Promote Education for Children of New Immigrants

Subsidies were allocated to the radio show “7 Southeast Asian Languages learning for Children” and private organizations so as to promote diverse cultural education via multiple patterns.

4 New Immigrants' Native Language Courses

The 12-year Basic Education Curricula included the native languages of new immigrants as selective courses in elementary schools starting in SY2019. In junior and senior high schools, the selective courses have been incorporated into the flexible learning curriculum and second



foreign-language curriculum. A total of 126 volumes of textbooks in seven languages have been completed, including Vietnamese, Indonesian, Thai, Cambodian, Burmese, Malay, and Tagalog. In SY2022, there are 5,390 classes in 1,166 elementary and junior high schools, with total of 12,854 students. There were 144 such classes across 46 senior high schools.

5 Fun Learning Activities

To increase and deepen the effectiveness of learning, schools should include fun learning activities featuring new immigrants’ native languages in student club and during extracurricular hours during the semester. The winter and summer camps are also to be held during the winter and summer breaks. In SY2021, 117 elementary, junior high, and senior high schools received subsidies for 147 fun-learning activities of new immigrants’ native languages. Colleges and universities are also subsidized to offer Southeast Asian language courses. In SY22021, 74 colleges and universities received subsidies for 212 courses with a total of 8,924 students, with the goal of effectively learning about Southeast Asian languages and cultures.

6 International Exchange Opportunities for Children of New Immigrants

In order to expand a global vision, cross-cultural communication, and international mobility and in response to the outbreak of a pandemic, in SY2022, 260 students participated in online activities via videoconferencing with schools in Southeast Asia as a way of continuously expanding and deepening international exchanges via diverse and creative communication platforms.

Respect for diverse cultures and the histories of different ethnic groups and steady development of the overall education system is always a challenge. The MOE will continue to strengthen education quality for the children of indigenous peoples and new immigrants. The students enjoy a diversified learning environment. Their rights to education are protected. The MOE will cultivate excellent indigenous talent and assist children of new immigrants to adapt and bring their bilingual and cross-cultural advantages into play, so that the public will have a better understanding of various cultures. ■



Study in Taiwan

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

In 2021, the number of international degree students, language students, and exchange students studying in Taiwan increased to 92,963, a significant increase from the number in December 2007, when international student enrollment was only 30,509.

Many efforts have been made to create an internationalized academic study environment in Taiwan, and Taiwan is an ideal study destination for several reasons. A survey of international students carried out by the Foundation for International Cooperation in Higher Education of Taiwan (FICHET) found that these reasons include: Taiwan provides a high-quality academic environment, rich cultural heritage, excellent living circumstances, reasonable tuition,

scholarships, opportunities to learn Mandarin Chinese, and studying in Taiwan will be helpful for both further study and future careers. Taiwan's advanced technology, its friendly people, and its breathtaking tourist destinations are also all attractive to international students.

I Scholarships

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

1 MOE Taiwan Scholarships – Scholarships for Degree Studies

These scholarships are offered by the MOE to students from countries without diplomatic relations with the Republic of China (Taiwan) to undertake a degree program.



The maximum scholarship period for each degree level is:

- A** Bachelor's degree programs: four years.
- B** Master's degree programs: two years.
- C** Doctorate programs: four years.

The MOE Taiwan Scholarship provides a monthly stipend of NT\$15,000 for bachelor's degree students and NT\$20,000 for students undertaking a master's degree or doctorate. The scholarship recipients must pay their airfare to Taiwan.

The scholarship provides up to NT\$40,000 each semester for each recipient's tuition and miscellaneous fees. If these exceed a total of NT\$40,000, the remaining amount must be paid by the recipient. The "miscellaneous expenses" do not include the following: administration fees, thesis supervision fees, insurance premiums, accommodation, or internet access.

2 New Southbound Elite Scholarship Program – Scholarships for University Lecturers from Southeast Asia and South Asia

Each year from 2017 to 2023, this program provides funding to universities and colleges in Taiwan to recruit 100 university lecturers from Southeast Asia and South Asia to study in Taiwan for a master's degree or a doctorate. Each scholarship recipient receives a monthly stipend of NT\$25,000 under this program.

3 MOE Huayu Enrichment Scholarships (HES) - Non-degree Scholarships to Learn Chinese

"Huayu" is one of several names commonly used to refer to the Mandarin dialect of Chinese. The MOE established the HES program to encourage international students to come to Taiwan to study Mandarin Chinese and learn about Chinese culture in Taiwan. The scholarships are awarded based on merit. Applications must be lodged at Republic of China (Taiwan) embassies and overseas missions.

HES scholarship winners study at a Mandarin Chinese Language Training Center affiliated with a university or college in Taiwan for a period from as short as two months, up to a maximum period of one year. They receive a monthly stipend of NT\$25,000.

II Learn Mandarin Chinese in Taiwan

The modern, Chinese-speaking society of Taiwan is an ideal place to learn Chinese language. The traditional Chinese characters are still used in Taiwan, so students who learn Mandarin Chinese in Taiwan can fully experience the beauty of Chinese characters as they have been written for centuries.





There are sixty-four Chinese language centers located all around Taiwan, each affiliated with a university, so foreign students can choose one in an area they would like to explore as they study. They offer a wide range of courses year-round at the Chinese language centers to suit people of all ages and levels of proficiency, with excellent teaching and materials designed to help students achieve a wide range of learning goals. And outside class, students can practice every day as they interact with the friendly people of Taiwan. Whether students are planning to learn Chinese for further study, work, travel, or pleasure, they are sure to find a suitable course through the

website of Taiwan Mandarin Educational Resources Center <https://lmit.edu.tw/>.

III Inquiry Service for Overseas Students

Providing high quality services is critically important to ensuring that overseas students can focus fully on their studies and research as well as enjoy their time in Taiwan. For this reason the MOE set up NISA, the Network for International Student Advisors in 2011, with the purpose of assisting the professional personnel on campuses continually improve the ways they meet the needs of overseas students. In recent years, the number of overseas students in Taiwan has been rapidly increasing, and last year they constituted 10% of the total number of students currently studying at colleges and universities in Taiwan. NISA now has mechanisms for students who have something on their mind to contact someone and receive rapid and effective handling of the matter.

NISA's Inquiry Service for Overseas Students at Tertiary Colleges and Universities now has a



dedicated webpage, an online mailbox, and a hotline for overseas students: 0800-789-007. It also has a network of personnel in a range of agencies who can immediately be called on for assistance, and it also conducts a number of meetings with overseas students each year in conjunction with several other agencies. The service is available in several languages: English, Chinese, Vietnamese, and Indonesian. For more information, please visit <https://www.nisa.moe.gov.tw/moecare/index/index/lang/en>.

IV Internships for International Students

Taiwan Experience Education Programs (TEEP)

In 2015, the MOE launched the Taiwan Experience Education Programs (TEEP) in conjunction with a number of universities and colleges in Taiwan. Each offers a distinctive short-term program with a practical focus in a particular field – for example, International Consulting, Electrical Engineering, Computer Science, Culture Studies, English Language Teaching, and

Taiwan's Natural Environment. Some target undergraduates, others are more suitable for graduate students.

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

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

V The New Southbound Talent Development Program

Taiwan's New Southbound Policy (NSP), launched in 2016, is a major new initiative to



enhance relations with Southeast and South Asian countries, Australia, and New Zealand for regional social and economic cooperation. The NSP has a strong focus on establishing people-oriented links and resource sharing to promote bilateral and multilateral cooperation with these countries.

The MOE has established a New Southbound Talent Development Program, in conjunction with the New Southbound Policy Guidelines, and set up a cross-departmental NSP Task Force with an earmarked budget of NT\$1 billion.

The task force is working to further expand and deepen exchanges and partnerships with NSP countries in three major strategic areas:

1 Market

Focusing on skills cultivation: Taiwan can offer high quality vocational and professional training, higher education, and Chinese language courses to students from NSP countries, and they can learn about Taiwan's development experience at the same time. Young people in Taiwan can improve their cultural literacy and study the languages of countries in Southeast Asia and strengthen their capacity to undertake economic and trade management there.

2 Pipeline

Skill Development Exchanges: The objective is to increase the number and range of two-way exchanges between young scholars and students by attracting outstanding students from NSP countries to Taiwan to study or do research and



sending students from Taiwan to NSP countries to gain a deeper understanding of those countries and their languages, as well as to engage with the local community.

3 Platform

For Communication: The objective is to establish and promote platforms to facilitate bilateral educational cooperation with NSP countries. The platforms will provide online and local access to facilitate bilateral alliances between universities, academic research bodies, and higher education institutions in Taiwan and overseas in NSP countries. Similar platforms can enhance cultural and sport-related exchanges with NSP countries through cultural and sporting events and related academic collaborations.

For more details about the extensive range of NSP programs, please see http://www.edunsbp.tw/index_en.html. ■

A world of possibilities: Mexican chemical engineering student explores career opportunities

Interviewee: **Rolando Ruiz Becerril**

National Taiwan University graduate student



National Taiwan University's (NTU) international reputation as an academic institution was what drew Mexican student Rolando Ruiz Becerril to Taiwan. He hailed the schools' College of Engineering as "one of the best colleges to graduate from" and lauded the school's wide range of subject and course offerings.

Speaking of his program of choice, chemical engineering, Becerril said, "I love my major mainly because of the broad scope that it has." According to him, chemical engineering knowledge can be applied to any job or industry and provide efficient solutions, from informing civil engineers of materials' strength to helping scientists decide what fuels to place in a rocket to better send it to space.

For Becerril, the most exciting thing about the subject is green energy and nuclear fusion energy. The chemistry behind the materials used for products and bioproducts is becoming increasingly important as the world transitions toward green fuels and energy with the goal of attaining sustainability and a circular economy.

At NTU, however, it was the physics courses that he enjoyed the most. "Both of my professors, Dr. Mario Hofmann and Dr. Stathes Paganis, are great professors that communicate the excitement about physics to their students," he said, adding that he got goosebumps during lectures and discussions about quantum physics.

He said he is confident that the knowledge he acquired through his education at NTU will help him and his team take on challenges in the future.

Meanwhile, Becerril also believes that the experience of studying in a foreign country will benefit him. "As the world has become so globalized, to understand the world means to understand how different solutions can be applied to different problems."

Learning about different approaches and attitudes also help form more rounded teams, according to Becerril. By studying in Taiwan and gaining international experience, he proves to his future employers and colleagues that he can work in diverse environments.

However, living and studying in a foreign country has its challenges of course. Becerril admitted, "It would be a lie to say that studying in Taiwan was not one of the hardest challenges I had in my life - to adapt to a whole new culture and learn how the system works in Taiwan - to learn how to interact with people with different backgrounds and different ideas or solutions."

Nonetheless, he happily took them on, saying he enjoyed challenging himself every day.

"Taiwan has made me grow so much," he added. "This growth and sense of self-discovery has ignited my curiosity to see what else I can learn here." ■



Scholarships



Learn Chinese
in Taiwan



Inquiry Service
for Overseas
Students



Taiwan
Experience
Education
Programs (TEEP)



The New
Southbound Talent
Development
Program

Japanese student aspires to educate youth, facilitate international exchange

Interviewee: **Haru Takara**
National Taiwan Normal University graduate student



Haru Takara, a student studying civic education and leadership, is not only interested in outdoor activities but also values youth cultural exchange. At National Taiwan Normal University (NTNU), she was able to combine her interests and thrive while learning invaluable leadership skills.

Having grown up in Japan, where natural disasters strike frequently, Takara was inspired by how the citizens of Kobe were able to rebuild their homes quickly following the Great Hanshin earthquake in 1995. She said that while studying natural disasters and reconstruction in high school, she discovered that boy scout training had been rooted in the minds of Kobe citizens in the past century, and it was by drawing on the skills it taught them that they overcame the challenge.

Takara saw in the experience the importance of mastering survival skills. At NTNU, she and her peers learn leadership, teamwork, and communication through outdoor activities such

as camping, scuba diving, hiking, and cycling, as well as study how the skills apply to education.

Of all the things she did, Takara said her favorite was hiking. She highlighted the leadership skills that she and her classmates learned over a four-day hike.

Meanwhile, while studying in the U.S., she took up community service and, in doing so, understood the importance of cultural exchange. She said that as an adolescent, her worldview was greatly broadened thanks to the opportunity, and she continued to expand her horizons in Taiwan by interacting with not only Taiwanese but also students from all over the world.

Now, in addition to English, Takara has also studied Mandarin, which allowed her to communicate with even more people around the world and to learn about Taiwan's culture, the people's backgrounds, and new values. "I believe that these expanded my world," she said.

Her knowledge of Mandarin has also encouraged her to stand up for herself more. She recalled when her family got charged more by a taxi driver for not speaking the language while visiting her in Taiwan, saying that after the incident, she leveraged her language ability to defend herself more.

In terms of future prospects, Takara said she would like to find a job related to youth education, as her passion lies in developing human resources with an international mindset and global perspective. She added that she aspires to nurture people's ability to survive in all situations.

"I would love to stay in Taiwan," she said. Another option would be to work in Okinawa, where she wishes to help facilitate the region's exchanges with Taiwan. ■



Bilingual and International Education

I Bilingual 2030

The two visions of the Bilingual 2030 policy are "cultivating Taiwanese talents that connect to the world" and "responding to international enterprises' investment in Taiwan, helping Taiwan's industries connect to the world, and creating high-quality employment opportunities." To achieve these, ministries actively promote the Bilingual 2023 policy, and the MOE is responsible for accelerating the progress of making higher education bilingual, balancing and enhancing bilingual education's conditions and digital learning at the high school level and below, and strengthening future generations' competitiveness by adding bilingualism to professionalism. The measures are as follows:

- 1** Accelerating bilingual education in higher education: The Program on Bilingual Education for Students in College was launched in 2021, with generalized enhancement and focused development as its two main objectives. Together with complementary measures, the program will cultivate bilingual talents with a global vision.
- 2** Balancing EMI conditions in schools at the senior secondary level and below: with generalized enhancement, elimination of disparities, and focused development as the three pillars in the promotion of EMI, students will be able to use English in their daily lives and improve their general proficiency.
- 3** Digital learning: existing online learning platforms, such as Cool English and Adaptive



Learning, will continue to improve while the public and private sectors work together to enrich digital learning resources.

increased annually up to NT\$250 million in order to manifest our national values, respect multiculturalism and international understanding, strengthen international mobility, and fulfill our responsibilities as global citizens.

II Internationalized Education

1 Background

In light of the global trends of internationalized schools, the MOE published the White Paper 2.0 on International Education for Primary and Secondary Schools on May 14, 2020. With the vision of “meeting international standards and linking up with the world,” the white paper aims to cultivate talents, create a well-founded environment, and set up a mechanism for international exchanges. To succeed in the objectives of “cultivating global citizens,” “internationalizing education,” and “enhancing global exchanges,” the MOE has proposed three strategies and 13 action plans. The three strategies are “school-based internationalized education,” “internationally friendly environment,” and “international connection mechanism.” The plans are being implemented from 2020 to 2025 in junior high and primary schools. The budget for the first year is NT\$100 million, and it will be

2 Three-Pronged Action

- A. Talent Cultivation:** The “School-Based International Education Project” is to be implemented by integrating school-based courses, international exchanges, and internationalized campuses.
- B. Infrastructural Preparation:** The MOE will empower teachers and school administrators with international training certification, review and revise laws and regulations concerning internationalized education, and help establish an international supportive network.
- C. International Connection Mechanism:** In order to follow the global trends, the MOE will work with education-related government agencies in promoting internationalized education, establishing cooperative platforms for the government, academia, and industry, as well as creating international education resource centers. ■



Education Expenditures

The government has demonstrated the importance it attaches to educational development. The president announced on January 6, 2016, that some of the amended articles in the “Compilation and Administration of Education Expenditures Act,” which increased the percentage of funds allotted to education expenditures from 22.5% to 23% of the national budget, will be shared by the central government and local governments according to the law.

In the 1951 fiscal year, the education budget for all educational levels was NT\$213 million, which accounted for 1.73% of GDP; in the 2022 fiscal year, the figure has since reached NT\$983.41 billion, or 4.33% of GDP. The

budget for private educational institutions has risen from the 1961 fiscal year, when private institutions accounted for less than 10% of the total education budget. In fiscal year 2022, funding for private institutions reached 21.41% of the education budget. Public schools meanwhile enjoyed 78.59% of the budget.

Looking at the breakdown of each education level, in SY2021, the total education budget was NT\$748.12 billion, of which preschool education accounted for 9.04%, elementary and junior high education for 41.71%, senior secondary education for 14.45%, higher education for 34.00% (junior colleges 0.73%, universities and colleges 33.27%), and 0.79% went to other institutions. ■



Prospect

The purpose of education is to help every child fulfil their dreams. In the spirit of holistic education, the courses will focus on developing core competence. With the vision of “accomplishments for every child - nurture by nature and lifelong learning,” students are encouraged to “take the initiative, engage the public, and seek the common good.” Schools will design courses based on life itself, and students will be “nurtured by nature.” They will acquire sound development both mentally and physically, and their potentials will be fulfilled

according to their aptitudes. Eventually, they will apply what they have learned, fulfil their responsibilities, and become lifelong-learners who will improve their own lives and lives of the community as a whole.

In the future, the MOE will continue to formulate education policies and work with schools and local governments as partners so as to align policies with practical needs in classrooms, ensure the implementation and effectiveness of education policies, and promote the innovation and development of education in Taiwan. ■

Statistics



Education Statistics

General Information							
School Year/Year	Total Population (Thousand Persons)	Nominal GDP (US\$ billion)	Economic Growth Rate (%)	Unemployment Rate (%)	Consumer Price Index (2021=100)	Mean Years of Schooling for Age 25 Plus (years)	Excepted Years of Schooling (years)
1980	17,886	42.3	8.04	1.23	47.02	-	-
1990	20,401	166.4	5.54	1.67	63.51	-	-
1995	21,357	279.0	6.50	1.79	76.37	-	-
2000	22,277	330.7	6.31	2.99	81.92	9.3	-
2005	22,770	374.0	5.38	4.13	84.75	10.6	-
2010	23,162	444.2	10.25	5.21	89.93	11.3	-
2015	23,492	534.5	1.47	3.78	94.54	11.9	16.6
2020	23,561	673.3	3.39	3.85	98.07	12.4	16.6
2021	23,375	775.8	6.53	3.95	100.00	12.5	16.8
2022	23,265	761.4	2.35	3.67	102.95	12.6	16.9

Sustainable Development Goal 4 Indicators									
Year	Completion Rate								
	Primary			Junior High			Senior Secondary		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
2016	99.92	99.92	99.92	99.81	99.82	99.80	98.62	98.40	98.86
2017	100.00	100.00	100.00	99.77	99.79	99.76	98.61	98.40	98.84
2018	99.99	99.99	99.99	99.72	99.74	99.70	98.58	98.41	98.76
2019	99.99	99.99	99.99	99.69	99.72	99.65	98.64	98.53	98.77
2020	99.98	99.98	99.98	99.66	99.68	99.64	98.67	98.59	98.75
2021	99.98	99.98	99.99	99.75	99.76	99.74	98.81	98.72	98.91

Sustainable Development Goal 4 Indicators (Continued)						
School Year/ Year	Participation Rate in Organized Learning - One Year Before the Official Primary Entry Age			Participation Rate of Youth and Adults in Formal and Non-formal Education and Training		
	Total	Male	Female	Total	Male	Female
2016	-	-	-	42.56	39.32	45.23
2017	-	-	-	43.08	37.78	47.77
2018	99.72	99.97	99.44	43.18	40.40	45.83
2019	92.53	92.66	92.39	45.39	42.99	47.26
2020	96.03	95.87	96.20	48.51	44.75	51.93
2021	96.64	96.77	96.50	-	-	-

School Year/ Year	Teacher Attrition Rate		Percentage of Teachers Who Received In-service Training					
	Primary	Junior High	Primary			Junior High		
			Total	Male	Female	Total	Male	Female
2016	6.89	6.20	99.11	99.55	98.92	98.44	99.30	98.07
2017	4.67	4.20	99.06	99.50	98.87	98.39	99.22	98.05
2018	3.19	2.11	99.09	99.49	98.92	98.20	99.10	97.82
2019	3.16	1.17	99.10	99.54	98.92	98.32	99.05	98.01
2020	3.16	1.81	99.05	99.45	98.89	98.24	99.06	97.90
2021	1.17	2.02	-	-	-	-	-	-

School Year/ Year	Gender Parity Indices						
	Completion Rate			Participation Rate in Organized Learning - One Year Before the Official Primary Entry Age	Participation Rate of Youth and Adults in Formal and Non-formal Education and Training	Percentage of Teachers Who Received In-service Training	
						Primary	Junior High
	Primary	Junior High	Senior Secondary				
2016	1.00	1.00	1.00	-	1.13	0.99	0.99
2017	1.00	1.00	1.00	-	1.21	0.99	0.99
2018	1.00	1.00	1.00	-	1.12	0.99	0.99
2019	1.00	1.00	1.00	1.00	1.09	0.99	0.99
2020	1.00	1.00	1.00	1.00	1.14	0.99	0.99
2021	1.00	1.00	1.00	1.00	-	-	-

Sustainable Development Goal 4 Indicators (Continued)									
School Year/ Year	Proportion of Schools Offering Basic Services								
	Electricity			Internet for Pedagogical Purposes			Computers for Pedagogical Use		
	Primary	Junior High	Senior Secondary	Primary	Junior High	Senior Secondary	Primary	Junior High	Senior Secondary
2019	100.00	100.00	100.00	-	-	-	-	-	-
2020	100.00	100.00	100.00	99.96	99.86	99.81	99.92	99.86	99.81
2021	100.00	100.00	100.00	100.00	100.00	99.81	100.00	100.00	99.81

School Year/ Year	Proportion of Schools Offering Basic Services											
	Adapted Infrastructure and Materials			Basic Drinking Water			Basic Sanitation Facilities			Basic Hand-washing Facilities		
	Primary	Junior High	Senior Secondary	Primary	Junior High	Senior Secondary	Primary	Junior High	Senior Secondary	Primary	Junior High	Senior Secondary
2019	-	-	-	100.00	100.00	100.00	100.00	100.00	100.00	-	-	-
2020	99.66	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
2021	99.92	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Summary of Education at All Levels						
SY 2022-2023						Unit: Person
	No. of Schools (school)	No. of Teachers	No. of Classes (class)	No. of Students	No. of Graduates in 2021	No. of Students Per 1,000 Population
Total	11,106	301,784	93,879	4,103,689	842,540	176.39
Preschool	6,661	59,501	-	572,730	-	24.62
Primary School	2,626	100,177	52,771	1,222,538	174,406	52.55
Jr. High School	736	45,415	21,401	562,230	196,233	24.17
Senior Secondary School	509	50,450	18,208	567,943	178,519	24.41
Uni., College & Jr. College	148	44,388	-	1,140,089	283,661	49.01
Special Edu. School	28	1,715	554	4,454	1,337	0.19
Supp. & Cont. Sch.	390	63	945	33,146	8,275	1.42
Religious College	8	75	-	559	109	0.02

Gross Enrollment Ratio and Total Net Enrollment Rate by Level of Education								Unit: %
School Year	Total	1st Level (Primary)		2nd Level				3rd Level (Tertiary)
				Junior		Senior		
	Gross	Gross	Net	Gross	Net	Gross	Net	Gross
2008-09	95.11	99.00	98.02	99.25	97.95	98.86	92.62	86.12
2011-12	94.12	98.79	97.98	98.86	98.15	98.98	93.62	84.27
2014-15	93.08	98.46	97.68	98.91	98.13	98.41	94.10	82.87
2015-16	92.71	98.36	97.56	98.95	98.17	98.84	94.25	82.12
2016-17	92.52	98.25	97.43	98.95	98.03	98.34	94.46	82.17
2017-18	92.42	98.13	97.27	98.87	97.94	97.90	94.28	82.29
2018-19	92.38	98.00	97.14	98.67	97.75	98.31	94.17	82.24
2019-20	92.56	97.87	97.02	98.49	97.51	98.77	94.25	82.66
2020-21	93.73	98.14	97.34	98.52	97.59	98.80	94.40	85.35
2021-22	95.01	98.34	97.69	98.71	97.90	99.54	94.73	88.08
2022-23	95.80	99.15	98.62	99.43	98.75	99.84	95.14	88.90

Overseas Students in R.O.C.						
Unit: Person						
Year	2007-08	2018-19	2019-20	2020-21	2021-22	2022-23
Total	30,509	129,207	128,157	90,895	94,579	103,658
Degree	16,195	61,970	63,530	62,387	65,383	66,917
Studying for a Degree	5,259	28,389	31,811	32,040	34,535	35,512
Overseas Compatriot Students (Includes Hong Kong and Macao Students)	10,936	24,575	23,366	24,315	26,555	28,284
Mainland China Students (Studying for a Degree)	-	9,006	8,353	6,032	4,293	3,121
Non-degree	14,314	67,237	64,627	28,508	29,196	36,741
International Exchange	1,441	5,242	5,766	2,475	5,190	5,190
Short-term Courses	1,146	10,630	7,846	3,785	2,686	2,686
Studying Mandarin Chinese	10,177	28,399	32,457	20,674	20,145	27,808
Mainland China Students (to Take Short-term Courses or Attend Meeting)	823	20,597	16,696	-	-	22
Overseas Youth Vocational Training Program	727	2,369	1,862	1,574	1,175	1,035

Number of Students Per Teacher at All Levels										
Unit: Person										
School Year	Total	Pre-school	Primary School	Jr. High School	Sr. Secondary Sch.		Junior College	College	Univer-sity	Special Edu. School
					Sr. High School	Sr. Voca. School				
1976-77	29.90	32.66	36.04	25.94	23.16	22.70	20.00	16.22	11.42	6.65
1981-82	27.25	26.10	31.79	22.97	22.99	22.50	20.79	11.92	13.53	5.24
1991-92	24.22	15.83	27.20	21.23	22.29	21.28	19.35	11.38	14.82	3.72
2001-02	19.71	12.44	18.60	15.67	19.41	19.18	20.56	20.17	19.60	3.58
2006-07	19.30	10.60	17.86	15.70	19.29	18.41	21.01	18.63	19.93	3.95
2011-12	17.90	12.72	14.78	13.74	18.53	18.29	27.69	21.10	21.52	4.08
2016-17	15.27	10.44	12.35	11.01	16.42		31.66	22.64	23.00	3.74
2019-20	14.34	10.50	12.12	9.88	14.58		27.79	18.66	21.84	3.16
2020-21	14.07	10.28	12.11	9.69	14.22		27.05	17.41	21.62	2.96
2021-22	13.88	9.99	12.14	9.57	13.81		26.58	15.44	21.81	2.84
2022-23	13.60	9.63	12.20	9.28	13.63		26.09	15.99	21.45	2.81

Ratio of Educational Expenditure to GDP								
Fiscal Year	Educational Expenditure (US\$million)			Educational Expenditure Per Student (US\$)	Nominal GDP(US\$ million)	% to GDP		
	Total	Public Sector	Private Sector			Average	Public	Private
1970-71	281	227	54	-	6,270	4.48	3.61	0.87
1980-81	2,014	1,638	376	448	46,393	4.43	3.60	0.83
1990-91	11,222	9,228	1,994	2,120	173,572	6.36	5.23	1.13
2001	17,464	12,997	4,467	3,350	299,303	5.83	4.34	1.49
2006	21,586	15,887	5,699	4,103	386,492	5.59	4.11	1.47
2011	26,621	20,481	6,139	5,647	483,957	5.50	4.23	1.27
2016	27,011	20,321	6,691	6,046	543,002	4.97	3.74	1.23
2019	29,483	22,359	7,124	7,021	611,336	4.82	3.66	1.17
2020	31,886	24,597	7,289	7,773	673,252	4.74	3.65	1.08
2021	35,543	27,930	7,613	9,352	775,838	4.58	3.60	0.98
2022	32,989	25,925	7,064	-	761,400	4.33	3.40	0.93

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For more information, please call:

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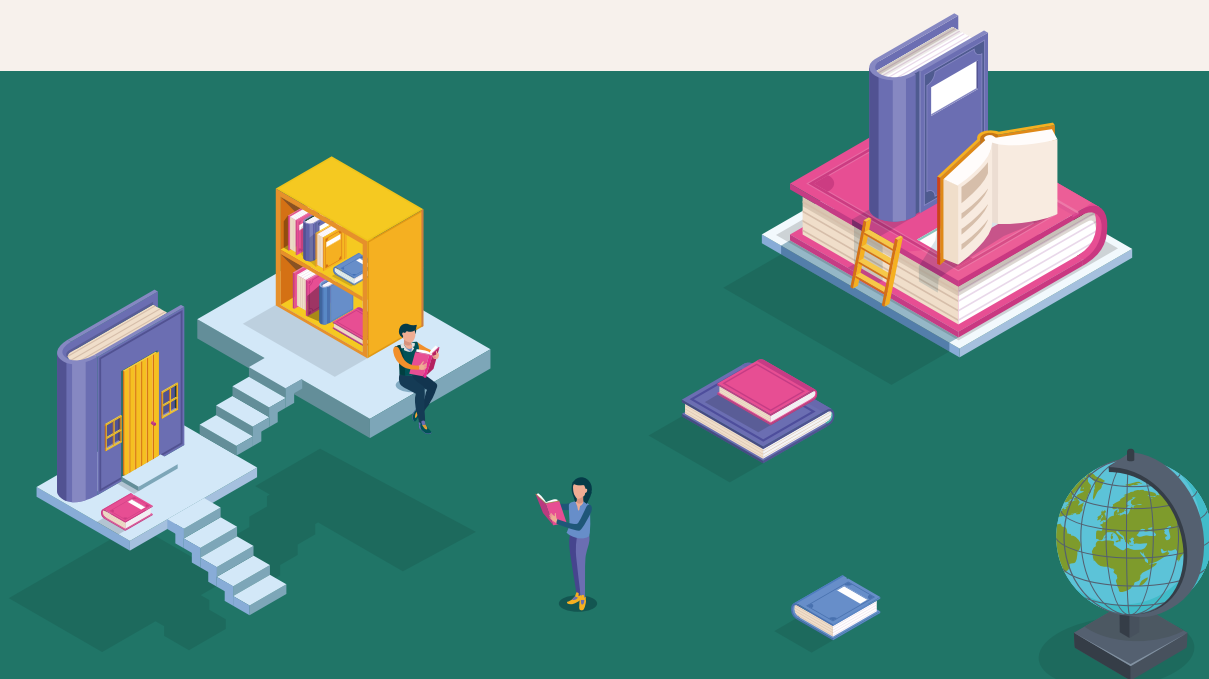
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