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## Compulsory Education

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

Ensuring that all toddlers receive proper preschool education is a major objective of our educational policy. Kindergartens are preschool



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

According to statistics by UNESCO, there are over 40 countries in the world that have a basic education system that exceeds 10 years. The main reason for this is that many non-developed countries have noticed that basic education is directly connected to national competitiveness. institutions set up in accordance with relevant legislation for children aged 4 and above up until the eligible age for elementary school, and are supervised by education administrative authorities, whereas nurseries are welfare organizations set up in accord with Children and Youth Welfare Act that accept toddlers aged 2 to 6 and are supervised by social administrative authorities. The talks and negotiations for merging nurseries and kindergartens started in 1997, and culminated in the Early Childhood Education and Care Act passed on June 29, 2011, to be put in place beginning Jan 1, 2012.

Put into practice in SY1968, Taiwan's 9-year Compulsory Education system is compulsory, free and obligatory. Legislation states that citizens from the age of 6 to 15 should receive compulsory education; which is divided into two stages – the first 6 years at the elementary school level, and the





latter 3 in junior high school. However, this system has been in place for over 4 decades. When first put in place, there were fewer than 10 countries worldwide with more than 9 years of compulsory education in place, making us one of the forerunners. Compared with developed countries, however, the number of years was not that high. To solve the current educational conundrum and enhance the development of national manpower, a 12-year Basic Education system will be adopted in SY2014, a new landmark for our education system.

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

To stimulate the development of junior high and elementary school education and improve its quality, and lay the groundwork for course planning, fundamental research in the development of elementary and junior high school curricula was carried out and added to the 12-year Basic Education policy strategic plan in 2012 to allow the National Academy for Educational Research to improve the teacher supervisory system and follow through with remedial instruction.

With increasing globalization in recent years, many nations are experiencing a growing income gap between the wealthy and the poor as well unequal resource distribution between town and country. Geographical factors and rapid changes in society can lead to uneven distribution of educational resources, causing an educational imbalance between town and country and depriving minority groups of equal access. To solve these regional education issues and bridge the resource gap between different locations, we are working to put the following into practice: reasonable distribution of educational resources, equality in educational opportunity, and realization of equal education and a just and fair society.

Another key strategy is the idea of social care and assisting in the education of children from economically disadvantaged families. Currently there are 3,147 public senior high schools, vocational high schools and junior high schools as well as elementary schools participating in the Promoting School Education Savings Account project nationwide, which authorizes the schools to receive charitable donations. Many philanthropists in both business and society have been long term donors to children in the program, a testament to the generosity of the people of Taiwan.



## Reading Empowers Tungmen Students

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

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

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

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

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

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



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

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

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







## Rubik's Cube is Not Just for Fun

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

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

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

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

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

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

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

