

## A Review of Taiwan's Current Higher Education Development and Challenges

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### Abstract

*In Asia, the last decade has presented unprecedented changes to some aspects of our society, including economic, political, cultural, and environmental aspects. Taiwan has also made tremendous progress and changes in the area of higher education. Following a global trend, Taiwan has entered the new century; into the new era of globalization and knowledge-based economy and we find ourselves facing some vital challenges in our higher education. In the past decade, higher education in Taiwan has increased rapid growth in quantities. The reasons behind this growth include political freedom and democracy, the deregulation of education policy, prosperity in social economics as well as other factors. Over the past 10 years, Education in Taiwan grew at the same pace with its prosperous economic development. Higher education has already become common in Taiwan. From 1994 to 2003, the number of college institutes has increased from 67 to 151, representing a 44% increase. By SY 2010, this number had increased to 165 institutions of higher education. There was also a rapid increase of junior colleges becoming colleges. Due to the increase in universities and students numbers, an imbalance indeed has been created between quality and quantity in terms of higher education institutes. The purpose of this article is to review and explore Taiwan's current higher education development and challenges.*

**Keywords:** Taiwan's higher education development, Taiwan's higher education challenges, quality, quantity, higher education institutes

### *A Brief Review of Taiwan's Education System*

Located in the western Pacific and Taiwan covers an area of 36,000 square kilometers (about .38 percent of the area of the USA) and has a population of 23.46 million. It has one of the highest population densities in the world and is over twenty times the population density of the USA. The lack of rich natural resources mandates that Taiwanese be highly productive in order for industry to be competitive; hence, an educational system is required to effectively develop productive capabilities of the dense population. In Taiwan, education is considered to be a significant priority for every child. The core of the current educational system in Taiwan is the twelve-year compulsory national education program. This includes a six-year elementary school, a three-year junior high school and a three-year senior high school. The 12-year compulsory went into effect in SY 2014, allowing junior high graduates to advance to high school without an entrance exam. Students from families with annual incomes under NT\$ 1.14 million can attend senior vocational school without tuition, or private high schools for the same fees as public schools. Upon graduating from junior high school, students can attend either a senior high school (a more academic program) or senior vocational school (a more practical program) for three years. Besides this, students would attend a five-year junior college, once they have graduated from junior high school. Programs at these junior colleges focus on applied sciences, technology, business, and medical and nursing training. Institutes of higher education include two year junior colleges, technical colleges, four year universities, technical universities and graduate schools. Most undergraduate programs require four years to complete their programs. The universities in Taiwan offer a wide variety of master's and doctoral programs. Graduate programs leading to a master's degree require between one to four years to complete, while doctoral degrees usually require two to seven years for graduation. On the whole, Taiwan's current education system is similar to the American education system (Ministry of Education in the Republic of China, 2006).

### *Multiple Channels for University Admission*

The Joint University Entrance Exam (JUEE) had been in use for 48 years. Starting in the 2002 academic year, it was replaced by a new system.

Three main channels of admission are addressed: the first one is call “selection by recommendation”, in which a university selects applicants recommended by high schools based on the criteria prescribed by its department. The second selection mechanism is through a two-stage process: the admission is based on the results of two exams. The first exam administered by University Entrance Exam Center includes five required high school teaching subjects. The second exam includes the subjects assigned by the university based on its own academic standard and performance. The third channel of admission is through exam only, of which only the three, four, or five assigned teaching subjects are evaluated (Ministry of Education in the Republic of China, 2006). As stated above, the new channel for entering university does reduce students’ working load and students’ heavy studying burden. Also, it provides multiple and varied routes to students for entering university. In the spirit of fairness, the new method for admission ensures the basic right and an equal opportunity to education for all students.

### ***Rapid Development of Higher Education Institutes***

In the past decade, higher education in Taiwan has experienced increasingly rapid growth in quantities. The reasons behind this growth include political freedom and democracy, the deregulation of education policy, prosperity in social economics and so on (Kuo, 1996). Over the past 10 years, Education in Taiwan grew at the same pace as its prosperous economic development. Higher education has already become common in Taiwan (Yang, 2000). From 1994 to 2003, the number of college institutes has increased from 67 to 151, representing a 44% increase (see Table 1). A total of 1,126,627 undergraduates were enrolled in these institutes, which also had 243,567 graduate students in 2,215 graduate schools. By the 2006 academic year, the population of higher education students had risen to 1,295,558 (Education Statistics of the Republic of China, 2003).

**Table 1: University Quantities in Taiwan**

School year	Universities
1994	67
1995	69
1996	86
1997	87
1998	93
1999	114
2000	136
2001	144
2002	148
2003	151

(Source: The data above adapted from Education Statistics of the Republic of China, 2003).

(Note: University quantities include general universities and colleges, universities and colleges of technology, 7 military and police academics, 2 open universities.)

Since 1949, the Taiwan Central Government has spared no effort to develop education at all levels of education. As a result, despite an incessant rise in population, student numbers at all level have grown faster than the population. It can be seen in the following table:

**Table 2: Students as a Share of Population by Level of Education Unit: 0/00**

School Year	Total	kindergarten	Primary school	Secondary education			Higher Education
				Sub-total	Jr. High	Sr. High	
1950	139.64	2.27	120.11	16.39	11.16	5.23	0.88
1956	177.92	5.75	142.57	27.20	18.83	8.37	2.40
1961	226.91	6.99	178.46	38.03	26.92	11.11	3.43
1966	249.33	6.25	176.97	57.48	39.54	17.94	8.63
1971	274.04	6.68	163.10	93.25	58.66	34.60	11.01
1976	270.15	7.32	141.32	107.23	66.43	40.80	14.28
1981	255.14	10.54	122.16	105.91	61.30	44.60	16.54
1986	258.64	12.22	122.22	104.32	55.69	48.62	19.88
1991	258.36	11.41	112.37	107.79	58.33	49.46	26.79
1996	241.17	10.96	90.99	104.88	53.22	51.66	34.33
1997	238.94	10.62	88.73	101.97	50.56	51.41	37.61
1998	237.85	10.90	88.24	98.06	47.15	50.91	40.66
1999	237.26	10.54	88.24	93.93	44.36	49.57	44.57
2000	238.05	10.92	87.38	90.33	42.67	47.66	49.41
2001	238.96	11.00	86.76	87.10	42.61	44.49	54.10
2002	238.75	10.72	86.01	85.25	43.28	41.97	56.77

(Source: The data above adapted from Education Statistics of the Republic of China, 2003).

(Note: A school year (SY) refers to a one-year period from August 1 of the current year to July 31 of the next year. For instance, SY 2002 covered a period from August 1, 2002 to July 31, 2003)

From 1950 to 2002, the percentage of the population of higher education has increased from 0.88 to 56.77. It is obvious that Taiwanese students currently have more opportunities to share higher education than in the past. According the data of the Ministry of Education, the college and university enrollment in academic year was 51.41 per 1,000 of the total population, and if the two open universities and continuing education are included, the rate was 56.77, ranking Taiwan as having one of the highest rates of enrollment around the world (Education Statistics of the Republic of China, 2003).

### ***A Great Challenge: Imbalance between Quality and Quantity in terms of Higher Education Institutes***

Taiwan's higher education system is not only gaining unprecedented independence from government control, it is also expanding significantly in size. In 1986, Taiwan had twenty-eight colleges and universities. As of 1999, Taiwan had over 100 institutes of higher education. More than 100,000 students take the joint college entrance exam each year. Approximately 61.9% of the students are admitted to a college or university. During 2000 to 2006, approximately 75%-90% of the students were admitted to a college or university. As of 2007, approximately beyond 90 % of the students are admitted to a college or university in Taiwan. (Education Statistics of the Republic of China, 2006) Because of a multi-channel school admission system, it allows schools to admit students through multiple channels. In doing so, we have greatly raised the ratio of population with higher education to the total population. However, due to the increase in universities and students numbers, education is no longer for the elite but education is accessible to all. Since this transformative transition appeared so quickly and lacked professional planning, the quality of higher education has been negatively influenced. These effects are in areas such as the quality of student, supply of outstanding faculty, resources for teaching and research, and learning outcomes to students. Meanwhile, educational resources and funding allocated to each institute of higher education declined. On the other hand, most of the colleges and universities in Taiwan have trouble recruiting enough students. Sooner or later, some of them will have to close down or join with other institutes. Taiwan now has more than 160 institutes and perhaps Taiwan will be recognized as having the world's highest "university density" by the Guinness Book of World Records, because Taiwan covers an area of 36,000 square kilometers (about .38 percent of the area of the USA). However, the rapid expansion of higher education though having partly met the needs of the human resources marketing, has given rise to some incompatible phenomena. In view of the large increase in student's numbers, it has become very tough for universities to maintain the high academic quality of instruction and research. The knowledge students acquire on campus cannot meet the needs and expectations of the current human resources marketing (Raige, 1999).

Current university education has been criticized for being impractical: a student graduating from university is equal to becoming jobless and hopeless in the society. Some students have already graduated from universities and they do have difficulty finding a suitable job. It is obvious that more graduates will be competing in an already tight job market. They stay with their family and cannot make a living by themselves. It is a common and current phenomenon in Taiwan higher education.

### ***Conclusion***

The quantity of universities, however, does not necessarily reflect their qualities. The more colleges and universities there are, the more important it is to have a reliable system for evaluating their performance. Strictly speaking, we don't have a reliable method to judge the universities. We would like to see an outside institute from the private sector, or even from abroad, handle evaluations, similar to those published in the United States by U.S. News & World Report. A credible evaluation system and method can help greatly to ensure the overall quality of higher education. We can foresee more drastic and rapid changes in domestic and international environments, technology, economy, and political changes in the near future. University's competitiveness is an important indicator of a country's competitiveness and the excellence of a nation's universities is a significant factor to increasing a country's regional and international competitiveness. Taiwan has gone through the transformative period and can compete with the other top universities around the world.

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