**Education in Taiwan: Taiwan's Colleges and Universities** 

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The *Wall Street Journal* recently compared two college student-led movements in 2014: one in Hong Kong's Umbrella protesters throughout October and November in which demonstrators are demanding that China institute free elections in the territory, and the Sunflower Movement in Taiwan in March and April, which denounced a trade service agreement with China (Dou & Hsu, 2014). University students from both societies, Taiwan and Hong Kong, have impressed the world with their disciplined behavior—orderly and polite conduct in political demonstration against their own political establishments and that of China. In the three-week long demonstration in March, thousands of Taiwanese college students occupied the Legislative Yuan, Taiwan's parliament, and broke into the Executive Yuan. The events, which were streamed live online, picked up by television news broadcasters, and translated into at least 13 different languages, aroused great social tensions at home and with China. Not surprisingly, the Hong Kong student protesters in October have turned to the Sunflower Movement organizers for organizational advice (Reuters, 2014).

The Sunflower protest seems to indicate a student population that is informed, engaged, and active – but economic, demographic, and possibly political trends underlying the Sunflower protests imply major problems that the university system will have to confront and overcome in order to educate Taiwan's students for the benefit of the nation which is striving to maintain its global competitiveness. In a global era, human resources with global mobility, innovation, creativity, and self-discipline are in high demand. As a small island state which relies on exports such as electronic equipment, machinery, mineral fuels, and optical, technical and medical equipment, Taiwan is most vulnerable to the impact of globalization. The rapid development of information technology and Taiwan's complicated relationship with China elevate the risk. Like many higher education authorities worldwide, Taiwan's education reform policy has focused on nurturing international personnel and transnational human resources. Universities have prioritized the improvement of learners' effectiveness and efficiency, in hopes of enhancing students' employability after graduation.

According the Ministry of Education's 2014 "White Paper on Human Resource Development," Taiwan's education goals between 2014 and 2023 are to re-orient education toward positive social values, to reshape the education system into an effective model, to reset reasonable resources, to reconstruct partnerships, and to solidify learning scholarship. In so doing, Taiwan's future education policy targets (1) preparing more outstanding and dedicated professional teaching personnel, (2) narrowing discrepancies between schooling and the job market, (3) strengthening students' international competiveness, and (4) empowering students' future productivity. Six key competencies are introduced in the government's policy to enhance the capacity of the next generation global mobility, employability, creativity, interdisciplinary ability, information competence, and citizenship (MOE, 2013a).

During the economic boom of the 1960s, Taiwan was the fastest growing economy in the world, and was named as one of four Asian Tigers (together with South Korea, Hong Kong, and Singapore).

In 2013, Taiwan's population comprised 23.3 million people in which 2 percent were ethnic minorities. The per capita GDP was \$20,930, 40<sup>th</sup> in the world. More than 70 percent of residents lived in urban areas, and the illiteracy rate was less than two percent, one of the lowest in Asia. The official language is Mandarin Chinese which maintains traditional Chinese characters and its literature classics are taught in all schools. Taiwan is renowned for its dynamic multicultural elements deriving from Chinese, Japanese, and western influences over the last few centuries.

Politically, Taiwan and China have been ruled separately since the communists won the Chinese civil war in 1949. Both parties remained hostile to each other until the late 1980s. Economic ties and cultural exchanges have improved drastically since 2008, but both sides still remain deeply suspicious of each other politically. The Taiwanese general public continues to resist any proposals for Taiwan's adoption of a "one country, two systems" framework, as has been implemented between China and Hong Kong.

#### **Higher Education Policy Changes in Taiwan**

# Expansion

Prior to 1994, higher education in Taiwan was promoted to serve economic development. The government implemented rather strict controls over the establishment of new HEIs, both public and private, determining their size and scale, appointing presidents, regulating admission quotas

and curriculum standards, and supervising faculty and student affairs on campus. The addition of new universities was extremely limited due to the centralized educational administration's heavy focus on economic development and political stability (Mok, 2014).

Beginning in the mid-1990s, higher education in Taiwan experienced a period of unprecedented expansion in response to global competition, domestic political elections, and rapid social change. For example, there were only seven higher education institutions (HEIs) in 1950; this had risen to 105 in 1986 (a 15-fold increase) and 163 in 2012. University student enrollment was only 6,665 in 1950. By 1986, there had been a 52-fold increase to 345,736, and by 2012 the university student population had more than tripled to 1,259,490. Today, nearly 70 percent of Taiwan's 18–22 age cohort studies in an HEI, the second highest rate in world after South Korea (Wang, 2014). However, government spending per university student declined from US\$6,700 (200,000 NT) in 1980 to US\$4,300 (130,000 NT) today (MOE, 2013b). Meanwhile, the university acceptance rate has increased from around 20 percent before the 1970s to 49 percent in 1996 and over 90 percent since 2006, among the highest in Asia (MOE, 2013b). Alongside these changes, there has been a significant increase in postgraduate education. From 1996 to 2006, the number of doctoral students increased 2.44 times (Yang, et al., 2012). Prior to the 2012-2013 academic year, undergraduates comprised less than three-quarters of the university population (934,000), while about 15 percent were master's students (183,000), and the remaining were doctoral students (33,000). The total growth of enrollment in postgraduate education was 1.75 times within a decade (MOE, 2013b). Nowadays, one out of 3.7 undergraduates ends up attending graduate school, which has led to nearly 60,000 students graduating from master's programs and 4,000 from doctoral programs each year. In short, 58.2 of every 1000 citizens of Taiwan are university students (MOE, 2013b).

### World Class University Competition

Since Taiwan joined the World Trade Organization (WTO) in 2001, the increasing need to incorporate the globalization process into the system of higher education, such as through cross-cultural interactions, student exchanges, and international competition for university faculty, has led to even greater pressure to take advantage of this irreversible trend in higher education. Taiwanese universities have been called on to play a central role in knowledge-based economic development, not only through meeting the government's and the market's external requirements to produce human resources, but also through competing with other institutions on the international stage. To date, however, Taiwan's universities have been under criticism for not being able to fully meet the requirements of Taiwan's fast-moving job market.

In an attempt to provide universities with more incentives for pursuing excellence and to offset the declining quality of universities due to rapid expansion and public budget cuts, the MOE first promoted the World-Class Research University Project in 2003. Then in 2005, the MOE launched the Higher Education for Excellence plan, which provided NT\$5 billion (approximately US\$1.6 billion) to twelve Taiwanese HEIs over a span of five years. The plan was renewed in in 2011, with the goal of creating a higher education system of excellence, adapting to the changing trends of the future, and producing great leaders. Through such a system, the MOE seeks to establish top universities and improve fundamental development, integrate human resources from different departments, disciplines, and universities, and establish research centers for pioneering specialized interests. In the long run, the MOE has the goal of raising the national level of education, which will in turn increase national competitiveness. Follow-up evaluation programs have been implemented throughout the process to control outcomes.

Four years after the Higher Education for Excellence plan was carried out, participating Taiwanese universities showed vast improvement. In the QS World University Rankings of 2009, National Taiwan University (NTU) made it into the top-one hundred ranking for the first time (Academic Ranking of World Universities, 2009).

# Governance and Academic Drift

During the period of rapid expansion of higher education, the government's public spending became relatively constrained. In response, the Ministry of Education launched a series of new governance policies, including revising its Universities Law and setting up the Executive Yuan Education Reform Commission to increase the deregulation, decentralization, democracy, and internationalization of HEIs. For example, the University Law, as amended in 1994, transformed universities from being under the traditional centralized control of the MOE into more autonomous campus environments, reducing academic and administrative intervention and moving toward more autonomy in terms of admissions, staffing, and tuition policies (Mok, 2014; Chou & Ching, 2012). In so doing, HEIs were expected to become more competitive and responsive to individual, social and global demands.

The rapid expansion of the higher education system caused some unexpected consequences. For one, the overly rapid upgrade of some vocational/technical colleges into universities changed the nature of some HEIs. This allowed them to convert into "comprehensive universities" at the expense of their original educational foundation for vocational and technical training, which had

formerly been at the core of Taiwan's economic development strategy (Chou, 2008; Hayhoe, 2002). Another impact came from the government's introduction of market competition mechanisms, which accelerated the uneven distribution of resources among public/private and elite/non-elite HEIs and eventually increased social stratification in Taiwan (Chou & Wang, 2012; Chen & Chen, 2009).

## **Higher Education Challenges**

Over the past two decades, Taiwan has responded to the worldwide trends of neo-liberalism and globalization through a process of political and social restructuring. As noted above, higher education has expanded at an unprecedented pace, admitting more students rather than limiting it to the elites. Along with this transition process, HEIs have also undergone transformation by prioritizing accountability and efficiency.

However, according to the latest Ministry of Education White Paper on Human Resource Development (MOE, 2013a), since the mid-1990s Taiwan's birthrate is declining and its society is aging – the policy to expand higher education took place regardless of these demographic changes. The following issues in higher education have since surfaced (MOE, 2013a; Chou and Wang 2012):

- 1. A less friendly environment for learning and instruction due to the market-driven educational policies and the environment;
- 2. A significant gap between research and industry because of the paper-driven academic reward system;
- 3. Increasingly uneven distribution of educational resources; and
- 4. Decreased social mobility and resulting social stratification resulting from unequal education opportunities.

Above all, an oversupply of university graduates has resulted in a gap between higher education and the job market due to the increasing numbers of students who have difficulties in finding a job in their university discipline. A survey indicated that only a quarter of university graduates in the last five years have found a job related to their college major (Cheng, 2010). The unemployment rate of university graduates increased from 2.7 percent in 1993 to 5.84 percent in 2012. The university graduate unemployment rate has been higher than unemployment rates for all other levels of education, including those without college degrees, since 2011 and remained at 4.8 percent in April 2014 (Directorate-General of Budget, Accounting, and Statistics,

2014).

This situation has placed serious financial burdens on families. The statement "better degree; higher unemployment" has taken hold within HEIs as employment opportunities for college students have decreased (Chou, 2008).

The high unemployment rate among university graduates is in part a result of the industry structure in Taiwan. For example, in 2007, there were 163 HEIs with a total of 1.3 million students and a 90 percent admission rate. Each year, approximately 300,000 students graduate from universities, among which many become unemployed. On the other hand, among 91,490 research personnel, 87 percent work in universities and academic institutions rather than being employed in industry or the corporate sphere, which are in need of research and development (R&D) staff. The academic research that originates in institutions of higher education often lacks practical applicability, and therefore does not serve the needs of companies and industry in Taiwan.

Similarly, HEIs are not preparing people for work in many of Taiwan's most important industries. High technology companies have close to 100,000 employees in semiconductor manufacturing, image display, digital life, biotechnology, communications, and the information service industry, but universities will supply only about 2,000 new employees to those six key industries in Taiwan over the next six years. A possible solution to this human resource shortage would be to establish a more aggressive higher education policy and strategy that would strengthen the collaboration between universities and the corporate world (Chou & Ching, 2012).

In addition, there is a problem with the increasing numbers of the "working" population among university graduates in Taiwan. With the unemployment rate for these individuals at 4.8 percent, many seek work in blue-collar professions. It is estimated that almost 50 percent of youth under age 30 are working in the blue-collar jobs (http://notes.ystaiwan.org.tw/post/44442675825). Those who are part of the working population phenomenon spent at least 27 weeks as part of the labor force during the year, although their incomes remained low. In Taiwan in 2010, the average monthly income of local workers was 42,141 NT (\$1,451 USD), which was the same as the average income in 1998, indicating that there was no improvement in earning power during that period (Wang, 2014).

**Upcoming University Closures** 

In recent years, Taiwanese society has faced a low birthrate and an aging population; partly in response, it has become more multi-cultural. The number of births dropped from 410,000 newborn babies in 1981, to 270,000 in 1998, to 167,000 in 2010, the lowest level in fifty years (Chen, 2010). By 2012, the birthrate had risen again to 229,481. Many private HEIs, especially in more remote areas, have found themselves confronted with a serious shortage of student recruits and a dozen HEIs have encountered operational difficulties arising from this shortage. It is expected that more universities – up to one-third of the total – will likely face forced closures or mergers after 2016, when the size of the 18 year old cohort declines for the first time (Tsai, 2010; Chang 2014). To offset the declining birth rate by increasing the numbers of international students, the MOE set up awards and programs for HEIs to promote internationalization by encouraging foreign students, promoting international exchange, and enhancing university competitiveness internationally. In 2012, the total number of international students (including degree-seeking students, exchange students, and students studying languages) reached 43,957, representing an increase of more than 58 percent over the 27,738 international students studying in Taiwan in 2007 (MOE, 2014).

In 2010 the legislature approved a special bill that permitted China's high school graduates and the top university graduates to enroll in Taiwanese HEIs. This policy went through a series of long debates over whether Chinese students should be granted the right to study in Taiwan or not. (Students from China are not considered international students.) Nevertheless, in order to ease the shortage of university students and promote communication among the younger generations, the bill was passed and established an annual quota for Chinese students who can be admitted to the island beginning in 2011. The figure will account for less than 1 percent (approximately 2,000) of the total full-time and local university student population in Taiwan (Chou and Ching, 2012).

# **National Identity Conflict among Taiwanese Students**

As mentioned earlier, despite the continuing cross-strait exchanges over the last two decades, Taiwan's general public and college students still remain suspicious about China's potential attempt for reunification. For centuries, Taiwan has been faced with identity conflicts. Whether under Japanese colonial rule (1895-1945), during the subsequent period of re-Sinicization after World War II (1949-1987), or throughout the de-Sinicization era under the Lee Teng-hui and Chen Shui-bian presidencies (1988-2008), the Taiwanese people have been subjected to a complex interplay of political and sociocultural forces shaping their identities. Today, the constant dilemma in Taiwan over national identity continues and has become heavily influenced

by yet another set of forces: globalization, localization, and shifting cross-strait relations.

For example, in an International Civic and Citizenship Education Study (ICCS) study of civic and citizenship education in 37 countries around the world in 2009, results for Taiwan (referred as Chinese Taipei) showed that Taiwanese teenagers (14 years old) scored much lower than the average in regard to "trust in national government, political parties, media, schools, and people in general" (Schulz, Ainley, et.al., 2009). The Sunflower Movement is a manifestation of this issue.

However, at the same time that high-level cross-strait relations and economic cooperation have developed to an unprecedented degree due in the past six years, cultural and educational exchanges have also increased. Recent changes in the political atmosphere between Taiwan and mainland China have led to the lifting of the long-time ban on recruiting Chinese students to study in Taiwan. Throughout this process, the multifaceted and dynamic way in which traditional Chinese culture and intensifying cross-strait interactions are shaping national identity is giving rise to great uncertainty about the future in Taiwan.

Research indicates that people in mainland China and Taiwan have, throughout time, been able to justify their national identities in a subtle way, a phenomenon that remains evident today (Hao, 2010). Education plays a major role in shaping national identity in Taiwan, and with the ongoing cross-strait cultural and education exchanges in higher education, this has become truer than ever before. Will higher education eventually lead to constant, close communication and exchanges between faculty members, students and others in China and Taiwan? Are higher education institutes in Taiwan a key part of the process? Will China's rise not only lead to the emergence of a new Chinese identity, but also influence Taiwanese identities? These are questions that may well define the future of cross-strait relations.

#### Conclusion

The inevitable growth of higher education throughout the world has become a major topic of discussion over the last two decades. This global trend of marketization has affected many HEIs in Asia and other regions. Taiwan is a good example of one that has adopted neoliberal principles in its higher education policy since the late 1980s. Taiwan's efforts to globalize its higher education system while preserving its cultural heritage and local identity have led to new dilemmas for university graduates and other citizens in terms of both financial security and national identity. Among the most significant changes have been the increase in the number of

HEIs and student enrollment, and the increasing number of educational and cultural exchanges with other countries including mainland China. This educational expansion has had mixed results. It not only opened up greater educational opportunities for high school graduates but also created unexpected results, including the changing government role regarding HEIs, intense competition between HEIs, increasing admissions, a surplus of university graduates, a lack of employment opportunities for graduates, and the risk of university closures. If the Taiwanese higher education system does not adapt to the powerful forces that shape it, many of these trends will continue or worsen in the coming years.

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