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Mei-Mei Song<sup>a</sup> & Hsiou-Hsia Tai<sup>b</sup>

<sup>a</sup> Tamkang University, Taiwan

<sup>b</sup> National Chiao Tung University, Taiwan

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# Taiwan's Responses to Globalisation: Internationalisation and Questing for World Class Universities

Mei-Mei Song<sup>a\*</sup> and Hsiou-Hsia Tai<sup>b</sup>

<sup>a</sup>Tamkang University, Taiwan; <sup>b</sup>National Chiao Tung University, Taiwan

In recent years, Taiwan has demonstrated strong policy change to counteract the potential threats brought upon by globalisation such as the opening of the higher education market to a foreign trade partner and increasing competition from neighbouring countries. In light of these challenges, the Taiwanese government launched a series of unprecedented mega-sized initiatives in the hope of enhancing the quality of the country's higher education in the global sphere. These programmes outlined two major themes: internationalisation and the quest for world-class universities. This paper depicts four major government initiatives and their impact on Taiwan's higher education, as well as the controversy that surrounds them. Some policy trends are observed in these programs: strong emphasis on research, strong emphasis on science and technology, further stratification of the higher education system, attempts to advance academic excellence through internationalisation, multiple functions of the government grants, and the Ministry of Education's continuing endeavour to direct university development and be outwardly "fair" to colleges and universities.

## Context

Taiwanese higher education has gone through dramatic changes in the past decade, as is the case for many countries under the impact of globalisation. Obvious policy changes in higher education can be observed in various ways: diminishing state subsidies for the sector and the modification of its funding mechanism, increasing demands for accountability from colleges and universities, tighter bonds between universities and the industry, attempts to establish stronger ties with the international academic community, the pursuit of prestige in worldwide rankings, policy borrowing from developed countries, and the shift in state controls from *regulation* to *supervision*.

\*Corresponding author. Graduate Institute of Futures Studies, Tamkang University, 151 Ying-Chuan Road, Tamsui, Taipei County, Taiwan. Email: mmsongtw@yahoo.com

Table 1. Government initiatives in higher education in Taiwan

Program	Year
Program for Promoting Academic Excellence of Universities	2000
Program for Improving Basic Education in Universities	2001
Program to Promote International Competitiveness of Universities	2002
Research University Integration Project	2002
Program for Cultivating Science and Engineering Talents at Universities	2002
Program for Improving Research University Infrastructure	2002
Program for Expanding Overseas Student Recruitment	2003
Project for Developing Top-Notch Universities	2004
Program for Rewarding Teaching Excellence of Universities	2005

Since 2000, the Taiwanese government has launched a series of major higher education initiatives (see Table 1), aiming to improve the quality of university education for at least some notable universities. These projects came with large government investments—a rarity in the history of Taiwanese higher education.

Two major themes are obvious in all of these projects providing special block funds to colleges and universities: heavy emphasis on internationalisation, and the quest for world-class universities.

### Internationalisation

Before such large-scale initiatives were launched, the level of internationalisation of Taiwan's higher education was mainly confined to individuals, namely, the cross-border learning of students. For decades, Taiwan has traditionally been one of the top nations that send a large number of students abroad, primarily to the US. At its peak during the late 1980s, more than 7,000 students went overseas for study each year—a considerably high number for a nation with a total population of only 20 million. The government at that time was highly concerned with the problem of “brain drain” because most of these students were top academic achievers in the country and most did not return home after graduation.

The circumstances, however, have changed in recent years. Despite the fact that there is still a rather large number of students studying abroad, the host countries for overseas Taiwanese students have largely diversified although they are still heavily concentrated in English-speaking countries. Given students' lower degree aspirations and the smaller number of college graduates interested in studying abroad in recent years, the government is now troubled by the diminishing level of internationalisation in Taiwan's academia, industry and the so-called “academic hybrid” as a consequence of the small academic community on the island (Song & Tai, 2006).

The number of international students studying in Taiwan, on the other hand, has been relatively low, with 6,380 in 2001 and 9,616 in 2004. Approximately 80% of international students in Taiwan are enrolled in short term language programs (Ministry of Education, 2006b) and students from Japan account for the biggest

proportion of foreign student enrolment, with Indonesia, USA and Korea following closely behind (Song & Tai, 2006).

The Ministry of Education (MOE) now faces the prevalence of globalisation and is starting to feel the pressure to make Taiwanese higher education more internationalised than it has been. It is deemed necessary to elevate the process of internationalisation to an institution level to extensively boost its integration with the global academic mainstream. The pressure to internationalise higher education is partly due to Taiwan's entry into the World Trade Organization (WTO) in 2001 and the subsequent General Agreements on Trade and Services (GATS), in which the Taiwanese government agreed to open the country's higher education market to foreign trade partners. These agreements alarmed the MOE and it became necessary to aggressively compel colleges and universities to become more internationalised, as local higher education institutions could face serious challenges from foreign universities once the latter starts recruiting Taiwan students through various cross-border activities permitted by GATS. It is believed that foreign competition will exacerbate Taiwanese universities' existing problems such as the shrinking pool of potential students as a result of dramatically declining birth rates in the country. In response to these potential problems, the MOE has attempted to explore various options such as recruiting university students from other countries.

As global competition among universities becomes evident and the Taiwanese government continues to perceive university competitiveness as a crucial contributing factor to the country's economic prosperity, the MOE has realised the importance of elevating the overall performance of Taiwanese universities in the international academic community. The level of internationalisation, therefore, is perceived as one of the decisive features in a university's ability to compete, and this in turn translates to the country's future productivity.

Two major programmes were launched in an attempt to advance the universities' level of internationalisation: the Program to Promote International Competitiveness of Universities (PPICU) and the Program for Expanding Overseas Student Recruitment (PEOSR). It should be noted that the MOE's efforts to internationalise colleges and universities did not begin with the aforementioned initiatives. As early as 1992, the ministry had led a collaboration between universities and the Academia Sinica in instituting the Program for International Graduate Students which recruited international postgraduate students for advanced research in certain competitive areas (MOE, n.d.b). The PPICU and PEOSR, however, are significantly larger in terms of scale and state subsidies as compared with any other initiative ever instituted for similar purposes.

### **Program to Promote International Competitiveness of Universities**

The PPICU was initiated in August 2002, specifically targeting the advancement of international competitiveness of Taiwan's universities. Strategies in five distinctive areas were delineated:

1. Promoting international academic exchange activities;
2. Constructing an internationalised learning environment by encouraging university courses instructed in English with a good support system for those involved in the courses;
3. Encouraging universities to participate in international assessment as well as professional accreditation in order to elevate university teaching and research standards to international levels;
4. Encouraging universities to institute twinning programs with foreign universities or to establish mutually recognised credit/degree systems; and
5. Establishing an English learning environment through enhanced internet facilities.

In 2005, a total of 2,279<sup>1</sup> international students enrolled in degree programs in Taiwan; more than half of them were from Asia, with science and technology majors accounting for the largest proportion (MOE, n.d.a). Among them, 37% studied at private universities. One hundred and fifteen special programs at 30 colleges and universities were set up to teach in a foreign language (mostly in English and in undergraduate and master's programmes), while 29 universities established joint degree programs with at least one overseas university (mostly in English-speaking countries such as the US, UK and Australia).

The MOE also devised a progressive mechanism to reward institutions that were able to successfully recruit a large number of international students. In other words, part of the subsidies a university receives depends on the number of international students it recruits—whether it is in terms of absolute numbers or its ratio to university enrolment. The rewards are based on a progressive scale where the higher the quota a university is able to meet, the larger the subsidies it receives. Programme subsidies went to 10 universities in 2005 and 13 universities in 2006, with a total amount of NT\$49.4 million (US\$1.5 million) and NT\$54.3 million (US\$1.6 million), respectively. This is expected to continue in the future. The MOE has also organised dozens of Higher Education Fairs since 2004, visiting various countries such as Vietnam, Thailand, Malaysia, Canada, and the US to promote higher education institutions in Taiwan.

In addition to subsidising universities with a good number of international students, the MOE also incorporated international student recruitment in the key indicators for nationwide University Assessment as well as a criterion for the Review of Private University Development, a mechanism for the state to assess the development plans for private colleges and universities and to determine the level of subsidies for these institutions accordingly.

### **Questing for World-class Universities**

The pressure to establish world-class universities in Taiwan is due to two reasons: the frenzied expansion of the higher education sector since the mid-1980s, which has raised serious concerns about the scarcity of resources available to individual

universities and students; and the fact that rising investment in top universities in other countries (particularly Taiwan's neighbours) has alarmed the government as a potential threat to the country's competitiveness in the long run. Taiwanese higher education has gone through a period of rapid expansion since 1987. From 1985 to 2005, the number of colleges and universities grew rapidly and the enrolment rate of youth aged 18 to 21 skyrocketed (see Table 2). Educational funds were depleted by the rapidly growing institutions and this did not create a proper environment for fostering outstanding universities. To make matters worse, the MOE's "head-counting funding mechanism", which allocates funds according to the number of students in the school, failed to encourage competition and performance among colleges and universities in the past.

The MOE therefore perceived the need to introduce large competitive grants in order to encourage excellence and diversified development among colleges and universities.

In the meantime, the increasing importance of universities to a nation's competitiveness also drew the government's attention to the higher education sector. In fact, throughout the development of higher education, the Taiwanese government has long regarded higher education as a crucial part of the national machine that provides top talents to the economy. The high-quality manpower produced by the educational system, for instance, has been recognised as the reason for the country's "economic miracle" in the 1970s and 1980s. University graduates in science and technology are believed to be one of the key forces behind the country's recent upgrade from a labour-intensified economy to one intensified by capital and technology. The government's conviction in the connection between education and economic development is further reinforced by the worldwide emergence of knowledge-based economy which links universities directly to a nation's economic competitiveness. The state, therefore, is alarmed by the recent decline in universities' average per-student spending as a consequence of substantial expansion in higher education. It is particularly concerned given that neighbouring countries such as Japan, Korea and China have launched significant projects that invest heavily in higher education. The government's fear of being marginalised in the world's economic

Table 2. Higher education growth in Taiwan, 1985–2005<sup>a</sup>

Year	Enrolment <sup>b</sup>	No. of colleges and universities <sup>b</sup>	Gross enrolment rate to age cohort 18–21	Higher education expenditure to total educational expenditure
1985	191,752	28	20.8%	13.6%
1995	356,596	60	39.4%	14.3%
2005	1,115,672	145	82.0%	39.4%

<sup>a</sup>From Ministry of Education, 2006a.

<sup>b</sup>Including numbers in undergraduate and graduate programmes while excluding those in junior colleges.

sphere as a result of lost competitiveness has been clearly illustrated in its higher education initiatives implemented in recent years.

It should be noted that the state's quest for world-class universities became even more definite after 2003, when the Macro Planning Committee presented its final report on the prospect of Taiwanese higher education. The Macro Planning Committee was an ad-hoc committee organised in 2001 by the Executive Yuan, the top executive branch of the country's central government, to conduct an overall review on Taiwan's higher education development. It had seven members, which included prominent figures in the country, current and former university presidents, an entrepreneur, an academician from the Academic Sinica, and a university professor. All committee members had studied and/or worked overseas, and most did so in the US. According to their report, Taiwanese higher education needed to focus on: diversifying its universities' missions and goals, promoting university autonomy, developing technological integration and innovation, elevating the quality of elite and overall education, establishing world-class universities, and underscoring professional and general education ("Asia's First", 2005).

Among the initiatives launched by the MOE, four were particularly significant: the Program for Promoting Academic Excellence of Universities, the Program for Improving Basic Education in Universities, the Research University Integration Project, and the Project for Developing Top-Notch Universities.

#### *Program for Promoting Academic Excellence of Universities*

The Program for Promoting Academic Excellence of Universities (PPAEU) was initiated by the MOE in 1998 based on the ministry's *Action Plan for Educational Reform*. The Action Plan was rooted on the *General Report on Educational Reform* and the *General Plan for Educational Reform*, both compiled by the Executive Yuan to improve education in all levels as a government response to society's overall dissatisfaction with the educational system. "Promoting the development of higher education excellence" was one of the 12 policy focuses proposed in the Action Plan (MOE, 2005).

With the MOE and the National Science Council (NSC) allocating a total of NT\$13 billion (approximately US\$401 million; NT\$10 billion was from the MOE and NT\$3 billion came from the NSC), the PPAEU was the first mega-sized project (in terms of budget) that was individually approved by the government for higher education development. It tried to amend the long-term problem of underinvestment in Taiwan's higher education, especially after the rapid expansion in the last two decades. It also aimed to foster a more competitive environment and establish better incentives to motivate competition among higher education institutions (PPAEU, 2005).

The PPAEU outlined two specific goals: to improve infrastructure for academic development at colleges and universities by subsidising key areas in order to pursue academic excellence, and to steer colleges and universities towards developing flagship areas and effectively integrate university resources (PPAEU, 2005). The programme aimed to encourage large-scale intra- and inter-university cooperation by

soliciting proposal applications from colleges and universities (instead of individual scholars as the government usually did), and recruiting a group of prominent local and international scholars for the review committee. While the programme welcomed proposals from any discipline in the academe and claimed to uphold the sole standard of “excellence”, the criterion used for the screening process explicitly stated that it would favour proposals that were from disciplines that were considered promising, innovative and key “international” academic disciplines in accordance with the development of the country, had a good foundation in the country and displayed a potential to achieve world-class standards. The PPAEU was carried out in two phases, each running for four years. They were launched in 2000 and 2002, respectively.

Competition for the grants was fierce. In the end, only 16 of the 261 proposals (6.13%) were approved in the first phase of the programme, while 18 of the 148 proposals (8.11%) were accepted in the second phase (PPAEU, 2005). The budget and the number of projects approved for the programme are listed in Table 3.

Although projects were said to be chosen based on “academic excellence”, the projects approved by the programme were highly concentrated in areas directly associated with the country’s economic competitiveness. Science and engineering projects were greatly favoured, with disciplines that study nanotechnology, internet, wireless communication, electro-optical engineering, and biotechnology highly preferred by the government. As indicated in Table 3, the budget for the four approved projects in the humanities and social sciences accounted for only 15.69% of the total grant budget in the first phase, the lowest among all four disciplinary areas. This declined to only 3.29% in the second phase. Moreover, the only approved project in humanities and social sciences in the second stage of the programme was on

Table 3. Program for Promoting Academic Excellence of Universities in Taiwan: Budget and number of projects approved

Disciplinary areas	Phase 1 2000–2004			Phase 2 2002–2005		
	Approved budget		No. of projects approved	Approved budget		No. of projects approved
	NT\$ <sup>a</sup>	US\$ equivalent <sup>b</sup>		NT\$ <sup>a</sup>	US\$ equivalent <sup>b</sup>	
Humanities and social sciences	680	21	4	70	2	1
Life sciences	1,110	34	5	610	19	3
Natural sciences	1,130	35	4	250	8	2
Engineering and applied sciences	1,460	45	3	1,190	37	6
Total	4,380	135	16	2,120	65	12

<sup>a</sup>Units = NT\$1,000,000.

<sup>b</sup>Units = US\$1,000,000; US\$1 approximates to NT\$32.8.

Source: Science and Technology Yearbook, Republic of China, 2005a.



integrating the knowledge economy and electronic commerce; this was clearly geared toward promoting national competitiveness through the development of knowledge that is “helpful” in the knowledge-based economy.

It was also clear that the grants were highly concentrated in so-called research-oriented universities in Taiwan, especially the public universities. The only two private universities were included only because they participated in a sub-project under a public university.

In order to sustain projects associated with academic excellence, the government launched a PPAEU extension programme in 2003, with the NSC allocating NT\$3 billion (US\$92.6 million) to finance it. For three years, the programme accepted multiyear, integrated research proposals that could last up to a period of four years. These proposals were either totally new or a continuation of projects approved in the previous programme. Like the PPAEU, the extension programme still stressed the importance of the projects’ potential contribution to national development. It also promoted interdisciplinary cooperation as well as in international competitiveness (National Science Council, 2003) (see Table 4).

After the announcement of this high-profiled PPAEU and its substantial investment in university research, the general public and many in the academe started to question the programme’s negligence of university teaching, given that “academic excellence” should include both teaching and research in higher education institutions. In response to such criticism, the MOE allocated part of the programme’s budget to sponsor another initiative: the Program for Improving Basic Education in Universities, which provided expenditures for colleges and universities to restructure and improve general education curriculum.

Table 4. Extension Program for Promoting Academic Excellence of Universities in Taiwan: Budget and number of projects approved

Disciplines	Fiscal Year 2004 2004–2007			Fiscal Year 2005 2005–2008		
	Approved budget		No. of projects approved	Approved b		No. of projects approved
	NT\$ <sup>a</sup>	US\$ equivalent <sup>b</sup>		NT\$ <sup>a</sup>	US\$ equivalent <sup>b</sup>	
Humanities and social sciences	110	3.4	2	100	3.1	2
Life sciences	370	11.4	4	230	7.1	3
Natural sciences	390	12.0	3	470	14.5	3
Engineering and applied sciences	730	22.5	4	0	0	0
Total	1600	49.4	13	800	24.7	8

<sup>a</sup>Units = NT\$1,000,000.

<sup>b</sup>Units = US\$1,000,000; US\$1 approximates to NT\$32.8.

Source: Science and Technology Yearbook, Republic of China, 2005b.

### Research University Integration Project

The Research University Integration Project (RUIP) was proposed in January 2002 by the Higher Education Macro Planning Committee. Its ultimate goal was to push at least one key university in the country to become a “world-class, Asia’s first” research university. With extraordinarily large block funds, the project targets proposal plans that can recruit overseas scholars, specifically world-renowned and well respected ones, to chair or actively participate in the projects. “Integration” was especially emphasised, and RUIP hopes to encourage strong collaboration beyond departmental and institutional boundaries that will alleviate the department- and university-centred orientation that is common, if not universal, in Taiwanese higher education.

The application for project funds was open to all colleges and universities and promised handsome rewards for successful university integrations whose initial proposals were approved by the MOE. In fact, the MOE set aside a special fund for the chosen winners of as much as NT\$10 billion (US\$309 million) over a three-year period.

RUIP also outlined specific guidelines and criteria for possible university reorganisations (MOE, 2002). These are listed below.

1. *Intra-university integration.* Universities that offer *comprehensive* disciplines are encouraged to explore the possibility of merging or reorganising either a single academic programme or multi-programmes across different disciplines within the university. A university is considered comprehensive if its academic programmes cover all-inclusive disciplines such as the humanities, social sciences, natural sciences, engineering and life sciences, among others.
2. *Inter-university integration.* Three types of inter-university reorganisation were intended:
  - (a) *The inter-university research centre.* Universities or research institutes can organise cross-campus research centres. The academic area of the research centre should have high potential for development and already be well established in the country. It can also stem from projects already carried out in the PPAEU, as long as it demonstrates the necessity and potential for further research.
  - (b) *The university system.* Under the precondition that a university’s independence and autonomy remains intact, research universities can set up a University System Committee to take charge of projects related to the pursuit of academic excellence for all institutions under the system. Participating universities should be offering programmes complementary to each other, be comparable in terms of size and “academic standards,” and be in close geographic proximity.
  - (c) *Merger.* Research-oriented universities that are smaller in size or are not equipped with a wide range of academic programmes can merge into a larger comprehensive research university. In order to maximise managerial effectiveness, smaller universities are encouraged to seek a merger with

institutions that are near enough for exchanges in teaching, research, and administrative activities. They should also be offering programmes complementary to each other and be comparable in terms of “academic standards”.

Specifically, universities oriented toward science and engineering were encouraged to cooperate or merge, with “comparable development”, with those more focused on humanities and the social sciences. With the prospect of establishing one big comprehensive university in mind, it was suggested that these institutions establish agreements on joint programmes, share resources or be involved in other types of cooperation. In addition, colleges and universities with similar attributes, such as teaching or research orientation, were encouraged to establish a university system (MOE, 2002); although in reality, the classification of higher education institutions in Taiwan has been ambiguous.

In August 2002, the MOE approved a NT\$799.6 million grant for three major projects chosen from a pool of 20 proposals submitted. National Taiwan University was awarded a grant for an intra-university integration that included the establishment of four research centres on nanoscience and technology, information and electronics technologies, genomic medicine and East Asian civilisation.

A Taiwan United University System Plan was authorised as a pilot project for the country’s first university system, with four national universities as its members: Tsing Hua University, Chiao Tung University, Yang Ming University and Central University. These four universities agreed to carry out cooperation through activities such as joint research projects and publications, shared access to facilities, an exchange of students and research personnel, and joint supervision of graduate students (Taiwan United University System, 2005). An inter-university integration plan was also approved for the two national universities in southern Taiwan: Cheng Kung University and Sun Yat-Sen University (MOE, 2003; “Review of the RUIP”, 2002).

After the announcement of the project, the motivation for the quick formation of alliances between colleges and universities came under public scrutiny. Owing to insufficient resources for higher education due to the rapid expansion of the sector, it had been the MOE’s policy to promote university mergers and integration for years. Past efforts, however, were futile and the only successful case was the merger of a teachers college and an institute of technology with the National Chiayi University; even this needed a strong push from the MOE.

After the proclamation that successful integrations were being rewarded, however, colleges and universities suddenly became enthusiastic about it, with more than four university alliances formed only three months after the policy announcement and virtually all public universities participating in some kind of alliance (Kao, 2002; Lin, 2002). The public was especially sceptical because most of these applicants failed to provide concrete plans to enhance research excellence. Even members of the Higher Education Macro Planning Committee, who started the idea for the plan, regarded RUIP as off-track because many universities “integrate only for the sake of integration” (Chang, 2002, para. 1). The frantic formation of alliances was also

described as “the rich marrying the rich” where less competitive universities are left behind and there is further stratification of colleges and universities (Hsiao, 2002).

*Project for Developing Top-Notch Universities*

Based on a recommendation from the Higher Education Macro Planning Committee, the Project for Developing Top-Notch Universities (PDTNU) was introduced as part of the Ten New Major Construction Projects plan, Taiwan's largest infrastructure plan in recent decades. The Construction Projects plan was initiated by the Executive Yuan in August 2004 largely to expand public infrastructure investment and enhance Taiwan's overall international competitiveness to accelerate the development of the economy. The Construction Projects plan was allocated a budget of NT\$948 billion (approximately US\$29 billion) over a five-year period, and aimed to improve major infrastructure in higher education, culture, transportation, technology and water resources. Seeing that colleges and universities can serve as agencies to “cultivate first-class talent and strengthen innovative research and development” (Government Information Office, 2003), the government allocated a generous budget of NT\$50 billion (US\$1.5 billion) to the PDTNU on top of its regular allocation to the higher education sector.

Due to the unprecedented large sum of grants it received, the PDTNU became one of the most popular projects available to colleges and universities in Taiwan, and also the most controversial. Often nicknamed the “Five-Years-50-Billion Project,” it aimed to establish first-class universities and top research centres. Specifically, the government hoped to have at least 15 programme areas or cross-university research centres ranking first in Asia within five years and at least one university ranking among the world's top 100 within ten years. With two sub-projects geared toward establishing first-class universities and top-notch research centres, the PDTNU intends to select potential universities and programmes and provide them with abundant resources to improve infrastructure and to recruit outstanding overseas scholars for teaching and research cooperation. Major strategies for developing first-class universities include: fortifying university management, elevating the effectiveness of teaching and research resources, integrating human resources, merging universities to an “appropriate” scale in terms of size, and elevating per-student expenditure to US\$10,000 per year. Strategies to develop top-notch research centres, on the other hand, include the establishment and/or integration of inter-university research institutes, cooperation with international research centres, concentrated investment in high-potential research teams in terms of human and facility resources, significant rewards for excellent teaching, the creation of indicators for teaching efficacy, programme reorganisations, and the introduction and integration of cross-department programmes, among others. Accordingly, the MOE attached a long list of conditions that went with the receipt of the grants. This included plans for improving university governance, institutional infrastructure and accountability in teaching and research activities.

In the end, a total of 12 universities<sup>2</sup> were selected from the 49 applicants to share the largest sum of block grants in the history of Taiwanese higher education.

The review committee, composed of members from the Academia Sinica and three leaders from the business sector, chose two benchmark universities: the National Taiwan University for north Taiwan, and the National Cheng Kung University for central and southern Taiwan. These institutions were selected as candidates for “first-class” university status, which entitled them to almost half of the first year’s total grant. As institutions with top-notch research programmes, the rest of the ten universities received the remaining half of the grants. In light of the MOE’s intention to expand the capacity of “superior universities”, as a repercussion of the country’s recent rapid expansion of higher education, universities receiving the grants were required to increase undergraduate enrolment by at least 5% (“Asia’s First”, 2005).

### **Policy Trends**

The aforementioned initiatives launched by the MOE in recent years in response to globalisation exhibit policy trends that are leading the country’s higher education development and its pursuit of internationalisation and world-class universities.

#### *Strong Emphasis on Research*

Although teaching and research are both commonly perceived as crucial functions of a university, the values depicted in the MOE’s recent projects still attach more importance to research than to teaching. With the exception of the Program for Improving Basic Education in Universities (PIBEU), which was launched to counterbalance the PPAEU’s heavy inclination toward research, all projects related to pursuing academic excellence have narrowly defined the term in the context of research. The programmes’ selection criteria, project content, funding mechanisms and accountability requirements were all about research. It neglected the importance of university teaching and because of this, the MOE were under heavy criticism. With classification of universities still unclear, many academics were also concerned with the prevalent fad of focusing only on university research, given that almost all institutions could proclaim themselves “research-oriented” for the sake of gaining higher prestige and more funding. The recent MOE projects certainly have reinforced this notion, and this is likely to devastate teaching activities at universities. Due to the widespread criticism, the MOE eventually launched a new project, Program for Rewarding Teaching Excellence (PRTE), in 2005 to somehow redirect the development of higher education.

#### **Strong Emphasis on Science and Technology**

As with many other MOE policies and projects, recently launched programmes favoured science and technology programmes over the humanities and social sciences. All three major projects that provided large grants were heavily skewed toward science

and technology disciplines, especially top-of-the-line programmes that could be directly linked to the nation's economic productivity such as nanotechnology, electronic engineering and biotechnology. The projects' selection criteria—such as the number of domestically or internationally published papers by faculty members—clearly placed science and engineering programmes and universities focusing in those areas at an advantage. The PDTNU also required its recipients to demonstrate accountability with results such as the number of papers published by faculty as soon as six months after the grant was rewarded. For faculty from the humanities and social sciences, such requests are not only almost impossible to deliver but also potentially harmful to their disciplines in the long run, as teaching staff would have to resort to less challenging research projects that can produce quick results (Shi, 2006). While the inclination toward “practical arts” programmes (Brint, 2002) is becoming prevalent in many countries, the phenomenon is particularly hazardous for Taiwanese higher education because of the government's long-term suppression of the humanities and social sciences, which has resulted in a frail foundation of humanities education (Hong, 2005).

#### *Further Stratification of the System*

Further stratification of Taiwan's university system is foreseeable. Due to historical reasons and the multiple dimensions of government regulations imposed on private higher education institutions, these colleges and universities have been perceived as inferior to their public counterparts (Song, 2005). In recent years, the MOE has gradually liberalised such restrictions and has started funding private institutions, allowing a few private universities to start breaking through the barriers. However, the recent series of projects will probably throw these private institutions back where they were, without substantial state subsidies. Due to the screening criteria set by these projects—such as the number of full professors in the faculty or the number of Science Citation Index or Social Science Citation Index publications per faculty member—almost all institutions funded by projects such as the PPAEU, RUIP, and PDTNU were public universities. This not only further widens the gap between the public and private sectors, but also strengthens the pull of research talents from private to public institutions (Chiang, 2002; Kao, 2002). No wonder Chen stated that these projects were in fact classifying colleges and universities into two simple categories: “(public) universities with the potential of excellence” and “(private) universities with no potential of excellence” (2005, p. 567).

Sceptics have also questioned the legitimacy and efficiency of ruling out private institutions altogether, which is not necessarily beneficial to the development of higher education. In the case of RUIP, for example, the criteria had precluded private universities from even partially participating in projects funded by this special grant, even though they might be particularly strong in certain fields. Given that private universities have less abundant resources than their public counterparts, private institutions are believed to be in more need of resource-sharing; but are nonetheless excluded from the project. The same scenario also applies to smaller institutions that

warrant resource-sharing with other institutions but might not have passed the threshold of “research universities” set out by the MOE (Chiang, 2002).

### **Attempts to Advance Academic Excellence through Internationalisation**

The intention to promote the internationalisation of colleges and universities is evident even in programmes related to academic excellence. In the PPAEU, RUIP and PDTNU, a university’s level of internationalisation is clearly one of the essential requirements in order to qualify for a grant. Institutions receiving grants are also required to move toward the direction of internationalisation by aggressively recruiting overseas scholars, significantly increasing publications in international journals, and promoting solid international exchange (as opposed to many superficial ones in the past), among other goals. This manifests the country’s eagerness to connect with the international community. Perhaps a higher level of internationalisation is seen as a remedy for the problems of *academic hybrid* that is brought about by Taiwan’s small academic community. For instance, all applications for the PPAEU grant had to be written in English, with the exception of those in humanities and social sciences, so that applications could be reviewed by scholars outside the country.

#### *Multiple Functions of the Government Grants*

The receipt of the grants served more than an economic function; it had financial and prestigious significance to the chosen institutions. Colleges and universities that were awarded grants used such news for propaganda purposes, such as including it in the university website or on student recruitment materials. On the other hand, failure to obtain such grants was commonly perceived as an embarrassment to the institution, and top school leaders often challenged the objectivity and/or the qualifications of the review committee after being rejected. One extreme example was the case of National Chung Cheng University, one of the five universities that was eliminated during the final round of the PDTNU grant. Chung Cheng’s secretary-general went on a 31-hour hunger strike in front of the MOE building to protest the decision, leading legislators to interfere with the MOE’s decision and even freeze project grants until the matter was resolved. Eventually, the MOE agreed to accept the petition from the eliminated universities and awarded them a leftover grant from the project. Nevertheless, the legitimacy of politicians intervening in professional reviews was largely questioned.

### **MOE’s Continuing Endeavour to Direct University Development**

It is clear that significant grant awards are part of the MOE’s attempt to lead the development of universities in Taiwan. Given its policy to shift from regulating to supervising colleges and universities, the MOE has used competitive funds to encourage institutions to move in certain policy directions instead of the former practice of demanding obedience with firm policy requirements and strict

regulations. These programmes are sound examples of this new policy change. There are three major policy goals in university governance that are clearly embedded in many of these projects: merger, integration, and public corporation of universities.

Faithfully believing in the importance of a university's optimal economic scale, the MOE regarded size as an important factor to a university's road toward becoming "world-class". Therefore, the MOE has been eagerly pushing the merger of smaller universities, particularly National Chiao Tung and National Tsing Hua Universities, two of the research universities with neighbouring campuses. The MOE offered financial incentives provided by the RUIP and promised to allot handsome rewards to the merger. When the merger negotiation between the two universities halted, the MOE incorporated the precondition of "scale" into the selection criteria of yet another programme, the PDTNU, trying to motivate the institutions by offering the large sum of grants from this project. When the merger negotiation eventually fell through and neither Chiao Tung nor Tsing Hua was selected as the potential first-class university, critics accused the MOE of playing the carrot-or-stick trick with those universities (Li & Chang, 2005).

#### *Old Habits (to be "Fair") Die Hard*

Ironically, the government still finds it difficult to break its habit of trying to be "fair" to all higher education institutions. In spite of such policy changes, the government continues to adhere to the mentality of giving every institution the same amount of resources regardless of their true needs. Therefore, one of the biggest obstacles in Taiwan's road to academic excellence is resource deficiency brought about by the rapid expansion of higher education and the country's flawed head-counting funding mechanism. Depleted by the large number of students and institutions, the state's educational budget was not ample enough to allow any university to pursue excellence. This is confounded by the fact that the MOE curtails universities' sources of income and caps the cost of tuition for public, as well as private, institutions. That is the reason behind the recent emergence of MOE programmes that aim to provide extra funding for key universities.

The results of such programmes, however, were often distorted. In the case of the PDTNU decision, for example, the original intent was to focus the additional resources on a few potential flagship universities. However, this was not supported by the legislators in control of the state budget, and ultimately the grant was diverted to as many as 12 universities (Heh, 2006).

In essence, these "special" projects are manifestations of the government's excessive and unreasonable regulations on university finances, as well as the "even-headedly" flat (and low) faculty compensation that had greatly impeded Taiwanese universities' ability to recruit outstanding talents from other countries. Although these special programmes try to amend some of these problems, perhaps the MOE ought to contemplate on the problematic design of its overall funding mechanism.



## Conclusion

Through a series of unprecedented large-scale initiatives launched by the Taiwanese government in recent years, it is apparent that the country is eager to catch up with the world in terms of higher education amid the powerful trend of globalisation. These programmes demonstrated strong emphasis in two policy focuses: internationalisation, and the quest for world-class universities. Part of the need to aggressively pursue these policy directions results from Taiwan's ascent to the WTO and neighbouring countries' substantial investment in higher education. The entry to the WTO opens Taiwan's higher education market to other countries, leading the government to fear foreign competition in the future. On the other hand, neighbouring countries' emphasis on higher education investments has alerted policy-makers to the possible deterioration of Taiwan's overall competitiveness as a result of declining university competitiveness, particularly in a new era of knowledge-based economy.

## Notes

1. The number excludes those enrolled in a language programme, as well as overseas students with Chinese ancestry.
2. The 12 universities are Taiwan, Cheng Kung, Tsing Hua, Chiao Tung, Central, Sun Yet-sen, Yang-Ming, Chung Hsing, Chengchi, Chang Gung, and Yuan Ze Universities, and Taiwan University of Science and Technology. Among them, only two are private.

## References

- Asia's first, world's first hundred: Project for developing top-notch universities* [in Chinese] (2005, October 13). Ministry of Education E-paper, 175. Retrieved June 6, 2006, from <http://epaper.edu.tw/175/mainstory.html>.
- Brint, S. (2002). The rise of the 'Practical Arts'. In S. Brint (Ed.), *The future of city of intellect: The changing American universities* (pp. 231–259). Stanford, CA: Stanford University Press.
- Chang, C. -P. (2002, March 27). Most committee members regard university integration off-track [in Chinese]. *United Daily News*. Retrieved August 23, 2006, from [http://www.ncu.edu.tw/~ncu7006/cnormal/ncu\\_report/910327\\_5.html](http://www.ncu.edu.tw/~ncu7006/cnormal/ncu_report/910327_5.html).
- Chen, P. -C. (2005). Reflections on the system of academic evaluation in Taiwan's discipline of education under academic capitalism [in Chinese]. In P. -C. Chen & C. -S. Ke (Eds.), *Higher education policies and administration in the new century* (pp. 559–588). Taipei, Taiwan: Higher Education.
- Chiang, H.-P. (2002, March 26). Forming alliances to share the pie? An analysis of the integration of RUIP [in Chinese]. *Lihpao Daily*. Retrieved July 30, 2006, from <http://iwebs.url.com.tw/main/html/lipo1/137.shtml>.
- Government Information Office, Republic of China. (2003). *Ten new major construction projects* [in Chinese]. Retrieved June 10, 2006, from <http://www.gio.gov.tw/taiwan-website/5-gp/thenew/index.html>.
- Heh, K. -F. (2006). Market mechanism is the only way to create first-class universities [in Chinese]. *Business Weekly*, 971. Retrieved July 20, 2006, from <http://www.businessweekly.com.tw/menu.php?id=951&no=971&mid=000000001>.

- Hong, Y. -H. (2005). Academic capitalism versus academic humanism: Reflection on Taiwan's academic excellence policies [in Chinese]. In Center for Higher Education Research and Evaluation (Ed.), *The challenges and responses to higher education in the 21st century: Trends, curriculum, and governance* (pp. 141–160). Taipei, Taiwan: Tamkang University Press.
- Hsiao, W. -S. (2002). *The status quo of the integration of inter-university resources in Taiwan and its influential factors* [in Chinese]. Report on Educational Research Trends, 1. Retrieved September 14, 2006, from <http://www.exam-point.com.tw/htm/EDU/0001/a/8.pdf>.
- Kao, H. -F. (2002, April 1). National universities allied, private ones protested [in Chinese]. *Wen-Chiao Daily*. Retrieved July 30, 2006, from <http://bbs3.nsysu.edu.tw/txtVersion/treasure/teacher-news/M.1013440168.A/M.1015388564.A/M.1017623288.A.html>.
- Li, M. Y., & Chang, Y. -F. (2005, October 10). Tsing Hua and Chiao Tung ruled out of first-class universities; Is it a punishment? [in Chinese]. *United Daily*. Retrieved September 20, 2006, from <http://www.yzu.edu.tw/?news=051025006>.
- Lin, L.-H. (2002, March 25). Universities allied, three systems established [in Chinese]. *Ming Sheng Daily*. Retrieved August 23, 2006, from [http://www.ncu.edu.tw/~ncu7006/cnormal/ncu\\_report/910325\\_4.html](http://www.ncu.edu.tw/~ncu7006/cnormal/ncu_report/910325_4.html).
- Ministry of Education. (n.d.a), *Introduction to higher education in Taiwan*. Retrieved September 1, 2006, from [http://www.edu.tw/EDU\\_WEB/EDU\\_MGT/KMS/EDU0000002/25.htm?FILEID=143578&UNITID=4&CAPTION=Introduction](http://www.edu.tw/EDU_WEB/EDU_MGT/KMS/EDU0000002/25.htm?FILEID=143578&UNITID=4&CAPTION=Introduction),
- Ministry of Education. (n.d.b), *Program for promoting academic excellence of universities* (in Chinese). Retrieved September 21, 2006, from [http://homepage.ntu.edu.tw/~fss/file\\_01/%a4j%be%c7%be%c7%b3N% b01%a8D%a8%f4%b6V%b5o%aei%adp%b5e.htm](http://homepage.ntu.edu.tw/~fss/file_01/%a4j%be%c7%be%c7%b3N% b01%a8D%a8%f4%b6V%b5o%aei%adp%b5e.htm).
- Ministry of Education. (2002). *Selection criteria for Research University Integration Project* [in Chinese]. Retrieved July 2, 2006, from <http://mx.nthu.edu.tw/~iso/secretary/att1.doc>.
- Ministry of Education. (2003). *Progress report on the RUIP* [in Chinese]. Retrieved August 2, 2006, from <http://140.111.1.192/university/importance/920103-2.htm>.
- Ministry of Education. (2005). *The history of Ministry of Education*. Retrieved October 16, 2006, from <http://history.moe.gov.tw/policy.asp?id=7>.
- Ministry of Education. (2006a). *Educational statistics*. Retrieved September 28, 2006, from [http://www.edu.tw/EDU\\_WEB/EDU\\_MGT/STATISTICS/EDU7220001/ebooks/edusta.htm](http://www.edu.tw/EDU_WEB/EDU_MGT/STATISTICS/EDU7220001/ebooks/edusta.htm).
- Ministry of Education. (2006b). *The number of international students in Taiwan* [in Chinese]. Retrieved September 10, 2006, from [http://www.edu.tw/EDU\\_WEB/EDU\\_MGT/STATISTICS/EDU7220001/data/serial/foreign.htm?open](http://www.edu.tw/EDU_WEB/EDU_MGT/STATISTICS/EDU7220001/data/serial/foreign.htm?open).
- National Science Council. (2003). *Summary of operational procedures for the Extensional Program for Promoting Academic Excellence of Universities* [in Chinese]. Retrieved September 18, 2006, from [http://rdo.ntu.edu.tw/laws/a\\_6.pdf](http://rdo.ntu.edu.tw/laws/a_6.pdf).
- Program for Expanding Overseas Student Recruitment. (2004, November 16). *MOE E-paper*, 82 [in Chinese]. Retrieved October 2, 2006, from <http://epaper.edu.tw/082/important.htm>.
- Program for Promoting Academic Excellence of Universities. (2005, February 15). *Ministry of Education E-paper*, 108 [in Chinese]. Retrieved August 20, 2006, from <http://epaper.edu.tw/108/dic.htm>.
- Review of the RUIP, Taiwan United University System Approved. (2002, July 27). *Central Daily*. Retrieved July 30, 2006, from <http://www.edujournal.com.tw/news/9107/910727-1.shtml>.
- Science and Technology Yearbook, Republic of China. (2005a). *Chapter II academic research* [in Chinese]. Retrieved July 2, 2006, from <http://www.nsc.gov.tw/pub/yearbook/yearbook93/main/frames/part-2.htm>.
- Science and Technology Yearbook, Republic of China. (2005b). *Chapter II academic research, section 1 introduction* [in Chinese]. Retrieved August 6, 2006, from <http://yearbook.stpi.org.tw/chinese/94/yearBook/2-1.htm>.
- Shi, C. -Y. (2006, January 28). The crisis of the \$50-Billion Project [in Chinese]. *China Times*, A15.

Song, M. -M. (2005, April). *Private higher education in Taiwan: Problems and opportunities after the massive expansion*. Paper presented at the annual meeting of Chinese American Educational Research and Development Association, Globalization of Education: Improving Education Quality through Cross-Cultural Dialogue, Montréal, Canada.

Song, M. -M., & Tai, H. -H. (2006). Transnational higher education in Taiwan. *RIHE (Research Institute for Higher Education, Hiroshima University) International Publication, 10*, 151–169.

Taiwan United University System. (2005). *Mid-term report of the Research University Integration Project*. Chunli: Author.