BRILL

INTERNATIONAL JOURNAL OF TAIWAN STUDIES
5 (2022) 19–41

International Journal of Taiwan Studies

brill.com/ijts

Taiwanese Higher Education in Times of Change: The Implications of the New Policy 2018

Tzu-Bin Lin
Professor, Department of Education, National Taiwan Normal University, Taipei, Taiwan
tzubin_lin@ntnu.edu.tw

Chia-Kai Huang
Postdoctoral Research Fellow, Department of Education, National Taiwan Normal University, Taipei, Taiwan
hiki329@gmail.com

Abstract

This paper explores the potential consequences of the Higher Education Sprout Project (HESP) announced by the Ministry of Education (MOE) in March 2018. In the fast-changing global arena of higher education, the Taiwanese government is striving for excellence in the performance of its higher education. Together with other East Asian countries like Japan, Korea, and Singapore, Taiwan officially entered the competition of global university ranking in 2006 when the government initiated the first round of the Aim for Top University Project (ATUP). After two five-year ATUP rounds, MOE reviewed the results and started to revise the policy. Consequently, HESP was proposed and implemented. In this paper, we explicate the context of changing higher education landscape in Taiwan since 1994, the year the most recent education reform started. The discussion then moves to the issues emerging from the nationwide ATUP project. During the ten years of ATUP, most Taiwanese universities were influenced by the directions the project established. However, there has been criticism of ATUP and its outcome was severely in question. After reviewing the ATUP, the HESP came out in 2018. We analyse the policy as well as address its potential influences on universities in Taiwan.

© KONINKLIJKE BRILL NV, LEIDEN, 2022 | DOI:10.1163/24688800-20211141
Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

Keywords

higher education – education policy – university ranking – top universities

1 Introduction: The Changing Context of Taiwanese Higher Education

In 1987 the lifting of martial law triggered the transformation of Taiwanese society. During the ensuing period of democratisation, the call for a more liberal education system was made (Lin, Wang, Li & Chang, 2014). Advocates from various sectors of society, including universities, non-governmental organisations, parents' groups, and formal and informal schools, came together to ask for an improved and updated education system. Since then, education reform has become a recurring theme in and focus of public debates among the Taiwanese public, and it became an important agenda item for both the Kuomintang (KMT, 國民黨) and the Democratic Progressive Party (DPP, 民進黨).

1.1 *The Development of Higher Education During Education Reform*

The 410 Education Reform Protest, which took place on the 10 April 1994, was a milestone in the history of the Taiwanese education system. Thousands of Taiwanese protested for a better education in Taipei, making four major appeals: (1) reducing the number of students in each classroom and the number of classes in each school; (2) expanding the number of senior high schools and universities; (3) modernising the education system; and (4) passing the Education Basic Law (W. Wu, 2005).

This protest has had lasting impact on Taiwanese education for more than two decades. To respond to the protestors' appeals, President Lee Teng-hui and the KMT government set up the Commission on Educational Reform and put forward five propositions in 1996. These propositions were to (Lin et al., 2014: 814):

1. decentralise control over educational processes
2. appropriate educational needs for each individual
3. establish multiple channels to education
4. promote educational quality
5. establish a lifelong learning society.

Most of the four appeals of the protestors and five propositions of the government related to compulsory and post-secondary education. However, they also included two points which would have profound influence on Taiwanese

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

higher education. One was the call to expand the number of universities; the other to establish multiple channels to education which referred to a need to change the entrance examination systems to both senior high schools and universities.

In the pre-1994 era there were two high-stake entrance examinations: the entrance examination to senior high school and the Joint College Entrance Examination. These examinations had been criticised for years because critics believed that they were not able to cater to the needs of students with various talents, and that the pressure of the two annual examinations had become a burden to students. This situation led to the call to increase the number of universities and the proposition to have multiple channels to enter universities as proposed solutions. Although their effectiveness is still debated after more than 20 years (Chou, 2008), a serious negative consequence emerged right after the early 2000s.

In the first decade of the implementation of the expansion policy of the higher education sector, the number of universities and colleges increased three times, with the number of universities increasing nearly six times (see Table 1).

Yet it is crucial to point out that there is an increase in the number of universities but a decrease in the number of colleges. Since 1994 some former colleges have been upgraded to university status and there is still an observable expansion of public and private universities in addition to the upgrading. Moreover, during the expansion, the total number of universities and colleges increased three times, but the budget for higher education only grew nearly

TABLE 1 The number of universities and colleges in Taiwan from 1994 to 2018*

Year	University			College	Total
	Public	Private	Sum		
1994	16	8	24	35	59
2000	25	28	53	74	127
2005	41	48	89	56	145
2010	45	67	112	36	148
2015	48	78	126	18	144
2018	45	82	127	14	141

SOURCE: COMPILED BY THE AUTHORS FROM STATISTICAL DATA PUBLISHED BY MOE.
* TABLE 1 SHOWS ONLY THE NUMBER OF UNIVERSITIES AND COLLEGES AND DOES NOT INCLUDE OTHER TERTIARY INSTITUTIONS SUCH AS THREE-YEAR OR FIVE-YEAR JUNIOR COLLEGES.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

TABLE 2 1994–2018 The educational expenditures (Unit: NT$1,000)

Year	Total educational expenditures	% of GDP	Expenditures of university and college	% of total educational expenditures
1994	449,691,445	6.37	70,081,817	15.58
2000	558,907,664	5.57	167,354,236	29.94
2005	676,137,109	6.07	231,986,045	34.31*
2010	765,283,147	5.42	221,480,012	28.94
2015	857,243,727	5.11	240,052,267	28.00
2018	903,311,198	5.08	—	—

SOURCE: COMPILED BY THE AUTHORS FROM STATISTICAL DATA PUBLISHED BY MOE AT: https://www.edu.tw/News_Content.aspx?n=829446EED325AD02&sms=26FB481681F7B203&s=B19AF3B0B4D7BFAC.

* FROM 2005 ONWARDS, THE TOTAL SPENDING ON HIGHER EDUCATION INCLUDES THE SPECIAL BUDGET FOR VARIOUS PROJECTS.

two times (see Table 2). An obvious consequence is a decline of the funding each university and college receives from the Ministry of Education (MOE). With the expansion of the higher education sector, the entrance rate to universities and colleges has grown significantly. In 2017 the entrance rate was about 97 percent among the age cohort who can enrol in a university (Yao, 2017), and the drop-out rate at university level was about 1 percent. In other words, most students who could enter higher education were also able to graduate. As Ko (2009) indicates, because of the expansion of higher education, more university graduates have entered the job market. It is increasingly difficult for employers to make a distinction between these future employees. Yet, the oversupply of university graduates, to some extent, became an advantage to employers. After the expansion of the higher education sector, employers could offer lower salaries to new graduates. Consequently, the declining starting salary for new university graduates has been a lasting issue in Taiwanese public debate. For example, Rickards (2018) describes:

> The Taiwan media often claims that university graduates get paid a notoriously low monthly starting salary of "NT$22K," and helping young people find better jobs with higher salaries is a stated priority of President Tsai Ing-wen's administration. But Kuo [Grace Kuo, data services leader with Willis Towers Watson] says her company's surveys reveal that new university graduates receive salaries of US$1,200 (almost NT$35,000) on average.

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

It is worth noting that securing higher salaries for young people, especially those with a university degree, is 'a stated priority of President Tsai Ing-wen's administration', while others consider the phenomenon of low starting salaries an issue of national security (see Hugo, 2018). As a result, the Taiwanese public is increasingly concerned about the quality of university education (Jiang, Lin & Huang, 2010).

1.2 *Taiwanese Higher Education in the New Century*

In addition to the public concerns mentioned in previous section, global university rankings, a signal of intensifying competition of higher education globally, further strengthen the public's concerns regarding the quality of education. It has been argued, for example, that the quality of higher education has become an indicator of a nation's competitiveness in the era of knowledge economy (Hazelkorn, 2017). Taking note of this trend, the Taiwanese government has made various moves to improve its plans for the development of higher education in Taiwan. The white paper on university education (大學教育政策白皮書), published in 2001, was the first such attempt made by central government. Shortly after, in 2002, the Macro-Planning Committee of Higher Education (高等教育宏觀規劃委員會) was established to draft a policy recommendation for the future development of higher education in Taiwan (Wang, 2014). Therefore, it could be argued that higher education has been at the core of education policymaking since the beginning of the twenty-first century.

When the first widely acknowledged global university ranking, the Academic Ranking of World Universities (ARWU), was released in 2003, it attracted the attention of some Taiwanese academics and the public (Hou, 2006). The publication of the UK-based Times Higher Education QS rankings in 2004 triggered a larger discussion among the Taiwanese (R. Feng, 2004; Mung, Lee & Lin, 2004). It is unfortunate, then, that Taiwanese universities did not excel in these rankings. To improve the performance of the universities in the global higher education competition, MOE made plans to enhance the research output and global visibility of Taiwanese universities, based on the recommendation of the Macro-Planning Committee of Higher Education. The first attempt towards this goal was the Aim for Top University Project (ATUP), which ran from 2005 to 2017. The second is the Higher Education Sprout Project (HESP), which began in 2018. According to MOE's plans, the HESP is the ATUP's successor (MOE, 2019a).

1.3 *Aims and Methods*

The aim of this paper is to critically review the impact of the two major policies related to higher education, ATUP and HESP, with a focus on developing

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

globally leading universities, in the context of decreasing budgets for universities. We argue that there is a drastic shift of direction between ATUP and the HESP, and that the second policy, HESP, and its funding scheme may have serious unintended consequences and has led to confusion regarding the development of top research universities.

The data presented in this paper is a part of our study on talent cultivation policies in a Taiwanese context. It was collected in 11 interviews with key stakeholders, including former ministers of education, officers in the Department of Education, MOE, and academics involved in the policymaking process. The interviews were conducted in Mandarin and the researchers transcribed responses into English with the help of two peers. Data was also collected from various official documents, mainly those released by MOE. We acquired all interviewees' signed consent, and interviewees are presented in this paper with pseudonyms. All data was collected from July to September of 2019. We applied thematic coding to analyse documents and interview data.

2 A Vision of Having World Class Universities: Concentrating on Key Universities and Areas

A key theme in the 2003 recommendations of the Macro-Planning Committee of Higher Education was to develop top university projects. The strategies were:

1. To assist at least one university with potential to integrate its human resource, to improve its management, to set up sound operational mechanism and to develop it into proper size.
2. That this international top university should fulfil the indicators of the Ministry of Education as well as the referencing indicators adopted from international ranking systems. Within ten years, there should be at least one university in the list of international top universities (for example, in the top 100 in one of the global university rankings). Another key strategy is to fund at least ten research centres to become top ranked in Asia within five years. (The Macro-Planning Committee of Higher Education, 2003)

It is obvious that the measures taken by the Macro-Planning Committee of Higher Education emphasise research output and influence on a global and regional level. In other words, this NT$50 billion initiative aims to build research-intensive universities. Interviewee K, the former director of the Department of Higher Education, MOE, described the birth of this project:

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

> The direction of developing higher education has been guided and led by the [Macro-Planning] Committee of Higher Education. The committee members have their vision and know about the global trend and competition of higher education development. The goal of this project is to develop universities holistically. But, some elite research centres were selected because our funding, frankly speaking, was not sufficient to fund the universities for holistic development. What we can do is to fund some specific areas.

As the above-mentioned strategies seem to focus on research-intensive universities or elite research centres within some universities, their focus is derived from a part of the recommendations from the Macro-Planning Committee of Higher Education. In the recommendations, the committee broadly suggested that universities in Taiwan should be categorised based on their specialties and functions. There are teaching-oriented universities, research-intensive universities, specialised universities, such as medical universities or normal universities, and community colleges (The Macro-Planning Committee of Higher Education, 2003). In our discussion, we only extract the parts relevant to the two topics of this paper. This paper, therefore, does not reflect the complete scope of the report on the macro-planning of higher education.

In this section, we illustrate the development and content of the first ten years of higher education policy in Taiwan. The outcome of this ten-year journey is also discussed.

The report by the Macro-Planning Committee of Higher Education proposed four categories to distinguish higher education institutions in Taiwan. ATUP is for those universities aiming to become top universities in the global arena. There are another two projects managing other categories: the first is Promoting Teaching Excellence in Universities Project (PTEUP); the second is Exemplary University of Science and Technology (EUST). The former is for universities planning to focus on teaching and training, while the latter for technological universities of vocational track. It is fair to argue that the committee and MOE successfully planned for different types of higher education institutions and sought to accommodate the needs.

Regarding funding among the three projects, ATUP is the main recipient with NT$10 billion per year. PTEUP receives between NT$2.2 to 3 billion, while EUST receives NT$1.1 billion. The funding for ATUP is about twice the sum of PTEUP and EUST combined, and this distribution makes it apparent that ATUP is the core strategy for the development of higher education in Taiwan at this

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

stage. In other words, the focus of higher education policy aims at boosting the research capacity and performance among top universities.

However, at this point, we would like to raise an issue that needs attention. From 2006 to 2017 the government spent NT$100 billion (about 3.4 billion US dollars) to pursue its higher education policy, but no official report consolidating the outcome of this policy has been released. There have been some exhibitions presenting the research outcomes of top universities, such as an exhibition of the first phase outcome taking place at National Sun Yat-Sen Memorial Hall between 24 and 25 October 2009. However, a final report of this ten-year project on higher education development remains forthcoming.

2.1 *The Aiming for the Top University and Elite Research Centre Development Plan: 2006–2011*

The Aiming for the Top University and Elite Research Centre Development Plan is the official name for the first phase of ATUP. Several interviewees indicated that there has been a discussion about assigning National Taiwan University as the only institution competing at a global level, with most funding allocated to it. Interviewee H, a former minister of education, stated: 'lots of the members suggested that we [Taiwan] just need one top university and that is National Taiwan University', while Interviewee S, another former minister of education, mentioned that 'there are only a few Taiwanese universities with potential to be top world university and National Taiwan University is the only choice if we can only choose one'. However, there were some stakeholders representing the interests of other universities. Interviewee J, a former president of University X (pseudonym), was one of the decision makers in the selection process. He mentioned that:

> Other members (within the committee), such as Morris Chang from Taiwan Semiconductor Manufacturing Company, strongly suggested that there should be only one top university in Taiwan. However, I could not accept it as the president of University X. . . . We alternatively suggested that there is a need for universities to compete. The resource [capacity] of National Taiwan University is more [i.e. greater] than other universities, but it does not perform that well [in the global competition of higher education]. Therefore, having competing universities might improve this situation.

In the end, 12 universities were selected to be in phase I of ATUP (see Table 3). The first ten universities are public while two are private. It is worth noting

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

TABLE 3 The universities and funds in phase I of ATUP (Unit: NT$100,000,000)

University name	2006–2007	2008–2011
National Taiwan University	30	30
National Cheng Kung University	17	17
National Tsing Hua University	10	12
National Chiao Tung University	8	9
National Central University	6	7
National Sun Yat-Sen University	6	6
National Yang-Ming University	5	5
National Chung Hsing University	4	4.5
National Taiwan University of Science and Technology	3	2
National Chengchi University	3	2
Chang Gung University	3	2
Yuan Ze University	3	Nil

SOURCE: COMPILED BY THE AUTHORS FROM STATISTICAL DATA PUBLISHED BY MOE AT: http://history.moe.gov.tw/important_list.asp.

that Yuan Ze University was moved to the category of elite research centre after 2008 and is no longer in the top university list.

Among the 12 universities, the National Taiwan University received nearly one-third of the total NT$10 billion. The other universities have not yet reached the ideal size, measured in number of students and faculty, to become top global universities.[1] Therefore, the concept of the university system was proposed based on the California system.[2] National Tsing Hua University, National Chiao Tung University, National Central University, and National Yang-Ming University are all located in the northern part of Taiwan and constitute the University System of Taiwan (UST), with one chancellor coordinating the four universities, which also still have their own presidents. With four leading research-intensive universities as members, UST is considered to be a candidate to become a top global university, and this is why these four universities were selected in the top university list.

National Cheng Kung University and National Sun Yat-Sen University are both located in the southern part of Taiwan. National Chung Hsing University

1 The idea of 'top global universities' refers to the lists of QS World University Rankings and THE (Times Higher Education) World University Rankings.

2 In this paper, the California system refers to the 'UC System', i.e. the University of California system. It is one of the three public university systems in California.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

is in the middle part of Taiwan. Some interviewees (for example, Interviewees T and S) mentioned that 'the regional balance' was one of the considerations for selecting these top universities. The National Taiwan University of Science and Technology is the only institution representing the vocational education system on the list, while National Chengchi University is alone in focusing on the humanities and social sciences. Chang Gung University and Yuan Ze University are the only two private universities selected by MOE. However, Yuan Ze was soon removed from this list, as noted above. In addition to the 12 universities, there are seven research centres receiving funding of up to the maximum amount of NT$140 million. The funding periods varied: only one centre secured funding throughout the five-year period, the other funding periods were between two to three years.

In phase I of ATUP the original policy objective of having one or a few universities competing for top universities was modified to 11 universities with various considerations, as described above. As Alexander (2013) indicates, there is a 'politics stream' that represents the balance of power and resource in education policymaking. It could be argued that regions, academic and vocational orientations, the disciplines (the formal and natural sciences, engineering and medical studies, the humanities, and the social sciences), and types (public and private) are selection criteria. Overall, ATUP could be viewed as a balanced attempt to maintain the advantages of Taiwanese higher education.

2.2 *The Development of the ATUP: 2011–2017*

In the second phase of ATUP, Taiwanese universities competed to be listed as a top research-intensive university. In this phase the list of 11 universities from phase I expanded to 12 universities with the addition of National Taiwan Normal University. As Interviewee L stated, normal universities were categorised as specialised universities during the committee meetings. However, as the Taiwanese public was not familiar with the four categories of universities and National Taiwan Normal University had been top ranked for teacher education in Taiwan, there was not much interest in the new list among the public.

Looking at the funding for each university on the list (see Table 4), it is obvious that National Taiwan University was allocated the biggest share. The funding for National Sun Yat-Sen University decreased while National Yang-Ming University increased. The rest of universities may have slight changes regarding their funding, but the list could be considered stable. In this phase, there are six research centres funded by MOE with the maximum fund of NT$100 million.

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

TABLE 4 The universities and funds in phase II of ATUP (Unit: NT$100,000,000)

University name	2011 onwards
National Taiwan University	31
National Cheng Kung University	16
National Tsing Hua University	12
National Chiao Tung University	10
National Central University	7
National Yang-Ming University	5
National Sun Yat-Sen University	4
National Chung Hsing University	3
National Taiwan University of Science and Technology	2
National Chengchi University	2
National Taiwan Normal University	2
Chang Gung University	2

SOURCE: COMPILED BY THE AUTHORS FROM STATISTICAL DATA PUBLISHED BY MOE AT: http://history.moe.gov.tw/important_list.asp.

In 2016 three universities on the phase II list formed a new university system, the National Taiwan University System (NTUS or NTU Triangle).[3] This NTUS consists of National Taiwan University, National Taiwan Normal University, and National Taiwan University of Science and Technology. The main campuses of these three universities are in Da'an District in Taipei City and each is the top in their own area. In other words, towards the end of ATUP, there are two university systems in the top 12 universities—UST and NTUS—within which resources are shared.

2.3 *The Result, Consequences, and Critiques of ATUP*

2.3.1 Result

A ten-year project, ATUP ended in 2017. To what extent did ATUP achieve its aims? In the absence of a final concluding report, we would like to use the performance of these top universities in various rankings to evaluate if the main aim of having at least one university in the top 100 in the global university rankings has been realised. National Taiwan University is chosen to represent the result because the remaining 11 universities did not rise above their initial positions in the major world university rankings. The result for the National Taiwan University is shown in Table 5.

3 For more information about NTUS (國立台灣大學系統), see https://triangle.ntu.edu.tw/index.html.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

TABLE 5 Outcome of ATUP: National Taiwan University in various rankings

	ARWU	QS	Times Higher Education
2003	152–200 /500*		
2004	153–201 /502	102 /200	
2005	153–202 /500	114 /201	
2006	151–200 /500	108 /200	
2007	151–202 /510	102 /201	
2008	152–200 /503	124 /201	
2009	101–151 /501	95 /200	
2010	101–150 /500	94 /500	-
2011	102–150 /500	87 /499	115 /200
2012	101–150 /500	80 /500	154 /402
2013	101–150 /500	82 /500	134 /400
2014	101–150 /500	-	142 /400
2015	151–200 /500	76 /699	155 /401
2016	151–200 /500	70 /701	167 /801
2017	151–200 /800	68 /915	195 /978
2018	151–200 /1000	76 /958	198 /1000
2019	151–200 /1000	72 /1000	170 /1000
2020	-	69 /1001	-

SOURCE: COMPILED BY THE AUTHORS FROM HTTPS://WWW.UNIVERSITYRANKINGS.CH, WHICH AGGREGATES VARIOUS UNIVERSITY RANKINGS, INCLUDING ARWU, QS, AND TIMES.

* RANKINGS RESULTS ARE SHOWN AS RANK/TOTAL NUMBER OF UNIVERSITIES FOR EACH YEAR.

During the ten-year duration of ATUP, MOE and the top universities made efforts to secure a place in the top 100 world universities in the global university rankings. The top university, National Taiwan University, managed to stay on the list of top 100 in the QS ranking, while it is between 100 and 200 in the ARWU and Times Higher Education rankings. Based on its performance on these rankings, we would conclude that one of the major aims of ATUP has been partially achieved.

2.3.2 Consequences and Critiques

After a decade of participating in the global higher education competition, ATUP has not only had an impact on the global ranking of top universities from Taiwan, but it has also impacted Taiwanese society. While doing policy analysis, it is crucial to look at intended consequences as well as unintended

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

consequences (Ball, 2006). Here, we investigate some of the unintended consequences partly deriving from ATUP.

There is no doubt that the ATUP policy initiative has attracted the attention of the Taiwanese public. In Taiwan, education is considered the core issue related to the quality of future generations and the competitiveness of the nation (Chou & Ching, 2012). Furthermore, the size of the budget that ATUP spending on these top universities was prominent, and the media coverage of ATUP regularly rose significantly during the publication of various world university rankings' annual results. Meanwhile, the 12 universities on the ATUP list have become synonymous with tier-one universities in Taiwan. Before ATUP, such a list did not exist. With the ATUP list, there is a concrete and widely accepted understanding of tier-one universities in Taiwan (Lo, 2014). These 12 tier-one universities have been the first choice for senior high school graduates, and they do not need to worry about student enrolment rates, while other public and private universities are struggling to survive with decreasing student numbers. Indeed, in the first phase of ATUP, some national universities appealed for reconsideration when the list was released by MOE. In a well-known incident, Professor Chen, the secretary general of National Chungcheng University, went on hunger strike in front of the MOE office on 19 December 2005 and asked for fair treatment for his university (The National Chung Cheng University, 2005). However, his request to add National Chungcheng University to the ATUP list was not realised.

Another consequence of ATUP is the homogenisation of universities. Since the top-tier universities are research-intensive, other universities that intend to be like these top universities are also shifting their focus to research, irrespective of their existing strengths (C. Wu, 2008), and most universities in Taiwan now claim to be research-intensive universities. The evaluation criteria of research output are also homogenised. While international rankings such as the Science Citation Index (SCI) and Social Science Citation Index (SSCI) draw the most attention, there is also a local ranking of higher education developed by the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT).[4] The Performance Ranking of Scientific Papers for World Universities (PRSPWU) started in 2007 and mainly concentrated on research output. PRSPWU draws on data from SCI and SSCI as the only evaluation criteria (Yonezawa, Chen, Jung & Lo, 2017). This design of the ranking reflects the overwhelming trust in the SCI and SSCI indexes among Taiwanese academics and higher education policymakers. The number of published SCI or SSCI papers has become the most important appraisal criteria for academics in

4 For detail of HEEACT, please refer to https://www.heeact.edu.tw/en/.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

most universities (Lo, 2014), but Chou, Lin, and Chiu (2013) indicate the negative impacts of solely valuing SCI, SSCI, Arts & Humanities Citation Index and Engineering Index papers on Taiwanese academics and this is, especially, not fair play to those in the humanities and the social sciences because it is difficult to produce papers in English in the above-mentioned fields.

It might be fair to argue that ATUP reduced the speed of the decline of Taiwanese higher education in the global competition. The former minister of education Professor Jong-Tsun Huang (2018) summarises ATUP with the following words: 'With the investment of NT$50 billion in five years, it just delayed the speed of widening gap between Taiwanese universities and other international universities'. Although his comment seems pessimistic, it is in fact praise for ATUP. Nevertheless, after two phases of ATUP, the third phase did not come, and MOE instead announced a new policy on higher education in 2018: the Higher Education Sprout Project (HESP).

3 The Shift of Policy Direction in 2018: Everyone Wins?

3.1 *Tougher Conditions for Universities in Taiwan: Declining Student Numbers*

In the 2000s and 2010s, decreasing birth rates predicted declining student numbers in pre-university and higher education. In 2016 the student population experienced a sudden drop by about 50,000 students (Zhu, Lin & Hu, 2013), and this has been a cause for alarm for universities and MOE. Therefore, questions about how to properly close some universities with very low enrolment rates has been an ongoing issue and MOE has not issued a standardised procedure.

Meanwhile, overseas universities, for example in Hong Kong and Singapore, increasingly seek to recruit students from Taiwan. Better positions in world university rankings have been one of the useful marketing strategies for these universities to attract Taiwanese students (Hsu, 2020). According to Pei-Wen Chen (2018), the number of senior high school graduates choosing to study abroad increased by 72 percent between 2012 and 2016. It could be argued, then, that the higher education sector in Taiwan is facing an even tougher situation when compared to the beginning of ATUP. What are the policies proposed by MOE to deal with this situation?

3.2 *Higher Education Policy: HESP in 2018*

HESP is a response to the needs of stakeholders in the field of higher education, who anticipated that an improved policy would be needed to assist

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

universities to survive or excel. Unlike the first decade of the higher education funding system, which was split between three projects (ATUP, PTEUP, and EUST), HESP is an integrated project which covers the whole spectrum of the previous projects (C. Chen, 2018). As MOE indicated, the amount of funding exceeded the sum of the previous three projects, reaching NT$17.37 billion per year (700 million is from the Ministry of Science and Technology). The unprecedented amount of funding promises the government's commitment to invest in higher education.

In this new project, research output or capacity are no longer the key requirements to secure the funding, but universities still need to produce a proposal to bid for the funding. From the released document, HESP is divided into two parts: 'Reinforce Quality of Universities and Encourage Multi-faceted Development' and 'Enhance International Competitiveness' (MOE, 2019a). On the MOE (2019b) website, it is stated that 'the mainstream education in the 21st century is focusing on students' learning. It could be applied to Higher Education, so that the development of Higher Education has to be back to the basic core including curriculum, teachers, and instruction. By doing so, students could be the subject of education.'

This rhetoric is very different from ATUP and marks a paradigm shift in higher education policy from focusing on research to focusing on teaching and training. The drastic shift was caused by an overemphasis on research under ATUP which lead to the uneven development of higher education, as explicated by MOE. Academics devoted themselves to research and ignored the importance of students' learning, curriculum development, and instructional innovation. HESP, in contrast, appears to be an attempt to reverse this trend of emphasising research output, by prioritising teaching and training (MOE, 2019b).

Probing deeper, three significant differences between ATUP and HESP become apparent. In the first part of HESP, there are four categories (MOE, 2018):

1. **Taking teaching as the core**, aims to raise the willingness of self-learning and lifelong education to cultivate students' abilities of critical thinking and cooperation for a) finding issues, b) analysing problems and c) solving problems. For this, we encourage university teachers to innovate teaching methods, establish faculty professional communities, and to conduct practical research on the improvement of instruction and pedagogy.
2. **Making resources more public**, focuses on the productivity and effectiveness of the university development of Institutional Research (IR) through both the establishment to self-monitor school performance and accountability and the publication of the relevant information and data

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

of university performance and management. In addition, to secure the role of universities as an engine for 1/3 social mobility, public universities should ensure a fair recruitment policy to increase the percentage of disadvantaged students.

3. **Developing university features**, encourages universities to identify their own advantageous areas and strengths so that the whole system of higher education in Taiwan will be of multiple characteristics. The flourish of various aspects, i.e. industry-academia collaboration, internationalisation, academic-oriented research capacity, teaching-oriented capacity, or international competitiveness, would make the Taiwanese higher education system more sustainable.
4. **Fulfilling social responsibility**, stresses universities' function as a social innovation facilitator and a nexus of regional industry-academia partnership. Universities are encouraged to take on their social responsibility on the aspects of local caring, and industrial and cultural innovation through teachers and students' communal involvement within the local development.

These categories send a clear message to the higher education sector that teaching is at the core of higher education, as it is described as the first category. Categories two and four, to some extent, are similar, in that they ask universities to take greater social responsibility and increase social mobility. In other words, universities are required to have an impact on society in various aspects. Keywords like 'research' and 'international competitiveness', which were strongly promoted in ATUP for a decade, are part of the third category in part 1 of HESP. Developing research capacity and being able to compete with other international higher education institutions become two out of the five listed features of a university, in the third category. The focus on research is not a part of a stand-alone category but rather a part of category three. The term 'international competitiveness' is also the *second* policy goal of HESP, and there is no explanation why international competitiveness exists in both parts of HESP (for the details of funding allocation for HESP, please refer to Table 6 below).

The second part of HESP, then, aims to enhance international competitiveness, and universities aiming at climbing up the various world university rankings could apply for it. In the description of part 2 of HESP, there are two categories: the Whole-School Program[5] and the Specialised Areas Research

5 The translated title appeared officially on MOE's webpage. Although the authors consider that the Whole-University Program is a better translation, we stick to the one used by MOE to avoid inconsistency of translated terminology.

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

TABLE 6 The allocation of funding in HESP (Unit: NT$100 million)

Part 1	1. Taking teaching as the core	88.0
	2. Making resources more public	
	3. Developing university features	
	4. Fulfilling social responsibility	
	University social responsibility	12.0
	Ensure a fair recruitment policy to increase the percentage of disadvantaged students	13.7
Part 2	The Whole-School Program	40.0
	The Specialised Areas Research Centre Program	20.0

SOURCE: COMPILED BY THE AUTHORS FROM STATISTICAL DATA PUBLISHED BY MOE AT: https://ws.moe.edu.tw/Download.ashx?u=C099358C81D4876CE33C455F1B761E1E9C1B1C9D4C5C3D01ED1F01045F87B75A0C21A1990C0BCA46F73083A0A42FFACAD73BC4EF42D42576E6D5F39B5FE6F9BCB11EAEF937E207AC00525E8BE02873A7&n=3C0C23F9F9B4C9538F9BB24E39E8EF221AF166041B49B293790A31F4A5F4AF626367D98BC677BC05B70C59F0D9FB2ADF&icon=..pdf.

Centre Program. These areas are identical to ATUP, as the whole-school program in HESP is the selected top universities in ATUP and the specialised areas research centre is the selected research centre. 'Global Taiwan' is the name for universities and research institutes chosen for competing globally.[6]

When the plans of HESP were released on 13 February 2018, top universities complained (J. Feng, 2018a, 2018b) and MOE's attitude towards universities with low enrolment rates puzzled the public (Lin, 2017). Although the number of Global Taiwan universities were reduced to four, the funding for each university did not increase. For example, the total funding for National Taiwan University is NT$1.8 billion—the highest share of HESP. However, under ATUP, the average funding received by National Taiwan University was about NT$3 billion, nearly double the amount allocated under HESP. Overall, the total amount of funding was NT$10 billion per year during ATUP, and this declined to NT$4 billion per year under HESP. It could be argued that this is a significant loss of funding for research-intensive universities. The four Global Taiwan universities were not satisfied with their allocated funding and complained

6 The HESP result is available on the MOE website at: https://www.edu.tw/News_Content.aspx?n=9E7AC85F1954DDA8&s=8365C4C9ED53126D [in Chinese].

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

that putting all universities under the same funding scheme would make them suffer funding shortages (C. Chen, 2018).

Meanwhile, several universities with low enrolment rates, which had been warned by MOE of the possibility of closure, unexpectedly received funding from HESP. Consequently, the press questioned MOE about this unreasonable allocation of funding (J. Feng, 2018c). The former deputy minister, Professor Leehter Yao, explained that the funding for these universities, which required special attention, was allocated for improving the teaching facilities and environment to allow the students at these universities to benefit from HESP (C. Chen, 2018). However, we would like to argue that there is no need to improve the environment since MOE plans to close these universities. What is the rationale to fund universities with very low enrolment rates?

4 Concluding Remarks: Implications and Consequence of Shifting Policy Directions to Taiwanese Higher Education

Based on the discussion of two major higher education funding projects in Taiwan, an obvious shift of focus can be identified. From the policy text and the allocation of funding, it is clear that the policy direction changed from emphasising research to teaching as a 'core' responsibility of universities. As we pointed out, top universities were, overall, positive towards ATUP because the funding at least maintained their position in the global competition. The aim of ATUP might not be fully accomplished but the performance of these top Taiwanese universities has been improving or remaining the same on various rankings (see Table 5).

A sudden change of policy direction in HESP implies that the importance of teaching exceeds the importance of research, since the universities are required to demonstrate good teaching performance to secure funding under HESP. The message sent to universities is clear. However, the philosophies of research-intensive universities and teaching-oriented universities is very different. If universities are viewed as the driver of the knowledge economy, research is the key. If the universities are considered as facilities for job training, teaching is the core. Although it could be argued that these two orientations are not mutually exclusive, the weighting might be different according to the focus of a university. In a research-intensive university, the weight of research activity should exceed the weight of teaching or social responsibility.

During the ten years of implementation of research-oriented higher education policy, Taiwanese universities recruited academics with high potential

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

and performance in research rather than in teaching. One of the significant consequences of decreased funding is the greater difficulties in recruiting new faculty. For example, a comparison made by the Macro-Planning Committee of Higher Education (n.d.) between the pay scale of universities in Taiwan and Harvard University indicates that the academic staff in Harvard receive five times more payment than their counterparts in Taiwanese universities. This is a weakness for Taiwanese universities while competing to recruit talents with other international higher education institutions. When a change of policy direction occurred, universities needed to adjust their recruitment policy and the structure of faculty to secure funding from MOE. Since a significant change like this from ATUP to HESP has already occurred, there is no guarantee that such a policy shift may not happen again. How do Taiwanese universities respond to this kind of uncertainty?

Another implication is that the policy shift directs universities from outward- to inward-facing perspectives. Pursuing excellence in teaching has not been a key theme of global competition of top universities, while research output is one of the key indicators of top universities. To some extent, we argue that the shift of policy direction demonstrates a move from searching for excellence through competing with top global universities to an inward focus on training to fulfil the need of human resources domestically.

An immediate consequence of this policy change is that the effort put in to promoting top universities globally under ATUP may have been in vain, because the global ranking of the four Global Taiwan universities is very difficult to maintain with considerably reduced funding. The ten-year investment in higher education might turn out to be wasted. We argue that there has been a considerable gap between ATUP and HESP because of the change of policy direction. Finally, based on our previous discussion, we would also point out that this change could further damage the research capacity and reduce the international visibility and competitiveness of Taiwanese higher education.

Notes on Contributors

Tzu-Bin Lin

is Professor of Education at National Taiwan Normal University. Prior to this position, he worked for Bournemouth University, UK and the National Institute of Education, Singapore. Professor Lin's research interests are in education policy and leadership, media literacy, comparative education, and

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

TESOL (Teaching of English to Speakers of Other Languages). Professor Lin has published more than 50 journal papers and book chapters internationally.

Chia-Kai Huang

recently received his doctoral degree from the Department of Education at National Taiwan Normal University. His research interest is on higher education policy, talent programme in higher education, education equity, and higher education evaluation.

References

Alexander, Nicola A. (2013) *Policy Analysis for Educational Leaders*, Boston, MA: Pearson.

Ball, Stephen J. (2006) *Education Policy and Social Class: The Selected Works of Stephen J. Ball*, London: Routledge.

Chen, Chi-Chung (2018) '高教深耕不公布細項, 教部：避免排名' [The details of HESP is not released to avoid ranking], Central News Agency, 13 February. Retrieved 6 July 2020 from: https://www.cna.com.tw/news/ahel/201802130149.aspx [in Chinese].

Chen,Pei-Wen(2018)'高中生出國念大學,5年成長72%,他們的志願不只台成清交,還有北大港大' [Senior high school students going abroad: They are not targeting National Taiwan University but Beijing University and Hong Kong University], *Parenting Family Lifestyle: Education*, 17 April. Retrieved 6 July 2020 from: https://flipedu.parenting.com.tw/article/4578 [in Chinese].

Chou, Chuing Prudence (2008) 教育該怎麼辦？[How are You Going to Deal with Education in Taiwan?], Taipei: Psychological Publishing [in Chinese].

Chou, Chuing Prudence and Ching, Gregory (2012) *Taiwan Education at Crossroad: When Globalization Meets Localization*, New York: Palgrave Macmillan.

Chou, Chuing Prudence; Lin, Hsiao Fang; and Chiu, Yun-Ju (2013) 'The impact of SSCI and SCI on Taiwan's academy: An outcry for fair play', *Asia Pacific Education Review* 14: 23–31.

Feng, Jing-Hui (2018a) '高教深耕太荒謬, 台大批: 政府亂搞納稅人的錢' [The National Taiwan University criticises the HESP policy], *United Daily News*, 6 March. Retrieved 6 July 2020 from: https://udn.com/news/story/6928/3014691 [in Chinese].

Feng, Jing-Hui (2018b) '教授老化又攬才難, 台大: 台高教恐淪第三世界國家水平' [Warning from the National Taiwan University: Higher education in Taiwan may fall into the third-world level], *United Daily News*, 3 June. Retrieved 6 July 2020 from: https://udn.com/news/story/6928/3177032 [in Chinese].

Downloaded from Brill.com09/09/2022 01:54:39AM
via National Taiwan Normal Univ

Feng, Jing-Hui (2018c) '高教深耕經費分配惹議, 清大: 連搖搖欲墜學校也補助' [The National Tsing Hua University fires at HESP policy], *United Daily News*, 6 March. Retrieved 6 July 2020 from: https://udn.com/news/story/6928/3014850 [in Chinese].

Feng, Ruey-jay (2004) '勿盲目追求世界百大' [Don't blindly focus on having top 100 university], *United Daily News*, 14 November: C8 [in Chinese].

Hazelkorn, Ellen (2017) 'Introduction: The geopolitics of ranking', in Ellen Hazelkorn (ed.), *Global Rankings and the Geopolitics of Higher Education*, London: Routledge, 1–20.

Hou, Angela Yung-chi (2006) '誰是全球第一? 解讀上海交通大學, 世界大學排名' [Who is no. 1 globally? Deciphering ARWU rankings], *Evaluation Bimonthly* 3: 32–36 [in Chinese].

Hsu, Chi-Wei (2020) '港大開放台灣學測指考成績申請, 獎學金最高400萬元' [The University of Hong Kong offers NTD 4 million scholarship to attract top high school graduates in Taiwan], Central News Agency, 7 May. Retrieved 6 July 2020 from: https://www.cna.com.tw/news/ahel/202005070242.aspx [in Chinese].

Huang, Jong-Tsun (2018) '五年五百億的規模，在國際上最多只是讓大學落後少一點' [With the investment of NT$50 billion in five years, it just delayed the speed of widening gap between Taiwanese universities and other international universities], *The News Lens*, 19 July. Retrieved 6 July 2020 from: https://www.thenewslens.com/article/99612 [in Chinese].

Hugo, Justin (2018) 'Analysis: Taiwan is better than selfish bosses and their heartless wage threats', *The News Lens*, 30 July. Retrieved 6 July 2020 from: https://international.thenewslens.com/article/100859.

Jiang, Hsiao-Cai; Lin, Mei-chi; and Huang, Juan-juan (2010) 'Relationship between "Top Universities Project" and "University Teaching Excellence Project" budget subsidies and student university choice', *Journal of Educational Theory and Practice* 21: 67–90.

Ko, Chao-Pin (2009) 'The influence of the Higher Education universalization on the signalling of diplomas: Theoretical analysis by using a game model', *Journal of Research in Education Sciences* 54(2): 107–133.

Lin, Shihching (2017) '教育部五年850億的高教深耕計畫只會造成大家一起死' [Doomed with the Higher Education Sprout Project], *The New Lens*, 17 July. Retrieved 12 July 2020 from: https://www.thenewslens.com/article/73573 [in Chinese].

Lin, Tzu-Bin; Wang, Li-Yi; Li, Jenyi; and Chang, Chiming (2014) 'Pursuing quality education: The lessons from the education reform in Taiwan', *The Asia Pacific Education Researcher* 23(4): 813–822.

Lo, William Yat Wei (2014) *University Rankings: Implications for Higher Education in Taiwan*, Singapore: Springer.

Ministry of Education (2018) 'Higher Education Sprout Project: Sustained progress and rise of universities in Taiwan'. Retrieved 6 July 2020 from: https://english.moe.gov.tw/cp-48-17299-E6CF9-1.html.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

Ministry of Education (2019a) '高等教育深耕計畫' [Higher Education SPROUT Project], 19 November. Retrieved 6 July 2020 from: https://sprout.moe.edu.tw/SproutWeb/Project/Origin [in Chinese].

Ministry of Education (2019b) 'Higher Education Sprout Project: Sustained progress and rise of universities in Taiwan'. Retrieved 6 July 2020 from: https://english.moe.gov.tw/cp-48-17299-E6CF9-1.html.

Mung, Sianjay; Lee, Mingyang; and Lin, Yiting (2004) '國際化比重, 我們的弱點' [The weakness of Taiwanese higher education ranking is internationalisation], *United Daily News*, 9 November: C7 [in Chinese].

Rickards, Jane (2018) 'What gives with Taiwan's low wages?', *The News Lens*, 19 March. Retrieved 6 July 2020 from: https://international.thenewslens.com/article/91779.

The Macro-Planning Committee of Higher Education (2003) 高等教育宏觀規劃報告書 [The Report on the Macro-Planning of Higher Education], Taipei: The Macro-Planning Committee of Higher Education [in Chinese].

The Macro-Planning Committee of Higher Education (n.d.) '發展國際一流大學及頂尖研究中心計畫' [The Aiming for the Top University and Elite Research Centre Development Plan]. Retrieved 6 July 2020 from: http://english.moe.gov.tw/dl-4905-ACA80C49-5257-47E0-BD71-9C1CCBB78D3D.html [in Chinese].

The National Chung Cheng University (2005) '頂尖大學, 該有中正' [The National Chung Cheng University should be in the top university list], National Chung Cheng University, 14 October. Retrieved 6 July 2020 from: https://www005006.ccu.edu.tw/new_content_demo.php?type=news&id=24 [in Chinese].

Wang, Shun-ping (2014) 'Policy analysis of establishing the world-class university in Taiwan from international perspectives', *Educational Resources and Research* 112: 151–175.

Wu, Ching-Shan (2008) 解讀台灣教育改革 [Understanding Taiwanese Education Reform], Taipei: Psychological Publishing [in Chinese].

Wu, Wu-Tien (2005) 'Experience and analysis of educational reform in Taiwan: The multiple school entrance system and "Grade 1–9 integrative curriculum" as examples', *Contemporary Education Research Quarterly* 13(1): 38–68.

Yao, Cha-Wen (2017) '"7分能入讀, 躺著能畢業", 台灣大學過多後遺症' [The consequence of too many universities in Taiwan], ETNet, 15 August. Retrieved 6 July 2020 from: http://www.etnet.com.hk/www/tc/lifestyle/internationalaffairs/taiwan/48483 [in Chinese].

Yonezawa, Akiyoshi; Chen, Shuanhye; Jung, Jisun; and Lo, William Yat Wei (2017) 'East Asia: Catch-up and identity-developments in and impact of university rankings', in Ellen Hazelkorn (ed.), *Global Rankings and the Geopolitics of Higher Education*, London: Routledge, 116–127.

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ

Zhu, Fang-Yao; Lin, Chih-Chen; and Hu, Chi-hui (2013) '大學死亡交叉, 105年少5萬生源' [The death cross for universities: Student number dropped by 50,000 in 2016], *China Times*, 4 September. Retrieved 6 July 2020 from: https://www.chinatimes.com/newspapers/20130904000430-260106?chdtv [in Chinese].

Downloaded from Brill.com08/09/2022 01:54:39AM
via National Taiwan Normal Univ