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The Push and Pull of International Students in Taiwan

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Abstract

This article details a mixed methods study conducted during the 2009 – 2010 academic year in Taiwan. It contributes to discourse examining the opportunities and challenges of international student enrollments in institutions of higher learning around the globe. In scope it details an empirical study exploring the dispositions of international students in terms of their academic and social spheres. Trends in Taiwan reflect traditional East Asian patterns; substantial numbers of university students from Taiwan studied in the United States and Britain while very few incoming international students chose the island nation as a host destination. In recent years the influx of international students to Taiwan has increased significantly, rising from 6,380 in 2001 to 21,005 in 2007. The use of quantitative qualitative method provided clarity and extended critical interpretations of the issues and dilemmas surrounding the international student experience in Taiwan. Implications suggest that universities committed to internationalization are called to address the realities – both positive and negative – of operating as globally competitive institutions.

Keywords: international student, internationalization, globalization, Taiwan, mixed-method study

The Push and Pull of International Students in Taiwan

The cross-border mobility of international students constitutes a critical element of the internationalization of higher education. Heightened interest in recent decades has shifted traditional mobility patterns from an elitist experience characterized by scholarship or fellowship recipients to the mass movement of individuals and groups (Teichler & Jahr, 2001). In the 21st century a select number of students define themselves as members of elite groups enrolled in high-quality degree programs in popular host destinations; the majority, however, leave home nations to obtain degrees at any personal financial expense. Others are motivated to acquire international experiences that complement concurrent academic programs in home nations. Traditionally international students migrated for association with world renowned scholars or to further a disciplinary knowledge base in nations such as the United States or Britain; in the contemporary era university students are more likely to study in the global arena in newly established host destinations for advancement of degrees, diplomas, or professional certification (Williams, 1981).

The Institute of International Education (IIE) definition of an international student is, one who undertakes all or part of his/her higher education experience in a country other than the home country (Project Atlas, 2004). More broadly, cross-border education is classified as a borderless asset of the global education industry that redefines traditional patterns and trends of international student mobility (Kwiek, 2005). Since 1995 the total number of international students has all but doubled, reaching nearly 2.7 million (OECD, 2006). Correspondingly the demand for global cross-border education is forecasted to increase from 1.8 million international students in 2000 to 7.2 million in 2025 (Bohm, Meares, & Pearce, 2002). Analysts predict that 70 percent of the global demand will be generated within the Asia Pacific region (Olsen, 2003).

In the contemporary era many nations have shifted foreign student policies from an aid approach to a trade rationale (Smart & Ang, 1993). Thus, signaling that cross-border education is a commodity of free trade rather than a public responsibility (Kirp, 2003). Given this the market for international students has become a dynamic growth industry sustained by universities, government agencies, private corporations, and entrepreneurs motivated by financial profit (Altbach, 2003). National governments are keen to sustain active involvement through their Ministries of Education or dedicated promotional agencies (Kemp, 1995), that capitalize on the benefits of international student populations as linked to skill migration, economic growth, public diplomacy, and research associated with a knowledge society (Kishun, 2007).

Contemporary patterns of cross-border mobility encompass a complex, contradictory, and expansive discourse shaped by the discussions, policy issues, and mission statements of individual universities as well as the themes of education policy and global trade within the

General Agreement on Trade in Services (GATS) and the World Trade Organization (WTO) (van der Wende, 2001). This discourse impacts newly established competitor nations that are expanding incoming international student enrollments, as well as the United States and Western Europe as leading yet declining host nation destinations (Zachrisson, 2001). The case of China exemplifies this position. In 2004, China was a leading sending country as defined by the nation's 343,126 university degree seeking students who studied abroad annually (UNESCO, 2006). In recent years China has also emerged as a popular host nation, as noted by expanding incoming international student enrollments from less than 45,000 in 1999 to more than 141,000 in 2005 (McCormack, 2007). Similar trends are occurring in Japan, South Korea, India, Malaysia, Thailand, and Taiwan.

Trends in Taiwan reflect traditional East Asian patterns; substantial numbers of university students from Taiwan studied in the United States and Britain while very few incoming international students chose the island nation as a host destination. Foreign students are the bridges of a nation to the international society. The number of students studying in Taiwan indicates the level of internationalization and international competitiveness of the nation's education, as well as representing the nation's power and ability to attract foreigners. In 2007, the total number of students (including degree-level, exchange, and language study students) reached 17,742, which registers an increase of 3,263, compared to the 14,479 count in 2006 (Ko, 2008). Between 2001 and 2005 incoming international student enrollments from Central and South America increased 208 percent and 95 percent from European nations. Incoming students from Vietnam comprise the largest group, followed by Malaysia, Indonesia, Japan and the United States. Scholars attribute the rising population of incoming international students to the global popularity of Mandarin studies, the growing reputation of Taiwan universities as world class institutions, and availability of scholarships administered by the Taiwan Ministry of Education (MOE) (Ko, 2008).

Review of Literature

The examination of globalization and internationalization as distinct processes is essential for serious scholarship addressing contemporary trends in higher education. Globalization is a multifaceted phenomenon enveloped by economic, social, political and cultural dimensions that meld 21st century higher education to international endeavors. The impact of globalization poses challenges to the role of nations as the sole providers of higher education and to academic communities as the primary voice for education decision-making. Processes of globalization within university settings transcend the integration of research, the use of English as the language of academia, the expanding international market for scholars, the growth of multinational publishing, and reliance on information technology (Altbach, 2003).

Scholars agree that processes of globalization are unalterable while those representing

internationalization remain fluid and changeable (Mok, 2007). Internationalism, says, Elkin, Devjee and Farnsworth (2008, p. 326) "is not something that is either achieved or not achieved: rather it is an engagement with a range of dimensions." Processes of internationalism are intertwined with a multiplicity of university administration policy, initiatives, and practices adopted in response to the affects of globalization (Scott, 1998) as noted by association with terminology such as: transnational, global, world, international, and cross-border education (Knight, 2002).

The examination of international student mobility trends and patterns is well established by a body of research identified with the push-pull framework (Agarwal & Winkler, 1985; Altbach, 1997; Cummings, 1993; Fry, 1984; Sirowy & Inkeles, 1985). This research suggests that international student's progress through developmental stages of decision making beginning with commitments to study internationally and ending with the selection of host institutions. Researchers defined research push factors as conditions in home nations that engender interest in university education beyond national borders. Pull factors are attributes of a host nation that attract international students and affect the decision-making process for study at particular institutions (Mazzarol, 1998).

Agarwal and Winkler (1985) quantified pull factors for the United States as a host destination among students from 15 developing nations. They noted that the percentage of international students enrolling in United States universities has declined in recent years. This shift was attributed to the rising cost of United States tertiary education and the multitude of university program options in students' home nations. As such a contemporary trend is involves nations that traditionally sent large numbers of students abroad; in recent years these nations have also become successful international centers via the offering of degree programs in English at a low expense (Chan & Ng, 2008).

In a related study McMahon (1992) used a push-pull model to statistically examine the mobility patterns of international students from 18 developing countries. Findings suggested that student flow was dependent on the level of economic wealth, the degree of involvement of the destination country in the world economy, and the priority placed on education by the home nation government. McMahon noted a negative correlation between economic prosperity in home countries and the volume of international student flow. Significant pull factors included the size of host nation economies and their political interests as evidenced by foreign assistance, transnational cultural links, and availability of international student scholarships.

In a summative study Massarol (1998) surmised that six pull factors consistently influence students' selection of host nations and institutions. The overall level of knowledge, access to information, and awareness of the destination nation within students' home country represented a critical pull factor. The reputation of host institutions for quality and the

recognition of their degrees in students' home nations were significant attributes of this factor. A second pull factor was the number of personal recommendations students received from parents, relatives, friends and gatekeepers. The third factor related to financial issues, including the expense of fees, living, and travel along with social costs, such as crime, safety and racial discrimination. The presence of other students from home nations and the option for part-time work were important attributes of this factor. Additional factors included: the environment, as related to perceptions about the climate in the host country; the geographic and time proximity between home and host nations; and social links defined as family or friends residing in the destination country.

The utility of the push-pull framework is apparent given the identification of factors affecting mobility patterns and trends of university international students from developing nations. Yet in some respects this framework compromises attention to the complexities associated with the international student experience. Limitations are noted in terms of the exclusion of international students from developed countries who pursue tertiary level education in either developing or other developed nations. The design of the push-pull framework, moreover, locates the national identity of international students as a reference for commonality; thus international students are defined as a homogenized group rather than as clusters of individuals who have significant differences between and within their nationalities.

Critics argue that scholarship addressing the complexities of the international student experience remains on the fringe of cross-border education literature due in part to a deficit of concepts to articulate the multidimensional complexities of international students' experiences. In response, a transnational lens is offered to illuminate theoretical and critical interpretations intended to examine the "persistent pull of 'locality' as a social space of identity formation" (Smith & Guarnizo, 1998, p. 22)

Research Design

Data collection and Analysis

The research was designed as a quantitative research method study. Beginning research questions included:

- 1. What are the benefits and dilemmas associated with the international student population in terms of institutional commitments for the expansion of internationalization for Taiwan's higher education institutions?
- 2. What are the interpretations of participants in regard to the issues and dilemmas surrounding the international student experience?

Scholars, who conduct research involving international dimensions, note the importance of primary sources as a viable option for data collection (Pinar, Reynolds, Slattery, &

Taubman, 1996). In response the investigation was initiated with a review of sources to develop a contemporary reference for the dilemmas and issues of globalization in Taiwan. The inspection of written documents such as books, periodicals, newspapers, and legal documents to gain a foundation for the history, geography, ecological needs, and community efforts at work in Taiwan were ongoing during all stages of investigation.

The survey respondents included 648 degree seeking international students from 23 countries. The survey was used to gather information at a particular point in time with the intention of describing the nature of existing conditions of international student in Taiwan universities (Cohen, Manion, & Morrison, 2007). Given this focus the survey was organized by section: Section One: *Experiences before and after coming to Taiwan* dealt with the logistical and emotional aspects of student mobility, Section Two: *Educational experiences in Taiwan*, addressed reasons for choosing Taiwan and particular universities, Section Three: *Social norms*, examined international students' circle of friends, social interaction norms, and classroom norms, Section Four: *Cultural norms*, focused on the cultural aspect of the international students' experiences in Taiwan, and Section Five *International Students' Demography*, detailed background information including international students' social status and scholarship information.

The study utilizes an online survey to gather the information regarding the international students all over Taiwan. The design of the online surveys were kept to a minimum and layout is user friendly, instructions are clear and simple, thus helped in increasing the completion rate of the survey (Dillman, 1999; Dillman, Tortora, & Bowker, 1998; Dillman, Tortora, Conradt, & Bowker, 1998). The survey data was statistically analyzed using the mean, standard deviation, frequency and percentage, correlations, and other cross-tabulations to determine the various descriptive summaries of the survey. A revised survey questionnaire was used based on Roberts, Chou, and Ching's (2010) international student survey. The survey questionnaire was administered on a voluntary basis in October 2008. An email was sent to all the international student offices all throughout Taiwan. The questionnaire was written in two versions: English and Chinese which required approximately 10-20 minutes for completion. A total of 648 participants' representative of 23 countries completed the questionnaire. Table 1; show that Mandarin Chinese was the predominant first language of participants (39%), which would indicate that most of the international students are from countries such as Mainland China, Macau, and Hong Kong. This is then followed by Vietnam (10%), and Indonesian (9%). Participants' second languages included English (53%), Mandarin Chinese (20%), and Malaysian (7%). Around 76% of the sample consisted of international students studying abroad for the first time. In addition, around 80% of the respondents are degree seeking students, with the remaining participants as exchange program students (7%) and Mandarin Chinese Language students (2%). Data gathered from the survey questionnaire were encoded and analyzed using the Statistics Package for Social Science

(SPSS) version 15. Internal consistency using Lee Cronbach's (1951) coefficient alpha (Cronbach's alpha) was computed at 0.89, suggesting a high level (Nunnally & Bemstein, 1994). Descriptive analysis included the mean, standard deviation (SD) and cross-tabulation of participants' multiple responses for identified questions.

Table 1

Participant demographics (N=648)

Items	n	%	M	SD
Age	648		24.63	6.39
Gender				
Male	297	46	23.87	5.16
Female	346	54	25.28	7.23
First language				
Mandarin Chinese	251	39		
Vietnamese	67	10		
Indonesian (Bahasa)	61	9		
Spanish	47	7		
English	37	6		
Japanese	27	4		
Malaysian (Malay)	21	3		
Cantonese	19	3		
Thailand (Thai)	15	2		
Korean	13	2		
Second language				
English	345	53		
Mandarin	131	20		
Malaysian (Malay)	44	7		
Enrolled program type				
Degree Seeking	526	81		
Exchange Program Student	43	7		
Chinese Mandarin Language Center	12	2		
Study abroad experience				
Yes	112	17		
None	493	76		
Work experience in Taiwan				
Yes	179	28		
None	424	66		

Results and Discussions

Experiences before and after coming to Taiwan

Section one depicts the *experiences before and after coming to Taiwan*, which dealt with the logistical and emotional aspects of student mobility. Choosing a host nation involves decisions made with high involvement and commitment, due in part to the expanding options for study abroad destinations around the globe (Cubillo, Sanchez, & Cervino, 2006). One of the most promising factors in Taiwan's higher education is the presence of scholarship opportunities for international students.

Table 2 Scholarship type and expenditures (N=432)

Items	n	%	
Scholarship type			
Ministry of Foreign Affairs (MOFA)	61	14	
Ministry of Education (MOE) – Taiwan Scholarship	104	24	
Huayu Enrichment Scholarship	2	0	
National Science Council	9	2	
Ministry of Economic Affairs	111	26	
Others	118	27	
Information regarding the scholarship			
Taipei Economic and Trade Office (TECO)	61	14	
School	274	63	
Friends	136	31	
Relatives	49	11	
Newspaper	13	3	
Self-research	69	16	
Others	28	6	
Average monthly expenditures			
Below 10,000	299	46	
10,001 to 15,000	165	26	
15,001 to 20,000	64	10	
20,001 to 25,000	25	4	
25,001 to 30,000	28	4	
Above 30,000	23	4	

Table 2 shows that of the 432 of the 648 respondents (67%) received scholarships offered by either the Taiwan Scholarship Program (jointly funded by the MOE, the Ministry of Foreign Affairs, the Nation Science Council, and the Ministry of Economic Affairs) or the MOE Mandarin Enrichment Scholarship Program (funded by the MOE). Applications for both scholarships are submitted to Taiwan overseas missions located in students' home nations. Majority are in scholarships given through their universities here in Taiwan, with a value of 118 or 27%. This is then followed by the Ministry of Foreign Affairs scholarship, which is given to countries that have diplomatic ties with Taiwan, with a value of 111 or 26%. The third largest is the scholarship given by the Ministry of Education (more commonly called the Taiwan Scholarship), with a value of 104 or 24%. When asked regarding how the international students gathered the information regarding the scholarship offers. Respondents responded that majority of them learnt about the scholarship in their school back in their country, with a value of 274 or 64%. This is followed by word of mouth transfers from their peers and friends back home, with a value of 136 or 31%. The third is self-research with a value of 69 or 16%.

The availability of host nation government scholarships is well established as a significant pull factor (Agarwal & Winkler, 1985; Cummings, 1993). Given this, the popularity of Taiwan government scholarships could be viewed as a contributing factor for the expanding international student enrollments. That said participants' rationale for receiving Taiwan scholarships was not typically linked to financial hardship. Table 2 also summarizes the average monthly expenditures in Taiwan Dollars of the international student in Taiwan. Majority of the students mentioned that they spend below 10,000 NT a month with a value of 299 or 46%. While 165 or 26% of the respondents claimed that they spent around 10,001 to 15,000 per month in Taiwan. In reality, scholarships in Taiwan provide financial support from one to four years of study and range from NT 25,000 monthly for undergraduate students to NT 30,000 monthly for graduate students. These findings suggest some discrepancy in living standards given that newly graduated college students in Taiwan earn from NT 26, 000 to 28, 000 monthly (CENS, 2008).

In many nations incoming international students represent the premier source for university internationalization. As a newly emerging competitor host nation, Taiwan envisions its national system of higher education as an international center, where people from around the world come to learn from each other. As such the MOE government scholarships enhance the cultural composition of Taiwan universities' student bodies and contribute to institutional prestige (Lo & Weng, 2005; Mok & Tan, 2004). The immersion of international students among the NCCU local students represents, therefore, a pivotal objective of the university efforts for internationalization.

Educational experiences in Taiwan

With regards to the educational experiences in Taiwan, students are ask questions regarding the difficulties before coming to Taiwan, challenging aspects in Taiwan, difficulties with regards to educational aspects, and reasons in choosing a place of study in Taiwan. As a reminder, the items are analyzed initially by their weighted scores, items ranked number 1 is given a weight of 3, ranked 2 is given a weight of 2, while the ranked 3 is given a weight of 1. Table 3 shows the result for the difficulties encountered before coming to Taiwan. The highest difficulty item is the *application of the Taiwan Visa* with 309 or 48%, while the second difficulty item is the actual *Scholarship applications* with 190 or 29%. The third most difficulty item is the *Lack of sufficient information regarding course programs* with 176 or 27%. These results suggest that Taiwan should invest more efforts in enhancing its visa processing procedures for the international students coming to Taiwan. However, such enhancement might be limited to the political issues surrounding the country, which is beyond the discussion of the current study.

Table 3 Difficulties encountered before coming to Taiwan (N=648)

Items	n	Weighted scores ^a
Taiwan visa application	309	708
Scholarship applications	190	389
Lack of sufficient information regarding course programs	176	324
Selecting which school to apply	150	301
Emotional preparation	137	237
Communicating with Taiwan's university	92	169

Note. a The respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

With regards to the challenges encounter in Taiwan, international students mentioned that the most challenging aspect is the *Memorizing Chinese character* with 170 or 26%. The second most challenging aspect is regarding the international students' *social relationships* in Taiwan with 172 or 27%. The third most challenging aspect in Taiwan is the *Adjusting to the weather* with 166 or 26%. Such results describe the difficulties of international student during their first few months in Taiwan, while some even suggest that they (international students) should be given enough orientation regarding the cultural and contextual issues regarding Taiwan, before even they travel to Taiwan.

Table 4

Challenging aspects in Taiwan (N=648)

Items	n	Weighted scores ^a
Memorizing Chinese character	170	402
Social relationship	172	334
Adjusting to weather	166	316
Cultural gap	136	255
Adjusting to food	124	252
Homesickness	112	214
Transportation	97	184
Being a non-English speaker	70	155

Note. a The respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

With regards to the international students difficulties with regards to their study here in Taiwan, most students mentioned that there seem to exist a problem with the *Understanding teachers' lessons/lectures* with 216 or 33%. Table 5 also shows that the item *expressing or giving your opinion to your teacher* with 190 or 29% and the item *expressing or communicating in Chinese* with 177 or 27%. These results suggest that international students are not properly oriented in the educational system of Taiwan. Local faculty and staff should be brief with regards to the study habit of the international students as well.

Table 5 Difficulties with regards to educational aspects (N=648)

Items	n	Weighted scores ^a
Understanding teachers' lessons/lectures	216	451
Expressing or giving your opinion to your teacher	190	441
Expressing or communicating in Chinese	177	417
Making oral presentation	199	370
Working on group project	150	336
Studying in a different educational system	150	288
Completing assignment on time	63	131
Managing your study load	45	88

Note. a The respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Table 6 shows the reasons why the international students select their current school in Taiwan. The main reason is the item *recommended by friends/classmates* with 240 or 37%. The second reason is the *surrounding suitable for learning* with 232 or 36%. And lastly, the third reason is the *direct contact form an institution in Taiwan* with 127 or 20%. Such results indicate that the power of the word of mouth exhibits the greatest influence in the international students' choice of schools. Hence, institutions should give outgoing international students a sort of orientation or a somewhat good impression, so as to aid in the recruitment of new international students.

Table 6 Reasons for choosing your current institution (N=648)

Items	n	Weighted scores ^a
Recommended by friends/classmates	240	568
Surrounding suitable for learning	232	485
Direct contact form an institution in Taiwan	127	266
Degree program availability in English	118	264
Random chance	110	223
Informative website	101	201
Mandarin Chinese language program	74	148
Recommended by embassy	59	125
Existing student exchange program	44	102

Note. a The respondents rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Social norms

In recent years, the concept of social capital has captured the imagination and attention of an extensive range of scholars and professionals in various disciplines and practical arenas (Lin, 2008). Similarly, social capital has been used to shed light on the relationship between the micro-level of educational experience and the macro-level of social forces and structures (Burnheim, 2003). Scholars noted that the concept of social capital has expanded from an individual asset to a feature of communities and even nations (Portes, 1998). As such, multiple definitions, conceptualizations, and empirical measurements are generated (Dika & Singh, 2002). However, the popularity of the concept of social capital has been accompanied by increasing controversy about its actual meaning and effects (Mouw, 2006; Portes, 2000).

Simply, social capital can be defined as "the investment in social relations with expected returns in the marketplace" (Lin, 2002). This general definition is consistent with the works of noted scholars such as Bourdieu (1986), Burt (1992), Coleman (1988, 1990), Flap (1991, 1994), Lin (1982), Portes (1998), and Putnam (1993, 1995, 2000). During the late 1980s, education sociologists Bourdieu (1986) and Coleman (1988) both emphasized the functional value of social networks and group membership as resources which can be leveraged by individuals to obtain access to other resources. In addition, both authors placed much emphasis on the role of education and in particular the role of the social environment in determining educational outcomes.

In an educational setting social capital is defined "as the networks, together with norms, values, and understandings that facilitate cooperation with or among groups." (Healy, Cote, Helliwell, & Field, 2001) In a study of Australian universities, Burnheim (2003) noted that it is important to understand (1) the particular role of social capital in the networks and networking within the universities, which themselves constitute capital, and (2) the universities' roles in the creation of the norms, values, and understandings which enable networks to operate. Similarly, in a mixed method study regarding international students in Australia, Neri and Ville (2006) noted that poor social networks in unfamiliar cultural and educational institutions have an adverse impact on the wellbeing and academic performance of the students.

Table 7 Social interaction norms (N=648)

Items	n	Weighted scores ^a
I want more Taiwanese friends	259	623
Taiwanese students have positive feelings towards me	205	423
I try my best to make friends	181	358
Taiwanese would like to know international students	175	331
Taiwanese students should take first step	96	213
It is difficult to make friends with Taiwanese students	67	156
My Chinese ability hinders me from making friends	71	145
I experience discrimination in Taiwan	54	110
Taiwanese students prefer fewer international students	35	69

Note. ^aThe respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

To further clarify the issues in the network and norms of international students in Taiwan,

the following two sections shall focus on these parts, namely: the social norms and the cultural norms experienced in Taiwan. Table 7 shows the result when the international students were asked regarding their social interaction norms in Taiwan. Most students replied that they wanted to have more Taiwanese friends with total respondents of 259 or 40%. This is followed by the item Taiwanese students have positive feelings towards me with total respondents of 205 or 32%. The third item is I try my best to make friends with total respondents of 181 or 28%. These three top results depict that international students are indeed accepting of Taiwanese students as not only their peers or classmates, but their friends as well.

Table 8 shows the international students aspects regarding their campus and classroom norms. The highest ranked is the item *teachers encourage interaction* with 144 or 22%. While the second is the item *teachers make special effort to help international student* with 162 or 25%. And the third is the item *cultural differences are respected inside the school* with 92 or 14%. Note that although the percentage of the international students selecting the item is not high, however, by looking at their weighted scores, the international students selected this three items as the major norms in the campus and classroom category.

Table 8

Campus and classroom norms (N=648)

Items	n	Weighted scores ^a
Teachers encourage interaction	144	568
Teachers make special effort to help international student	162	485
Cultural difference is respected in school	92	266
Teachers understand problems of international student	143	264
Opportunity to learn from other culture	110	223
Feel included in class	130	201
Teachers understand cultural differences in learning	81	158
Classmates are accepting of cultural differences	136	148
Student of different groups work well	136	125

Note. ^aThe respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Table 9 depicts the international students' circle of friends in different situations, such as: social and educational. Results indicate that the international students' educational and social time is mostly done with Taiwanese students, while their closest friends are still their friends from their own home country.

Table 9
International students' circle of friends (N=648)

Items	n	Weighted scores ^a
Studying and reviewing lessons		
Taiwanese students	334	909
Students from other countries	236	592
Students from their own country	211	411
During social activities		
Taiwanese students	345	903
Students from other countries	303	745
Students from their own country	244	458
Closest friends		
Taiwanese students	289	716
Students from other countries	293	791
Students from their own country	197	391

Note. ^aThe respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Cultural norms,

The students are also asked regarding their perception of what is the accepted fact in the world today. Majority of the international students agrees that *advancement in technology* is the most prominent discovery of our generation, next to the *learning of Mandarin Chinese language*. Such results indicate that the changes in language needs are both ways, to the East the Mandarin Chinese and to the West the English language.

Table 10
Accepted fact in today's society (N=648)

Items	n	Weighted scores ^a
Technology connects people	180	393
Technology makes the world smaller	175	384
Learning Mandarin Chinese is the current trend	184	364
Local traditional customs should be maintain	166	347
People should leave together in harmony	124	275
English is most widely spoken language	86	196

Note. a The respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Table 11 and table 12 shows the discouraging and distinct Taiwanese cultures which the international students felt unique and different, while some of items selected are considered norm to the Eastern or Asian culture. Much to the surprise of the selection of activities regarding night market as one of the major Taiwanese cultures the international students felt worth recalling.

Table 11

Discouraging Taiwanese cultural norms (N=648)

Items	n	Weighted scores ^a
Chopsticks	139	366
Fortune telling	127	260
Poultry slaughtering in market	83	181
Eating hotpot	60	111
Eating bethel nut	55	102
Incense burning	53	95
Going KTV	47	93
Shopping at night market	23	36

Note. a The respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Table 12

Distinct Taiwanese cultures (N=648)

Items	n	Weighted scores ^a
Shopping at night market	289	662
Eating at night market	220	493
Garbage segregation (sorting of garbage)	269	484
Poultry slaughtering in market	134	299
Eating hotpot	148	279
Going KTV	82	172
Eating bethel nut	71	157
Environmentally conscious	66	134
Chopsticks	12	32
Incense burning	12	26
Fortune telling	15	25

Note. ^aThe respondents' rankings were given corresponding weights (e.g. 1^{st} priority – 3, 2^{nd} priority – 2, and third priority – 1) before computing for the individual scores of each item.

Implications and Conclusion

This article contributes to discourse examining the opportunities and challenges of international student enrollments in institutions of higher learning around the globe. In scope it details an empirical study exploring the dispositions of international students in terms of their academic and social spheres. The use of quantitative methods provided clarity and extended critical interpretations of the issues and dilemmas surrounding the international student experience. Universities committed to internationalization are called to address the realities – both positive and negative – of operating as globally competitive institutions. This implies that attracting the right kind of international students and determining standards for their contribution to campus life are more important goals than the total number of international students. The term diploma disease, coined by Dore (1976) signifies this phenomenon. Dore argues that the sheer magnitude of students traveling internationally in the pursuit of advanced degrees, diplomas, or certifications has shifted the purpose and direction of tertiary education. Education, says Dore, is not a commercial endeavor defined by time or space but rather the harmonious development of the physical, mental, moral, and social dimensions of life necessary for engagement with opportunities to gain both knowledge and wisdom. This stance suggests that determining the form of higher education best suited for the academic community should remain a pressing issue side by side engagement with contemporary processes of internationalization.

The Taiwan government efforts to develop national policies and set targets to attract substantial numbers of international students are impressive. Yet ingoing international students to Taiwan universities experience unhappiness and disorientation on arrival from their home nations. Most are successful in terms of building a circle of friends and booming happier over time. However, the friendships are typically with international student peers from the same nation, which provides fellowship and empathy but limited opportunities for connections with Taiwan students and to learn about local culture and institutions. With regards to the benefits and dilemmas associated with the international student population in terms of institutional commitments for the expansion of internationalization for Taiwan's higher education institutions. Taiwan's higher education institutions are heavily committed to increase the numbers of international students. However, some issues are needed to be taken into account such as the proper orientation of incoming and outgoing international students. In addition, faculty and staff should also undergone proper training or orientation regarding on how to handle issues with the international students. The majority of international students make little or no use of formal university sanctioned organizations widely associated with the benefits of social capital as noted in the literature. Many international students accept paid employment, often for long hours and with limited social capital benefits besides language

improvements. These international students could derive the benefits of social capital by committing a greater amount of time to university organizations and fewer hours to paid employment. As well many international students report a high degree of residential instability, which disrupts both their social connections and academic study.

In sum, the growth in number of international students and their share of total enrollments is a contributing factor to the higher education landscape in Taiwan. It has provided an enriched and more diverse cultural experience on Taiwanese campuses, and a range of economic and social benefits for local communities. Hence, social interaction and activities should be encouraged in order to effectively enhance the social capital of all students on university campuses. The ability of international students to form social networks with local Taiwanese moreover is viewed as an important factor in the further enhancement of Taiwan's higher education international dimension.

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無研發成果推廣資料

國科會補助專題研究計畫成果報告自評表

請就研究內容與原計畫相符程度、達成預期目標情況、研究成果之學術或應用價值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)、是否適合在學術期刊發表或申請專利、主要發現或其他有關價值等,作一綜合評估。

1.	請就研究內容與原計畫相符程度、達成預期目標情況作一綜合評估
	■達成目標
	□未達成目標(請說明,以100字為限)
	□實驗失敗
	□因故實驗中斷
	□其他原因
	說明:
2.	研究成果在學術期刊發表或申請專利等情形:
	論文:□已發表 ■未發表之文稿 □撰寫中 □無
	專利:□已獲得 □申請中 ■無
	技轉:□已技轉 □洽談中 ■無
	其他:(以100字為限)
3.	請依學術成就、技術創新、社會影響等方面,評估研究成果之學術或應用價
	值(簡要敘述成果所代表之意義、價值、影響或進一步發展之可能性)(以
	500 字為限)
	本研究一共獲得全國 648 份有效問卷,再根據上述兩種理論分析國際學生何以來台就讀、
	所學科系、以及來台後之生活適應,包括是否領取台灣獎學金、每月生活花費、上課中的
	師生互動與台灣學生的同儕關係等面向。從研究中了解大多來自歐美國家之學生都領有台
	灣的獎學金,相對之下,亞洲學生則以自費為主。其中,多數國際學生來自於中上階層,
	來台主要係因獎學金的吸引及學習華語的誘因,且大多國際學生是透過口耳相傳及我國駐
	外單位獲得來台留學之訊息。其中以華文學習人數居多,而且背漢字是學習中最困難的地
	方,緊接著是如何與當地發展社會關係、天氣的適應、文化代溝,以及來自非英語系的國
	家等都屬學習上的困難。最後,多數學生對來台學生持正面態度,肯定來台學習可擴展學
	習視野、結識更多國際與台灣當地的學生,進而累積個人之社會資本。