



# Futures studies in Asia Pacific: the case of Taiwan

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Until date, studying the future has been linked mainly with economic development and the creation of wealth, but settings of the world economy and education are changing in a drastic way. Asia is emerging as an, or better said, the world centre. Taiwan is entering the critical stage of generating for the future alternatives on an environmental and cultural-spiritual level. The future studies department at the University of Tamkang in Taiwan is on a different level to the rest of the world, as it's the only university on the planet that has "to futurize" as a mission statement. This work analyses how the fact that being a university orientated towards the future has meant being orientated towards change, and, having a clear, defined vision and strategic direction. Through a social learning process, a forward looking culture and by visioning, change and development has had a bearing in practically all strategic Taiwanese spheres. The broader context continues not just to be the teaching of future studies but also to completely "futurize" the university, Taiwan and even mankind.

*Orain arte, etorkizunei buruzko azterlanak garapen ekonomikoari eta aberastasuna sortzeari lotuta egon izan dira batez ere, baina mundu-mailako ekonomia- eta hezkuntza-ingurunea gogor dabil aldatzen. Asia munduaren erdiguneetako bat izateko bidean dago, munduaren erdigune bakarra ez esatearren. Taiwan etapa erabakigarrian sartzen dago, eta etorkizuna modu alternatiboan, ingurumenarekin edo kultura eta espirituarekin lotuta sortuko duen erabaki behar du. Tamkangeko Unibertsitateak (Taiwan) etorkizunei buruz egindako azterlanek ez dute parerik munduan, "etorkizuneratzeko" helburua duen unibertsitate bakarra baita. Lan honetan azertu da etorkizunera begira dagoen unibertsitatea izateak aldaketara begira egotea ekarri duela, eta ikuspegi eta bide estrategikoa argi eta definituta izatea. Ikasketa sozialeko prozesuaren bitartez, aurrera begiratzean eta "ikuskatzean" (edo irudikatzean) oinarritutako kulturak aldaketa eta garapenerako Taiwango estrategien ia maila guztietan izan ditu eraginak. Testuingururik zabalena, oraindik ere, etorkizuneko azterlanak irakasteaz gain, unibertsitate osoa etorkizuneratzea da, Taiwan eta gizateria ere etorkizuneratzeko itxaropenaz.*

Hasta la fecha, los Estudios de futuros han estado ligados mayoritariamente al desarrollo económico y a la creación de riqueza, pero el entorno económico y educativo mundial está cambiando de manera drástica. Asia está emergiendo como "un" –por no decir "el"– centro del mundo. Taiwán está entrando en la etapa crítica de generar el futuro más alternativa, medioambiental o cultural-espiritual. Los Estudios de futuros de la Universidad de Tamkang en Taiwán no tienen parangón mundial, al ser la única universidad en todo el planeta que tiene como misión "futurizar". Este trabajo analiza cómo el hecho de ser una universidad orientada hacia el futuro ha significado estar orientada hacia el cambio y tener clara y definida la visión y la dirección estratégica. A través de un proceso de aprendizaje social, una cultura basada en mirar hacia adelante y "visionar" (o imaginar) ha incidido en prácticamente todas las esferas de las estrategias taiwanesas de cambio y desarrollo. El contexto más amplio sigue siendo no sólo enseñar Estudios de futuros sino también futurizar la Universidad entera, con la esperanza de futurizar Taiwán e incluso la humanidad.



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## **1. ECONOMIC MIRACLES AND FUTURES STUDIES**

Economic success and futures studies are twin miracles in Taiwan's recent history of development. In other words, the introduction of futures studies to Taiwan was heavily influenced by Taiwan's changing role in the world economy. Having gone from poverty to riches, many Futures Studies values were in conflict with the values of modern Taiwanese, who were more concerned with: 1) short-term strategic issues; 2) economic growth; 3) one specific future and not many futures for Taiwan; 4) dangers from China; and 5) by and large, a practical approaches to the world. Simply put, Taiwanese have lived with deep uncertainty ever since the nationalist KMT government fled there from the mainland in 1949.

Consequently, the idealism of futures, with its concern for social and technological innovation, and its overriding quest for a better world did not appear to have any immediate value to these practical modern Taiwanese. They worry about getting good jobs in Taiwan's growing economy, not wondering about the next century. Likewise, Taiwan's corporations have not engaged in long-range planning; they prefer to wait for new technologies to be created and produced by others so they can buy them. Once purchased, they find immediate applications for these technologies. They were content with their secondary role in the world economy.

Like any other competing economies, if Taiwan desires to seize a crucial as well as sustainable role in the world economy and increase its per capita income from 16,000 to 26,000 US dollars, it will have to become a stronger player in the world information economy. Doing so means innovating; forecasting emerging technologies; escaping from the confines of economistic strategic thinking, and making serious use of the tools Futures Studies has to offer.

Shaw once described Taiwan as "...a democracy more informed by classical Greek philosophers than by Chinese... And everybody loves an Ivy League degree." [1] Nevertheless, he envisioned that Taiwan, amongst Asian societies, is best placed to nurture and keep at home a future generation and noted that Taiwan possesses the right combination of institutions that will allow talent to blossom. The desire and excitement of exploring intellectual capital could influence the cultivation of a solid Taiwanese knowledge economy.

It would only become inexcusable if we accept or duplicate ways of thinking from the West, without questioning. We need to aim not to just catch up with the quantity and uses of research methodology, but to encourage creative thinking and respect diverse viewpoints. The field of Futures Studies, among many others, provides an opportunity to fulfill the enthusiasm of any non-Western thinker. For example, many Taiwanese find it fascinating to experience "thinking out of the box" in the processes of scenario building or foresight analyses. And it only takes a few powerful ideas to change the society and the world.

As mentioned above, Futures Studies has largely been linked to economic development and wealth creation in most developing countries. Taiwan has begun to enter the critical stage of a more alternative, environmental or cultural-spiritual, future generation form. While the regional and global economy is transforming to face the rapid rise and challenge of China and India (Chindia), it will force the world, especially neighboring countries to become more foresight-oriented. Changes in the age-cohort will also take the field of Futures Studies in greater Chinese societies into different directions. Taiwan and other emerging economic tigers in Asia have all been experiencing the awkward phase of Cultural Lag. The situation could become even more complex if we have to go through a chaotic progression of Future Lag as well. [2] What takes place in the future depends on how the instruments developed today are used and the results of the planning being done for the years ahead.

## 2. BRINGING FUTURES TO TAIWAN

Tamkang University's Futures Studies in Taiwan holds a unique place in the world since it is the only university whose mission is to futurize. Futures-oriented education is one of the university's innovative major objectives, along with

Internationalization and Information-oriented education. Other universities have Futures Studies Centers or maintain professors engaged in Futures Studies research, but the entire focus of Tamkang University is oriented towards the future. This is largely due to its founder, Clement C.P. Chang. A responsible Chinese scholar and a futurist, Chang's ambitious vision is "not only to project future changes but to create future changes...especially the intelligence and courage to make things happen for the tomorrow that we expect to have." [3]

While we are proud that futures studies is a required undergraduate course, futures is more than a course. It is a way of thinking. For Tamkang, this means a number of things. 1. Learning how to learn. 2. Anticipating new technologies and using those most appropriate for education. 3. Understanding the changing nature of demands on our university. 4. Understanding the deeper patterns of change and 5. Using the future to create a better university. Thus, the real issue is futurization, not just teaching futures studies, although that is certainly a first and crucial step. As Chang explains, in the Oriental culture "we set goals but have no regard for the process." [4] Futures thinking needs to go through appropriate futures-oriented process in order to live differently.

At Tamkang University, this meant establishing a consensus of pedagogical approaches since the futures course contains around ninety classes per academic year, taught by twenty-six faculties. The plan was to conduct a three-round Delphi survey of these faculties to obtain diversified pedagogical perspectives. Prior to the survey, Wendell's Foundations of Futures Studies was designated as a required reading. [5] As a result, a consensus was reached that the task specified above has to be realized by emphasizing the following "statements of futures teaching philosophy." [6]

- Recognizing, adjusting, and creating the future
- Cultivating visions and senses of the future
- Establishing a world view with an attitude of caring and participating
- Developing an acute sense of observation
- Questioning authority and being a critical thinker questioning known facts
- Giving insight into long-term trends
- Adapting to team-based and interdependent working relations
- Becoming familiar with knowledge of advanced technological products
- Being concerned with the potentials and impacts of future technologies
- Caring for the future welfare of minority groups
- Respecting diverse viewpoints on alternative futures
- Advocating the essentiality of interdisciplinary and multicultural approaches

Following these statements of teaching philosophy, an integrative and interdisciplinary approach lays out the foundation of futures course design. The longitudinal dimension of learning futures starts with one of the following core courses:

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### Undergraduate Core Courses

- Social Futures
- Technological Futures
- Economic Futures
- Environmental Futures
- Political Futures
- Educational Futures
- Global Futures
- Multicultural and Global Societies
- Climate change and Sustainable Futures
- Research Seminar in Futures Studies

Trends and foresights of five major courses of change in Society, Technology, Economy, Environment and Politics are the basic electives. Educational futures and research seminar in futures studies are advanced electives for senior and graduate students from non-futures MA programs. The rationale is to inspire diversified voices and gain insights from the “outsiders” since nearly every department has overemphasized its specialized knowledge.

The Graduate Institute of Futures Studies began in Fall/Autumn 2002. The Futures MA program is distinctive in that the entire pedagogical focus is on a transforming, globalized, future-oriented, information society. We promise to make the program an ideal place for students to develop and enhance comprehensive knowledge and skills and for faculty to convene to impart their deep wisdom on various issues and topics. Students as possible future leaders need multidisciplinary interests; the willingness to adopt different ways of knowing; a global orientation; a tolerance for complexity and ambiguity; a long-term perspective; a view of the future as plural and alternative, rather than as singular and predictive; and the ability to imagine a diversity of alternative futures, in addition to just preferred futures. Envisioning the future means not only forecasting but also creating confidence in the ability to creatively adapt to new global challenges. By questioning the given problem-solving solutions, alternative futures can be explored and a preferred future has a greater probability of being realized.

The courses have been developed into three major modules as listed below. This structure of course design attempts to offer students the following goals of learning

- Understanding of theories, methods and issues in Futures Studies
- Detailed understanding of one thematic area in Futures Studies (for example, the futures of ageing societies, the futures of genetics, or the futures of health)
- Detailed understanding of one's own preferred professional future and the futures of professions generally.

Areas that the courses will cover include:

- Epistemology of Futures Studies (how is the future studied)
- Theories of Social Change (why and how do civilizations and organizations change)
- Organizations engaged in Futures Studies (Futures Studies around the world)
- Specific theme areas, including, the futures of: the nation-state, the world system, work, organizations, health, the self, gender, and new technologies such as genomics.
- How to become a professional futurist – some necessary skills

### ***Ways of Teaching***

Although pedagogical styles vary with each professor, we have agreed on the general teaching guidelines:

1. Lectures on major areas of the knowledge base of Futures Studies
2. General discussions on thematic areas
3. Small group discussions or workshops focused on developing detailed design features of the future
4. Videos, CD-ROMs and alternative forms of multimedia.

What is most worth mentioning during this long process of building up a Futures learning community is that we have received relatively positive feedback. According to results from a recent survey sent out to 120 universities in Taiwan, one undergraduate Futures program, two Futures MA programs and over 30 Futures courses have already been offered and others are interested in offering Futures courses or a certificate program within five academic years. The influence of Futures Studies has also been extended to universities in China. Peking University, Nanjing University, Southwestern University of Finance and Economics and the Chinese University of Hong Kong are attempting to join the Futures network.

### **3. VISIONING THE FUTURE OF TAMKANG UNIVERSITY**

Tamkang University has been through three waves of structural changes with significant success in terms of its research capacity, student enrolment and societal prestige. Most importantly, Tamkang University leads the private sector in a national assessment of the nation's 156 universities. The core structural change of Tamkang's foresight plan has been to develop three campuses, linked by new technologies (in effect a fourth campus, the cyber campus). The main campus, Tamsui, will be research focused. Taipei campus will be lifelong learning and applied focused, especially in relation to Taiwan's aging population. Lastly, the new Lanyang campus, will be a residential campus, with a teacher- student ratio

hopefully of 1-20. We are certain, that even while technology transforms the world, there is a place for face to face, slow reflective learning.

From an analytical perspective, the future of Tamkang University looks relatively optimistic. The conclusion of our earlier completed document, “Strategic Directions for the Futures of Tamkang University,” [7] quoted a member of the staff, who said: “ I am optimistic because of the quality of the people here. They are the real resources.” This report is crucial because while current enrolments are increasing, the trend is likely to change by 2015 and especially by 2025, when the nature of the university is likely to change (because of globalization, virtualization, aging, and the genetics revolution). Thus, given the demographic transition Taiwan will be shortly experiencing, it is forecast that by 2015, enrollments will drop significantly. The total fertility rate has drastically dropped to 0.94 for Taiwan, the lowest in the world. With fertility dropping, universities will find themselves competing for scarce domestic students. They will need to find new sources of revenue (beyond students); find new students outside Taiwan (China, Southeast Asia and Pacific Islands) or develop niches of excellence as part of a sustainable society.

As one Dean said, “*The question is why do students come here? Tamkang has to give them a more rewarding experience*”. As the environment becomes more nationally and globally competitive, clarity on core missions and core strategy will become even more important. The secret to success is a happy customer, even in an educational setting where critical knowledge is paramount. As another Dean put it, the facts are:

- Enrollment is likely to decrease given the aging of society (drop in birthrates).
- Education remains a priority for Taiwanese parents.
- While earlier a BA was considered a must, most likely with the global skills revolution, an MA or Phd will be a necessity. Or will we need more people with exemplary vocational skills?

What should Tamkang do? What is its vision? Strategic Priorities? The above-mentioned report is based on one hour interviews with three groups: a. administrative leaders – deans of the colleges, the Vice-president and the President; b. selected staff and c. selected students at Tamsui campus. It is divided into 1. Visions. 2. Strategic priorities. 3. University culture 4. Structure of the University and the academy. 5. the Role of Technology, and 6. Issues. I summarize these below.

### **Vision**

There was general agreement that Tamkang University should continue its long term process of excellence, moving up the rank of private universities, being at the top by 2010 and by 2020 a world class university.

### Strategic Priorities

As might be expected, there was no consensus on the strategic priorities. We present the main priorities with supporting statements. Divisions emerged between a focus on teaching or a focus on research, and as developed further below in the section on technology, on the appropriate role of virtualization.

Students recommend the following:

1. Enhance professor/student ratio. *However, students believed that this is best done not through increasing the number of professors – who are considered relatively good – but by reducing or capping the number of students. So reduced numbers would be good!*  
Said another: *I am optimistic because Tamkang has lots of excellent professors. We should seriously cut student size to an adequate amount.*
2. Recruit professors have are experienced professionals. Essentially this means applied knowledge, not just the classics. As students said: *the qualifications of professor should be flexible. The university should allow certain experienced professionals, such as corporate CEO and artist, to teach courses emphasizing practical applications. This approach is emerging and will be more popular when we have more part-time students who are looking for practical knowledge in the job market. As I noted above*
3. Face to face is crucial. Our students have grown up in the Net world, and interestingly, it is face to face time that they value the most. As students commented: *I found the effect is rather unreal and reduce the learning atmosphere. Distance education is a good design but only for students with deep and clear interest on the subject.* Another says: *It is A waste of time and energy. Face to face interaction is the most important thing.*
4. Have flexibility of courses, including globalization of courses. Students want the university to facilitate their choices, that is, not be a structure that constrains them. They thus wanted to increase elective courses *through flexibly taking courses at other campuses, or even other universities.* As well: *all campus should loosen their “definition” of majors. Students should have more time and opportunities to choose.*
5. Enhance Career Futures. Students write: *Academic certification should be more flexible too. Instead of diploma, certain value-added certification on popular jobs will be more useful and attractive for potential students. Internships should be emphasized too. They help build a network relationship with alumni and finding potential job market.*

While some of these are a natural part of growing pains, the main point remains that the students are seen as serious stakeholders and should be consulted in the process of creating desired futures.



When staff were asked about their vision of the future, this is what they said:

1. Develop a learning organization. As staff commented: Staff should not be treated as civil servants. Rather, Tamkang should cultivate abilities, which the staff doesn't already have. The purpose of work is not just for yearly promotion on salary and position but to have various opportunities of learning. In a nutshell, Tamkang should be more like a learning organization.
2. Develop immediate networking among locations and campuses so that virtual education can develop. As staff commented: Tamsui campus should establish grand labs such as information processing center and biotech research center. Safe encryption system should create paperless campuses, hence create efficient administration and save budgets on hiring and making changes. To integrate all campuses, we need to develop an interconnected system of community, broadband and stable electricity. Of course, people are still at the center of service. But with adequate technology and efficient system of services, Tamkang will establish its status of prestige in the future.
3. Attract students from the Mainland China. Staff wrote: To compete globally, we should start from attracting students from Mainland China. Quemoy should be a good place to put this project into experiment.

Senior administrators and professors are more focused on the organization as a whole, hoping to ensure that Tamkang is the top private university in Taiwan by 2010 and a world class university by 2020. The issue is how to get there. I summarize their suggestions below.

1. Create a multi-door learning environment. This would consist of face-to-face tutorials, web-based learning and large classroom learning. Such a multi-door approach would also facilitate transformations in the content of learning.
2. Focus on research. One group of Deans asserted that the way to become a top private university by 2010 was to focus on research.
3. Interdisciplinary teaching. In terms of the curriculum, there appeared to be widespread agreement that it should be:
  - Interdisciplinary Teaching and Research Institutes
  - Integrated and Global
  - More team teaching and flexible delivery
  - Face to face and not face to blur
  - TQE or Total quality education focused on process based education, group learning and shared experiences, that is, excellence through creating community and learning how to learn
4. Attract young professors. Since students currently prefer public cheaper universities, there had to be ways to attract students. Getting younger excellent teachers was one of them. As one Dean said: this will 1. make

- students happy. 2. They will tell other students. 3. Alumni will recommend Tamkang. The best advertising is through graduates.
5. Reduce teaching loads. A group of professors, however, said that to realize the vision of a top private university (and eventually a world class university), it is most important to *reduce teaching loads*. This would lead to more time for research, reflection and for student needs.

## Organizational Culture

In terms of the most appropriate culture of the organization, there was clear movement from the traditional hierarchical organization to one more focused on the needs of the knowledge economy. This was generally framed in terms of the attributes of a learning or network organization. As one leader stated “our goal at Tamkang should be a place where *everyone is a leader*.”

In terms of evaluation, this means: *a shift from control based faculty evaluation to performance and availability based evaluation*. Another said, breaking away from the industrial 9-5 model: *The College doors should always be open*. Finally, one dean commented as to the values of the future: *perseverance, creativity and imagination are what is most important*.

Indeed, one Dean argued that Tamkang’s cultural history could provide that niche. As he said: *Given that the history of the university is from simple to complex, the key issue is finding one’s niche. The niche for Tamkang should be: New Neo-Confucianism. This should be the ethical framework and overarching paradigm in which to conduct research. The framework would be inter-disciplinary and lead to a renaissance*. Others agreed, with technology and globalization unstoppable, the niche as about neo-confucianism humanism. Said one leader: *One key for Tamkang will be: a focus on the humanities, asking what is human, what is not*.

## Structure of the University and the Academy

Academics should focus their time as follows:

- one third teaching
- one third research
- one third community engagement or consulting.

Of course, this is college dependent. One Dean argued that social work may be more community oriented, business more teaching with research focused on applied case studies, while science would be more applied science based. Colleges that have graduate programs need certainly to have a stronger research focus. This situational context can help to solve the tension between research, teaching and community engagement/consulting.

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Some argued that research was crucial to creating a top level university or teaching was, but most believed finding a balance was crucial. One Dean even suggested that *Tamkang needed to decentralize with colleges far more autonomous, having their own campus even.*

## Technology

Perhaps most surprising was the blasé view toward broadband and other technologies. This is especially surprising as one of Tamkang's current priorities is Technologization. Deans were near universal in not placing broadband as a strategic priority. *They said: Broadband is not so important.* Another did see it as important but said, referring to flexible delivery, not *essential*. A third argued that it was not the media per se but the ability and capacity to communicate in the new media that was central. Dissenting voices came from senior faculty. Some of them saw broadband (and now wi-fi) as essential to the future of the university, seeing it as a necessary tool in creating a multi-door learning environment.

This, as mentioned above in the strategic priorities, would consist of: *small face to face tutorials, web-based learning, web based video conferencing and large classroom learning.* Generally, they believed that it would play a more important role in the longer term future. However, the challenge is not just in the technology (costs, implementation sigues) but in the industrial paradigm which insists on standardized learning and the earlier Confucian paradigm, which is focused on master-student, ignoring the peer-to-peer learning revolution which the new digital technologies can create.

While there were differing views with respect to technology and pedagogy, with the respect to the administration of the university, technology was seen to be crucial. One forecast was that: *The administrative system will become fully automated. Far less secretarial labor will be needed.*

## Issues

Perhaps the most important issue was the role of Lanyang campus. Without a doubt, Tamkang University is taking a great leap forward with the initial realization of Lanyang Campus. While many universities are uncertain of the future, Tamkang University is charting out its alternatives and step by step creating them. Lanyang is envisioned as a campus based on the Oxbridge model. This can be characterized by a: (1) low teacher and student ratio, (2) strong collegiality between professors, (3) multiple ways of learning, including, group, individual, action learning, (4) residential learning. A broad liberal college education is envisioned.

While the initial costs are high, it is hoped that in a decade plus the campus will be self-sustaining. In the meantime, Tamsui and Taipei - the older campuses - will subsidize Lanyang. The success of Lanyang is dependent on a variety of factors:

1. The changing world economy, with Asia moving from mass production to more high value production. It is likely that Asians will focus more and more on high value products, both in the production and consumption aspects.
2. A globalizing world with a greater movement of students and
3. A decreased regulatory role of the Ministry of Education – particularly with respect to tuition. This could be the wildcard, as education becomes deregulated, it will give more space for Lanyang to grow, to leverage its excellence.
4. The culture of Lanyang. This is the point of agency. But what is this culture? First, it is intended to be a culture that is far more innovative, creative, part of the emerging knowledge economy. Students need to take the usual subjects but it is the capacity to think, to learn about learning that is paramount. Second, this culture is far more sensitive to the way the world is changing than the way the world was. It is future-orientation.

#### 4. BRIDGING TAIWANESE FUTURES AND GLOBAL DEVELOPMENT

During the past several decades, many young elites in Taiwan have accepted international funds and aid from Western countries and International Non-Governmental Organizations (INGOs). Through these cooperative programs, Taiwanese elites not only acquired knowledge, science and technology in the academia, but also deeply influenced by the democratic and freedom values through Western societies. When they had the opportunities to devote themselves to Taiwanese society, they boldly transformed these new ideas and values to envisioning the probable, possible and preferred futures of Taiwan in a coming Global era. Those foresights and visions consequently touched nearly every sphere of Taiwan's current strategies of change and development.

While Taiwan is on a competitive path toward a much more developed society in terms of economic, societal and cultural progress, we do feel obligations to join the global feedback loop by providing similar opportunities to assist elites of other developing countries in the region. One of the greatest efforts was to establish a futures office under the Vice President's office of Taiwan. While the effort could not be realized in the near future, Futures thinking has started to plant roots within the public sector. The former Vice President of Taiwan, Arnett Lu, has invited postgraduate students as young elites from our partnership societies and offers them scholarships and international educational opportunities. [8] The funding agency, assembly of the Democratic Pacific Union (DPU) has been characterized by the metaphors of ocean, humanism, vision, foresight and global development. The spirit which embedded in their international educational plan of Taiwan is coincided with that of Futures Studies. Furthermore, the international futures education plan has become a joint effort with the National Youth Commission, Executive Yuan.

The National Security Bureau and Ministry of Defense are also seeking foresight strategies and consultations through Futures workshops and seminars. It is a great achievement that the sector known as least responsive to change has also started to link futures with issues of security, conflict, violence, inequality and instability that abound in our region and globally. Within the government agencies many still argue that this is a natural state of international relations. Many Taiwanese endeavors are now extended internationally, through peace keeping, peace building and community development and reconstruction, to preventing these conflicts and rebuilding societies where they have taken place.

In the long run, Taiwanese can be expected to devote much more to building a more peaceful world by educating for alternative futures and sustainable development, by engaging indigenous reconciliation, and by trying to eliminate racial, ethnic and gender violence, economic inequality, and environmental degradation. A foresight social environment for learning has to be connected horizontally across different sectors and a rigorous and far-minded education and training is a key element in obtaining these ends. Tamkang University's futures education and movement has been developing a series of peace and security programs and workshops ever since the incident of 9/11 terrorism, including "the symposium of Peace Visions and Future Leaderships" (2001), "Workshops of Peace Education for the Pioneer Teachers at the Primary Schools" and alliance with PEACETIME Foundation of Taiwan to coordinate the Peace Conferences (2001-2003) and has hosted the 4th Annual Peace Conference - Visions and Future Actions for Peace (2004). [9]

The influence of Tamkang University's futures movement has also extended from the government and public sector to industries and research organizations. To name just a few, the Taiwan Institute of Economic Research has joined OECD's International Futures Program with faculty and graduate students of Tamkang's Futures program acting as its research partners. The Industrial Technology Research Institute has initiated a series of futures and innovative research projects. The most prominent research topic linking with Taiwan's creative industry is the futures of an ageing society. The so-called "project silver" has established cooperative relationships with EU Senior Economy Project, Silver Economy Network of European Region and Holland's Senior Healthcare Economy. Adopting futures methodologies from Tamkang and Finn 2015, the Taiwan Agricultural Technology Foresight Information Center has begun to develop alternative futures of a green industry. After taking a series of futures workshops, the Taiwan Textile industry research institute has even created its own center of creation and imagination. The list of Taiwan's rising futures organizations is limitless. But most importantly, the fundamental changes have begun from the primary educational system.

Through Sohail Inatullah's central role in the futures community, his remarkable contribution to the Journal of Futures Studies, and his effort in

organizing several influential international conferences, a great number of world-renowned futurists have developed strong ties with Taiwanese society and Tamkang University. Some of them are dedicated to Futures Studies and Peace Education, such as Johan Galtung (Transcend), Hazel Henderson (Calvert Social Investment Fund), and Margaret Bedggood (Amnesty International). We have also developed in-depth cooperation projects with many futures organizations, such as Foundation for the Future (program director, Sesh Velamoor), World Futures Studies Federation (president, Jennifer Gidley), World Future Society (president, Timothy Mack), Australian Foresight Institute (president, Richard Slaughter), The Futures Foundation (president, Jan Lee Martin) and Association of Professional Futurists.

Taiwan's futures network has thrived with remarkable contributions from many enthusiastic futurists, including Wendell Bell, Clem Bezold, Peter Bishop, Robert Burke, Marcus Bussey, James Dator, Linda Groff, William Halal, David Hicks, Christopher Jones, Patricia Kelly, Ian Lowe, Graham May, Ivana Milojevic, Graham Molitor, Ryota Ono, Tony Stevenson, Cesar Villanueva and many others. Future-oriented education as the core educational philosophy of Tamkang University speaks everywhere to the futures of industries and research organizations. It has made Tamkang an important center within the island and Asia Pacific region for exchanging futures thinking and technology foresight. A joint-venture international conference will be held at Tamkang University with Kyung-Hee University of South Korea and Foundation for the Future in November 2010. A group of significant Asian futures thinkers will be participating and brainstorming on the multifaceted subject of "Global Transitions and Asia 2060: Climate, Political-Economy and Identity." With this joint effort, we might challenge ideologies of Western imperialism by proposing alternative scenarios through Glocal social learning.

## 5. FUTURES OF TAIWAN'S FUTURES STUDIES

Due to great efforts in developing Futures thinking and Futures movements over the past three decades, Taiwan and its people have begun to benefit from exploring alternative possibilities, particularly the students of Futures classes. Results of a recent survey from a valid sample size of 595 student respondents who has taken at least one futures course, show that on the one hand, students are taking a relatively practical approach to link the world and are aware of the potential economic and political threats from China. In addition, they are learning new skills within the emerging knowledge economy and global market, and training for business positions. On the other hand, they have also started to demonstrate the phenomenon of generational replacement. Nearly 82 percent of them disagree that "only politicians, business leaders and other people holding powerful positions could influence the future." They constantly question not just their values and empirical positions about the nature of the world, but the paradigms that inform their

positions. They are more integrated, seeing the links between the external world and the internal world, individual and society. They have a clear vision of the future, but see the future as evolving and thus continuously explore alternative futures, and link these futures to strategy and day-to-day outcomes. [10]

It is essential to go deep into the inner and spiritual dimension. The core of cultivating foresight is a voyage along two complementary pathways. While the journey outwards leads us to discover the world in which we live, the journey inwards heightens our understanding of ourselves and our potential. Both journeys constitute a necessary preparation for personal fulfillment and social responsibility in an interdependent and rapidly changing world. In due course, students of futures can be expected as having qualities of a long-term perspective and creation of alternative futures. This great outcome originates from interactive futures teaching and learning and is due mostly and deeply to many devoted futurists.

However, a culture of social learning is created by many stakeholders – students, faculty, administration, the society, and the parents of the students. Hence, the most critical issue for success is responding to changing stakeholder needs. In our view, while we need a compelling vision of the future, the future is not fixed. It is changing. We are doing our best to proactively respond to changing needs of parents, students, community, business and the government. Taiwan has undergone a miracle in the last 50 years. We know to continue this miracle we must become an innovative economy and doing this means transforming our organizational culture to meet changing needs.

The world environment of economy and education is dramatically changing. Asia is emerging as a, if not the, world center. More and more middle class Asians will aspire to sending their children not overseas but to the top universities in Asia. Technologies such as the web and its evolutionary children will create true 24/7 virtual face to face education. The gamers of today will be the professors of tomorrow. Pedagogy, as the South Korean government advocates, will be more and more focused on a new balance of the individual and the collective, between discipline and creativity, between left and right brain, between status-quo and paradigms and emerging futures, between respect for the past and responsibility for the future.

For a university, organization or society to continue thriving, its policy planning must be in multiple forms: mission centered, market smart, vision-led and futures strategic. For Tamkang, the legacy is multifold. First, it is love of teaching, love of knowledge; essentially, this is the university as a service institution. Second, is its cultural heritage, neo-Confucian, and third is its focus on internationalization, technologization and futurization. These legacies are crucial and are being impacted by dramatic changes. First, via market pressures where the deeper notions of service are challenged by corporatist pressures, financial concerns. Second neo-



Confucianism is challenged by the women's movement, by new types of organizational structures – that are less rigid and vertical organizations, to learning organizations, and by more equal opportunity, ie a challenge to the Men's club. Third, internationalization, technologization and futurization are becoming more important. The broader context remains not only teaching Futures Studies but futurizing the entire university, with the hope of futurizing all of Taiwan and even humanity.

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