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# Knowledge based urban development in classrooms: planning Taipei's knowledge based development

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**Abstract:** *Rapid urbanisation of the global population over the last two centuries has inevitably brought with it a number of challenges and opportunities for economic, environmental and social sustainability of regions. This is arguably a result of rapid globalisation and subsequent growth in knowledge and service based economic markets. This paper reviews the introduction of a specialised teaching structure where the concepts of Knowledge Based Urban Development and Knowledge Cities were taught to various students of the discipline of Urban and Regional Planning at the Queensland University of Technology, through their study tour to the city of Taipei, Taiwan. The concepts were conveyed under the name 'Taipei Metropolis Knowledge Based Regional Planning Studio' and its methodology reviewed a series of tasks that was considered to provide a stronger level of understanding of how Knowledge Cities and Knowledge Based Urban Development had been formed in some areas of Taiwan. Findings from this international collaborative planning studio indicate that students have gained a greater level of understanding and insight into planning systems and processes in a trans-cultural context. The students have also been exposed to ideas and knowledge that have challenged conventional perspectives and encouraged global awareness.*

**Keywords:** *Knowledge cities; knowledge based urban development; international student collaboration; trans-cultural engagement*

## Introduction

Rapid urbanisation of the global population over the last two centuries has inevitably brought with it a number of challenges and opportunities for economic, environmental and social sustainability of regions. The coming decades will bring continued urbanisation with an estimated 60% of the global population living in cities by 2030, prompting Carrillo (2006, xi) to name the 21st Century the 'Century of Cities'.

Urban population growth is recognized as being fuelled largely by economic change and a shift toward a global economy (UNFPA, 2007). The post-industrial economy is transforming cities and regions by moving away from the traditional land, labour and capital factors of production towards a knowledge based economy (Velibeyoglu and Yigitcanlar, 2008).. Knowledge or intellectual capital is now regarded as a powerful factor of production in itself and a key driver behind city and regional competitiveness; subsequently, attracting and retaining knowledge workers is seen as key priority for policy makers (Ewers, 2007).

Knowledge workers, also referred to as the creative class, are highly mobile and prefer cities and regions that provide diverse opportunities and a high quality of life (Yigitcanlar et al. 2007). Florida (2003) notes that knowledge workers are highly educated and talented people and the driving force behind regional growth. Florida (2003) also notes that knowledge workers are often attracted to places that are diverse, tolerant and inclusive in addition to having employment opportunities.

Therefore, cities must compete in order to not only attract knowledge workers but also retain them. According to Martinez (2006, p17) cities are competing in three main areas in an effort to entice knowledge workers: '(1) The quality of local culture (a city with unique cultural vitality, ethnic diversity, and social tolerance); (2) A dense labour market (job abundance and additional opportunities for knowledge workers); and (3) The presence of local facilities and attractions which are highly valued by knowledge workers (access to outdoor activities and artistic events)'. The move towards a Knowledge Based economy together with the impacts of globalisation has brought a number of challenges including new forms of production and increasing urbanization of city-regions (Scott et al., 2001). This urban growth has also generated a number of social issues relating to income inequality, unemployment, poor living standards and social and spatial fragmentation (Redman and Jones, 2005). In addition to social issues, urban growth is bringing concerns over environmental quality and the need for effective governance of city-regions (Velibeyoglu and Yigitcanlar, 2008).

The role of urban and regional planners is integral to addressing the economic, environmental and social issues brought about by urban growth. Therefore, it is essential that planners are equipped with the skills to address complex and diverse political, social and economic systems of contemporary cities and regions (Yigitcanlar, 2011). Urban and regional planning education is an important tool in the development of planning professions that are adept at dealing with the complexities of post-modern cities (Yigitcanlar, 2011). Further to this, the internationalisation of planning education offers greater potential for development of more innovative, dynamic and global minded practitioners (Bremer, 2008).

This paper focuses on an international study trip involving students enrolled in Urban and Regional Planning from Brisbane to Taipei in July 2011. The review of literature in the following part of the paper puts into context the role of Knowledge Based Regional Planning and its relevance for regional planning education. It also emphasizes the need for more international case studies as a way to equip planning graduates with the skills necessary to deal with an increasingly global community.

### **Why knowledge based regional planning?**

In order to address the needs and issues of growing city-regions it is argued that a more integrated and progressive form of urban development is needed (Velibeyoglu and Yigitcanlar, 2008). Knowledge Based Urban Development (KBUD) is seen as an integrated and strategic approach to the spatial development of city-regions based on the interplay between knowledge production and urban form. Furthermore, KBUD is differentiated from other forms of development by its holistic approach to urban development that seeks economic, social and environmental sustainability. However, it should be noted that KBUD strategies are not generic strategies and need to be tailored to suit a city-regions' own knowledge assets (Velibeyoglu and Yigitcanlar, 2008).

Strategic planning can be seen as central to the implementation of KBUD principles as it is a systematic process for future urban development which identifies and considers a long-term vision, socio-economic and environmental characteristics, competitive strengths and critical issues. It forms an integrated strategy for the existing urban environment which allows flexibility in decision making and collaboration between stakeholders (Steinberg, 2005). Clearly, strategic planning can assist in the delivery of KBUD as it provides for the optimisation of city-regions' strengths to enable competitive advantage over the long-term. It also identifies weaknesses and key issues that must be addressed for sustainable regional growth. Most importantly, strategic planning advocates democratic decision making processes and stakeholder participation (Steinberg, 2005).

### **Why Taipei metropolis?**

Taipei, Taiwan was chosen as the study area for the introduction of KBUD theory to the students for two main reasons. Firstly, Taipei has only recently begun to focus strongly upon planning and development. Moreover, the shift of development has moved from manufacturing to knowledge-intensive industries and thus helped to further demonstrate the practical application of KBUD theory (Chou, 2005). This shift has helped influence an economic transition in terms of establishing a number of home-grown industries with technological competitiveness in the international arena, such as ASUS and HTC. These companies have in-turn helped increase the interest and level of professional development in the respective fields of study.

Secondly, KBUD has further developed through the creation of Technology Parks. KBUD in the form of the Taipei Technology Corridor was an important element in the decision to include Taipei as a prospective international planning case study for the students at the Queensland University of Technology. The level of innovation and technology research generated by the Taiwanese approach to science parks are unconventional and result in the 'rapid diffusion of technological capabilities' (Chen and Choi, 2004, p77).

Whilst KBUD principles are seen in South East Queensland through such initiatives as the Brisbane Technology Park, it is hard to discern the impact of such initiatives in an international context and indeed, it is argued by Massey (quoted in Wang, 2009, p 3) that such initiatives are 'a form of prestigious urban development with few productive synergies generated.' Storey and Tether's study in 1998 (quoted in Wang, 2009, p 3) further showed that science parks in Europe only had at most a modest contribution to KBUD. However it was considered that the opposite had occurred for Taiwan and it was therefore a suitable practical example for the class. Furthermore, the drive towards sustainable urban development in the Taipei metropolitan region is an important element of KBUD.

This made the Taipei study area a planning laboratory for the students, as the region is currently undergoing economic transition and urban restructuring to become a globally competitive and sustainable knowledge based region.

### **Taipei metropolis-knowledge based regional planning studio**

The urban and regional planning profession necessitates development of practical planners who have experience in a range of areas such as community development, community participation and conflict resolution (Kotval, 2003). One way to address this requirement is through experiential learning pedagogies in graduate programs which can provide students with opportunities to gain 'real world' experience and link theoretical applications to practice. This can enhance student learning outcomes; facilitate new life experiences and garner self-confidence (Elwood, 2011).

When applied to an international setting, pragmatic learning can add a valuable dimension to student learning experiences. This is particularly relevant given globalisation and internationalisation of a number of professions including urban planning (Witherby, 2007). It is therefore imperative that education and training of urban planners evolves simultaneously to enable planning graduates to deal with changing economic, social and political climates and grasp the complex political and socio-economic systems that prevail in contemporary societies (Yigitcanlar, 2011). International collaborative planning projects give new depth to planning education and practice and have the potential to facilitate a deeper understanding of cultural diversity and inter-cultural skills (Cornwall and Stoddard, 1999). This is further supported by Bennett and Salonen (2007, p46) who claim that being members of a global community with a shared future requires 'powerful forms of intercultural competence'.

### **Project context**

The School of Urban Development at the Queensland University of Technology (QUT), Gardens Point Campus, Brisbane, Australia offers a course in Urban and Regional Planning through the faculty of Built Environment and Engineering (BEE). The four year course includes a number of core subjects which aim to provide students with 'real world' planning experience at local, metropolitan and regional scales. The final year of the planning course is structured so that students are introduced to planning practice at regional level in the final semester of planning studies. The UDB474/UDN514 Regional Planning Practice unit consolidates learning outcomes from previous units undertaken in the planning degree and allows for application of theory to practice.

Regional Planning Practice is a studio based unit which focuses on larger scale, strategic level planning processes. The unit aims to equip students with the requisite knowledge to develop and implement effective strategic regional planning frameworks through studio based planning projects. Additionally, the Regional Planning unit further enhances students 'real world' capabilities by providing them with the opportunity to participate in an international study trip. In July 2011, 25 students and 4 teaching staff arrived in Taipei, Taiwan to partake in a collaborative study trip with Built Environment Planning staff and students from the Department of Real Estate and Built Environment, National Taipei University (NTPU). The main focus of the study trip was the Knowledge Based Urban Development (KBUD) of the Taipei Metropolis; an appropriate focus given the region's focus on improving competitiveness in areas such as finance, commerce and technology (Department of Urban Development Taipei City Government, 2005).

The study trip consisted of a number of elements that combined to give a comprehensive experience of the study area (refer figure 1). To commence the trip, a briefing was held with the students to go over aims and objectives of the study and review the forthcoming activities and expected outcomes. Following the briefing, formal studio activities commenced with a series of lectures and regional planning workshops undertaken with students from both QUT and NTPU, held at the NTPU San Shia Campus, Taipei. The planning workshops were an effective tool in the teaching process and served a dual purpose; (1) as an initial ice-breaker for the QUT and NTPU students; and (2) to facilitate the exchange of knowledge, perceptions and ideas. Therefore, participation in didactic activities organised during the study trip was imperative for effective dissemination of information and knowledge of the study area. The collaborative effort of the students supported an increased awareness of cultural diversity and it became increasingly apparent during the workshops that new social networks were forming that would extend beyond the confines of the study trip.



*Figure 1: Elements of the field trip*

The field trip also included visits to the planning and infrastructure divisions of the Taipei City and New Taipei City Government as well as to places of cultural and community significance. Seminars from community organizations and guided tours of key landmarks augmented the trip and enabled students to immerse in the cultural dynamism of Taipei. Local community consultation was conducted to some extent over the duration of the trip, assisted by the participating NTPU students. Students were then able to apply new knowledge and observations of the study area into collaborative workshop activities that were conducted in the planning studios throughout the study trip.

In the first planning studio, student groups containing students from both QUT and NTPU were formed and student details were exchanged. The QUT students were then able to begin working on their regional site appraisal in collaboration with the NTPU students and in the process strengthen cross-cultural communication skills. The appraisal exercise formed the basis for ongoing investigations into the study area which culminated in formal presentations given at the end of the trip by the QUT students on the Knowledge Base Urban Development of Taipei Metropolis. Students from NTPU were not required to participate in the presentations; however their collaboration with the QUT students was an important element in the formation of the presentations.

On the last day of the study trip the student groups each presented their findings on the Knowledge Based Regional Development of Taipei Metropolis in front of invited community stakeholders and the staff and participating students from NTPU. The presentations demonstrated synthesis of analysis relating to the economic growth, governance/institutional development, environmental development and socio-cultural sustainability of the Taipei Metropolis. The groups were required to include the following elements in their presentations: (a) Main observations and key planning issues; (b) Strengths, Weaknesses Opportunities and Threats (SWOT) analysis and; (c) a draft vision. In order to demonstrate technical skills the groups were also required to include maps of the study area which graphically demonstrated the SWOT analysis.

At the conclusion of each presentation, staff and students from the NTPU were invited to give feedback, ask questions and engage in discussion relating to the key findings of the group. This proved to be successful in stimulating a robust exchange between QUT and NTPU regarding future development of the Taipei Metropolis and gave students valuable, first-hand insight into the study region. In terms of individual learning outcomes, each student was required to demonstrate findings from the study trip in the form of a site appraisal poster. The mandatory appraisal requirements were consistent for all students and included; (a) identification of planning issues and implications for the study area; (b) opportunities and constraints mapping; (c) a vision and vision statement and (d) a list of draft planning objectives categorised under governance, economy, socio-cultural and environment. Students were also encouraged to use a range of visual images and graphics in the poster design. Each poster varied in terms of layout and presentation style showcasing individual interpretation of key findings and experiences from the study trip. Examples of student posters can be seen in figures (2)-(5) below.









Figure 4: OUT student appraisal poster

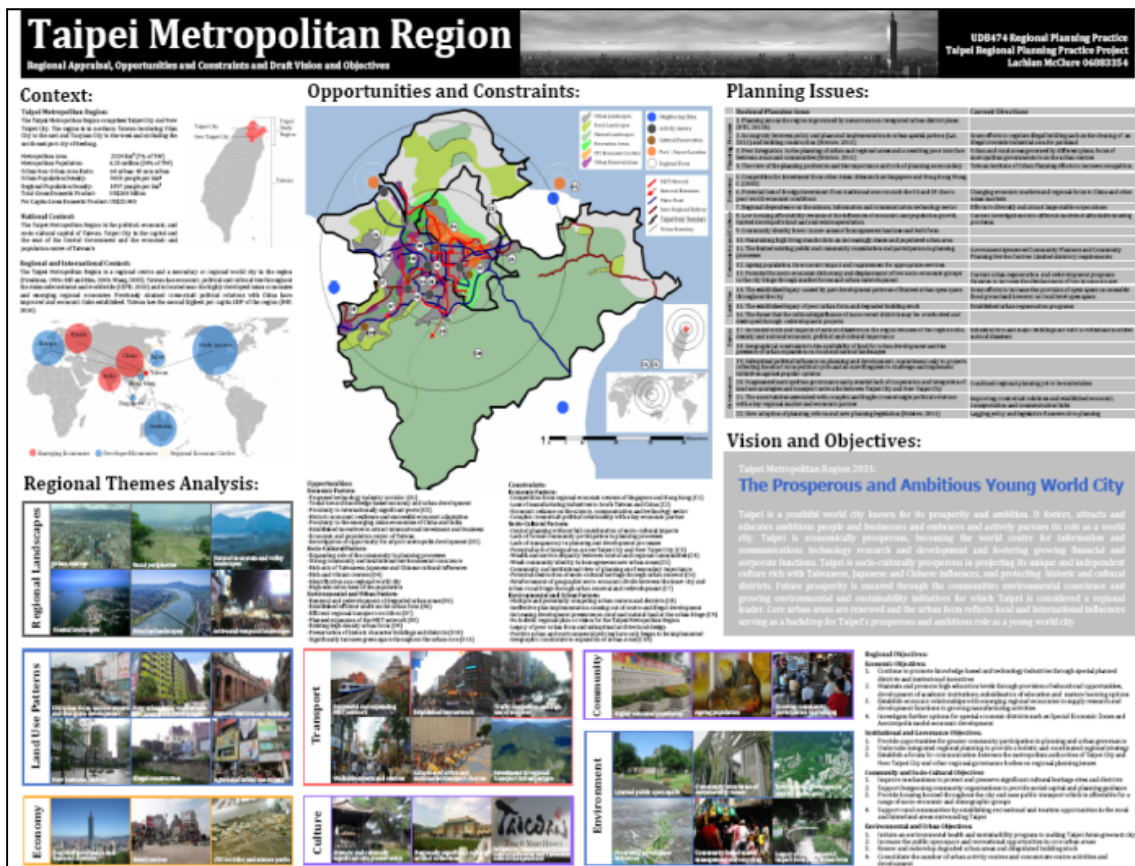


Figure 5: OUT student appraisal poster

## Discussion

**Student perspectives:** Approximately two months after completion of the study trip, students and staff from QUT and NTPU were asked to participate in a structured survey in order to receive feedback about the international collaboration. Semi-formal interviews were also conducted at this time with a number of the participating QUT students. The survey and interview process helped to establish the strengths and weaknesses of the trip and the overall perceptions of the participants. It was conducted a short period after the trip to allow enough time for students to reflect upon the experience.

Key findings from the semi-formal interviews held with the students indicated that most believed the study trip was beneficial in giving them first-hand knowledge of Taipei and a deeper appreciation for cultural differences. The students felt that visiting the area gave them an advantage in terms of learning outcomes as they could more readily apply information received through lectures and seminars to the study area. The majority of students strongly indicated that collaboration between QUT and NTPU was a positive experience and one that resulted in many profound discussions about the planning issues and strengths of the region during the workshops. The QUT students appreciated the local knowledge imparted by the locals and that the NTPU students could 'tell you exactly what it is like to live there.'

Overall the student feedback was positive and indicates that the collaborative trip was successful, however a few issues were mentioned by the students that should be addressed for future international study trips. These issues included having more in depth briefings prior to departing from Australia, as many students felt that they did not have a good grasp of the study region or expectations of the trip. A number of meetings were held with participating students at QUT before the Taipei study trip commenced, however to address this issue it may be necessary to include a few lectures that introduce the study area and outline in depth expectations of the trip.

Another issue raised by a few students was the long duration of most days of the study trip. This was somewhat unavoidable given the nature of the trip and the relatively short timeframe being spent in Taipei. It was necessary to combine the formal academic work with visits to tourist sites and cultural landmarks in order to give the students exposure to as much of the study area as possible within a limited timeframe. Many students did indicate that despite the full days they would have been greatly disappointed if visits to tourist sites had not been included in the trip schedule. Nevertheless, over the course of the trip the itinerary was altered to allow more rest and free time for the students. The final issue of note was the students desire to include more activities with the host university students in both a social and formal context. A number of QUT students mentioned that having more contact time with the NTPU students would have helped to further break down cultural and language barriers.

In terms of the structured survey, it consisted of 31 questions with a corresponding five-level rating scale for each statement: (1) strongly agree; (2) agree; (3) neither agree nor disagree; (4) disagree, and; (5) strongly disagree. The questionnaire was distributed to the participating QUT students and to the NTPU staff and students via email, with participants invited to include any additional comments. A total of 37 surveys were completed by students, 25 from QUT and 12 from NTPU. (See Appendices for the combined survey results of staff and students from both universities).

There were a number of points that the students agreed upon having combined scores for the categories 'agreed' and 'strongly agreed' of over 90 percent. These points were; (a) International Collaboration is a valuable experience for my professional growth and development; (b) International Collaboration is a valuable experience for my personal growth and development, (c) International collaboration is valuable to my understanding of domestic urban and regional planning issues and; (d) Overall satisfaction from the international collaboration. Following closely behind were several points with combined percentages (agree and strongly agree) of between 85-90 percent. These points included: (a) International Collaboration is a valuable experience for my professional growth and development; (b) I recommend this international collaboration experience to others; (c) International collaboration enhanced my qualifications to pursue a professional career, domestically; (d) International collaboration provided me an understanding of alternative sets of planning objectives and processes; (e) International collaboration enabled me to think critically and re-evaluate generic planning objectives and processes; (f) International collaboration enhanced my appreciation of local planning objectives and processes; (g) International collaboration enhanced my appreciation of



national planning objectives and processes; (h) International collaboration equipped me with skills to respond effectively to unfamiliar problems in my university education; (i) International collaboration improved my ability to communicate with people from different countries or cultures other than my own; (j) International collaboration helped me build networks and cooperative working with students and faculty from my university; (k) Students contributed positively to the overall quality of the experience; (l) Faculty contributed positively to the overall quality of the experience.

None of the students strongly disagreed with any of the points and only a small number disagreed with a few statements. The three main disagreements (between 5-8 percent) were: (a) Faculty were helpful in providing me information on the region before the trip; (b) International collaboration enhanced my qualifications to pursue a professional career, domestically; and (c) Planning education in my university performs at a high level, internationally. The first issue was mentioned during semi-formal interviews and whilst study material was distributed prior to the trip, students felt that they needed more time to absorb information and become familiar with the host country before leaving Brisbane. Given the relatively short timeframe of the trip, it is perhaps not greatly evident to some students how the trip provides benefits on a professional level or how well the university performs internationally. However, the survey results highlight that the vast majority of students found the trip a valuable and rewarding experience and would recommend the trip to others. One student stated, 'Loved it, it was a great learning & cultural experience and very helpful to my academic/professional career.'

**Staff perspectives:** Overall the teaching teams from QUT and NTPU were in agreement that the collaborative planning trip was an invaluable experience for the students. It provided an opportunity for trans-cultural engagement and the exchange of knowledge and ideas; two of the same elements that are seen to contribute to knowledge based societies. Staff agreed that the regional planning studios were an effective platform for the students to collaborate, share experiences and discuss existing planning processes in both Australia and Taipei. Perhaps a testament to the success of the collaborative studio workshops is the number of new friendships that formed between the visiting and host university students which transcended language barriers and time limitations.

It was also agreed by the teaching teams that the study trip exposed students to real world planning scenarios, key issues and stakeholders involved in the knowledge based development of Taipei Metropolis. Students visited community infrastructure and met with community groups throughout the region as well as local government planning authorities. Although language and cultural differences were challenging for the students at times, these visits gave the students immeasurable insight into the study area which helped to facilitate greater discussion of planning issues with the host students.

There were no points that the staff disagreed or strongly disagreed upon and on completion of the study trip it was clear to the teaching team that the international collaboration between universities was a positive and rewarding experience. The trip exposed students to new ideas and knowledge that challenged traditional ways of thinking and as one staff member commented, 'International collaboration builds students skillets, which will hopefully bring them out of their comfort zone and therefore learn how to deal with unfamiliar cultures, people and systems; a valuable skill to have in the work place.'

## Conclusion

The importance of international planning education in facilitating a deeper understanding of cultural diversity and exposing students to new ways of thinking cannot be underestimated. In an era of globalisation and wireless technology, international collaborative planning projects can equip graduates with the skills necessary for professional practice in a national or international context.

Key findings highlighted in this paper from the QUT and NTPU regional planning collaboration in Taipei indicate that:

- Greater depth is added to urban and regional planning courses from international study collaborations.
- Students develop inter-cultural skills that are an asset in professional practice when faced with diverse and complex planning issues

- Students are exposed to different planning systems and processes which challenge existing outlooks and encourage creativity and innovation

Some issues identified from the collaborative study related to the students having more information provided about the host country prior to commencement of the trip and having some shorter days during the study tour so that students are not overwhelmed by the full trip itinerary. Another issue related to language and cultural barriers which at times prevented effective communication, however upon reflection, many students came to regard this as part of the experience and a way to develop inter-cultural communication skills.

## References

- Bennet J.M. and Salonen R. (2007). Intercultural Communication and the New American Campus. *Change* March/April: 46-50.
- Bremer D. (2008). Planning Tomorrow's Urban World. *International Educator*. 17: 4, 32-39.
- Carrillo F. J. (2006). 'Introduction: The Century of Knowledge Cities' in Carrillo F. J. (Ed) *Knowledge Cities: Approaches, Experiences and Perspectives*. Butterworth-Heinemann, Oxford.
- Chen, S. and Choi, C.J. (2004). Creating a knowledge-based city: the example of Hsinchu Science Park. *Journal of Knowledge Management*, 8, 5: 73-82.
- Chou T. (2005). The Transformation of Spatial Structure: From a Monocentric to a Polycentric City. In: Kwok Y. *Globalizing Taipei: The political economy of spatial development*. Routledge, Chapter 3, pp. 55-77.
- Cornwell G. H., Stoddard E. W. (1999). *Globalizing Knowledge: Connecting international and intercultural studies*. Washington DC: Association of American Colleges and Universities.
- Department of Urban Development Taipei City Government. (2005). *City of Taipei-The Urban Development Context*, Taiwan.
- Elwood S.A. (2004): Experiential Learning, Spatial Practice, and Critical Urban Geographies, *Journal of Geography*, 103:2, 55-63.
- Ewers M.C. (2007). Migrants, markets and multinationals: competition among world cities for the highly skilled. *GeoJournal*, 68:119–130.
- Florida R. (2003). *The Rise of the Creative Class: and how it's transforming work, leisure, community and everyday life*. Basic Books, New York.
- Kotval Z. (2003) Teaching Experiential Learning in the Urban Planning Curriculum. *Journal of Geography in Higher Education*, 27:3, 297–308.
- Martinez S. D. (2006). 'A Comparative Framework for Knowledge Cities' in Carrillo F. J. (Ed) *Knowledge Cities: Approaches, Experiences and Perspectives*. Butterworth-Heinemann, Oxford.
- Redman C.L. and Jones N.S. (2005). The Environmental, Social, and Health Dimensions of Urban Expansion. *Population and Environment*, 26: 6, 505-520.
- Scott A., Agnew J., Soja E., and Storper M. (2001). 'Global city regions: an overview,' in Scott A. (Ed): *Global City Regions*, Oxford University Press, New York.
- Steinberg F. (2005). Strategic urban planning in Latin America: experiences of building and managing the future. *Habitat International*, 22:1, 69-93.
- UNFPA. (2007). *State of the World Population 2007: Unleashing the Potential of Urban Growth*, website [http://www.unfpa.org/swp/2007/presskit/pdf/sowp2007\\_eng.pdf](http://www.unfpa.org/swp/2007/presskit/pdf/sowp2007_eng.pdf), visited 16 August 2011.
- Van Winden W. (2008). Urban governance in the knowledge based economy: Challenges for different city types. *Innovation: Management, Policy & Practice*. 10: 197–210.
- Wang X. (2009): Knowledge-based urban development in Wuhan, China. In: *Regional Studies Association: RSA Annual Conference: Understanding Spatial, Social and Economic Futures*, Leuven, Belgium, 6-8 April 2009.
- Witherby A. (2007) The Internationalization of Planning. Planetzien website, <http://www.planetizen.com/node/22711>, visited 14 August 2011.
- Yigitcanlar T., Baum S. and Horton S. (2007). Attracting and retaining knowledge workers in knowledge cities. *Journal of knowledge management*, 11: 5, 6-17.
- Yigitcanlar T and Velibeyoglu K. (2008). *Knowledge-based strategic planning: harnessing (in)tangible assets of city-regions*. In: *International Forum on Knowledge Asset Dynamics*, Italy, Matera, 26 - 27 June 2008.
- Yigitcanlar T. (2011). International regional planning education experience: learnings from Malaysia, Korea and Turkey study trips. *Procedia-Social and Behavioural Sciences*, 12: 70-89.

## Appendices

*Appendix 1: 2011 Student Combined Survey (QUT and NTPU) (%)*

Student Survey	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Q01 International Collaboration is a valuable experience for my professional growth and development	37.83	51.35	10.81		
Q02 International Collaboration is a valuable experience for my personal growth and development	35.14	62.16	2.7		
Q03 International Collaboration distinguishes my university education from others	35.14	56.76	8.1		
Q04 I recommend this international collaboration experience to others	29.73	59.46	10.81		
Q05 International collaboration enhanced my qualifications to pursue a professional career, domestically	18.92	67.57	10.81	2.7	
Q06 International collaboration enhanced my qualifications to pursue a professional career, internationally	27.03	51.35	16.22	5.4	
Q07 International collaboration provided me an understanding of alternative sets of planning objectives and processes	24.32	59.46	16.22		
Q08 International collaboration enabled me to think critically and re-evaluate generic planning objectives and processes	24.32	62.16	10.81	2.7	
Q09 International collaboration enhanced my appreciation of local planning objectives and processes	18.92	70.27	8.1	2.7	
Q10 International collaboration enhanced my appreciation of national planning objectives and processes	21.62	64.86	10.81	2.7	
Q11 International collaboration enhanced my appreciation of international planning objectives and processes	24.32	54.05	21.62		
Q12 International collaboration equipped me with skills to respond effectively to unfamiliar problems in my professional career	24.32	43.24	29.73	2.7	
Q13 International collaboration equipped me with skills to respond effectively to unfamiliar problems in my university education	18.92	67.57	10.81	2.7	
Q14 International collaboration equipped me with skills to respond effectively to diverse contexts in my professional career	18.92	56.76	24.32		
Q15 International collaboration equipped me with skills to respond effectively to diverse contexts in my university education	16.22	64.86	18.92		
Q16 Planning education in my university performs at a high level, domestically	18.92	62.16	16.22	2.7	
Q17 Planning education in my university performs at a high level, internationally	24.32	51.35	18.92	5.4	
Q18 International collaboration enhanced my understanding of diversity in my social and organisational surroundings	18.92	51.35	29.73		
Q19 International collaboration improved my ability to communicate in a multi cultural or foreign environment	29.73	45.95	21.62	2.7	
Q20 International collaboration improved my ability to communicate with people	37.83	40.54	18.92	2.7	
Q21 International collaboration helped me build networks and cooperative working with students and faculty from my university	40.54	45.95	13.51		
Q22 International collaboration helped me build networks and cooperative working with students and faculty from other universities	24.32	54.05	18.92	2.7	
Q23 International collaboration is valuable to my understanding of domestic urban and regional planning issues	21.62	48.65	27.03	2.7	
Q24 International collaboration is valuable to my understanding of international urban and regional planning issues	35.14	59.46	5.4		
Q25 Activities were appropriate to achieving an understanding of regional planning issues	21.62	51.35	27.03	2.7	
Q26 The coursework was appropriate to achieving an understanding of planning issues	21.62	48.65	27.03	2.7	
Q27 Students contributed positively to the overall quality of the experience	27.03	59.46	13.51		
Q28 Faculty contributed positively to the overall quality of the experience	29.73	56.76	10.81	2.7	
Q29 Faculty were helpful in providing me with information on the region before the trip	18.92	51.35	21.62	8.1	
Q30 Faculty were accessible for guidance on the regional planning project after the trip	27.03	51.35	21.62		
Q31 Overall satisfaction from the international collaboration	35.14	56.76	8.1		

Appendix 2: 2011 Combined Staff Survey (QUT and NTPU) (%)

Staff survey	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Q01 International Collaboration is a valuable experience for students' professional growth and development	87.7	12.5			
Q02 International Collaboration is a valuable experience for students' personal growth and development	75	12.5	12.5		
Q03 International Collaboration distinguishes students' university education from others	62.5	37.5			
Q04 I recommend this international collaboration experience to other colleagues	62.5	37.5			
Q05 International collaboration enhanced students' qualifications to pursue a professional career, domestically	37.5	50	12.5		
Q06 International collaboration enhanced students' qualifications to pursue a professional career, internationally	75	12.5	12.5		
Q07 International collaboration provided students' with an understanding of alternative sets of planning objectives and processes	62.5	37.5			
Q08 International collaboration enabled students' to think critically and re-evaluate generic planning objectives and processes	37.5	62.5			
Q09 International collaboration enhanced students' appreciation of local planning objectives and processes	50	37.5			
Q10 International collaboration enhanced students' appreciation of national planning objectives and processes	50	50			
Q11 International collaboration enhanced students' appreciation of international planning objectives and processes	62.5	25	12.5		
Q12 International collaboration equipped students' with skills to respond effectively to unfamiliar problems in my professional career	25	50	25		
Q13 International collaboration equipped students' with skills to respond effectively to unfamiliar problems in my university education	25	62.5	12.5		
Q14 International collaboration equipped students' with skills to respond effectively to diverse contexts in my professional career	37.5	50	12.5		
Q15 International collaboration equipped students' with skills to respond effectively to diverse contexts in my university education	62.5	25	12.5		
Q16 Planning education in students' university performs at a high level, domestically	25	50	25		
Q17 Planning education in students' university performs at a high level, internationally	37.5	50	12.5		
Q18 International collaboration enhanced students' understanding of diversity in my social and organisational surroundings	87.7	12.5			
Q19 International collaboration improved students' ability to communicate in a multi-cultural or foreign environment	87.7	12.5			
Q20 International collaboration improved students' ability to communicate with people	87.7	12.5			
Q21 International collaboration helped students build networks and cooperative working with students and faculty from my university	62.5	25	12.5		
Q22 International collaboration helped students build networks and cooperative working with students and faculty from other universities	87.7	12.5			
Q23 International collaboration is valuable to students' understanding of domestic urban and regional planning issues	50	37.5	12.5		
Q24 International collaboration is valuable to students' understanding of international urban and regional planning issues	75	12.5	12.5		
Q25 Activities were appropriate to achieving an understanding of regional planning issues	37.5	62.5			
Q26 The coursework was appropriate to achieving an understanding of planning issues	37.5	62.5			
Q27 Students contributed positively to the overall quality of the experience	12.5	75	12.5		
Q28 Faculty contributed positively to the overall quality of the experience	37.5	62.5			
Q29 Faculty were helpful in providing me with information on the region before the trip	37.5	62.5			
Q30 Faculty were accessible for guidance on the regional planning project after the trip	62.5	37.5			
Q31 Overall satisfaction from the international collaboration	62.5	37.5			