

**Running a Satellite MSc programme in China.
Experiences of teaching from the first year joint MSc Transportation Planning
and Engineering programme between the University of Southampton and the
Beijing Jiaotong University**

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INTRODUCTION

In September 2005 the School of Civil Engineering and the Environment at the University of Southampton launched its joint MSc programme in Transportation Planning and Engineering (TPE) with the Beijing Jiaotong University (BJTU), China. Through a collaborative agreement, the existing TPE MSc Programme taught in Southampton was offered to students at BJTU as a mirror of the UK programme in terms of module content, material delivery and methods of assessment. Students taking the course at BJTU enrolled as University of Southampton students and had the same rights as their UK counterparts.

The agreement dictated that BJTU staff would undertake the majority of the teaching, with the remainder being undertaken by staff from Southampton and external lecturers who would travel to Beijing at set intervals to deliver intensive week lecture slots. Aspects of the syllabus which required knowledge of UK practices would be taught predominantly by UK staff.

The aims of the Programme were for students to:

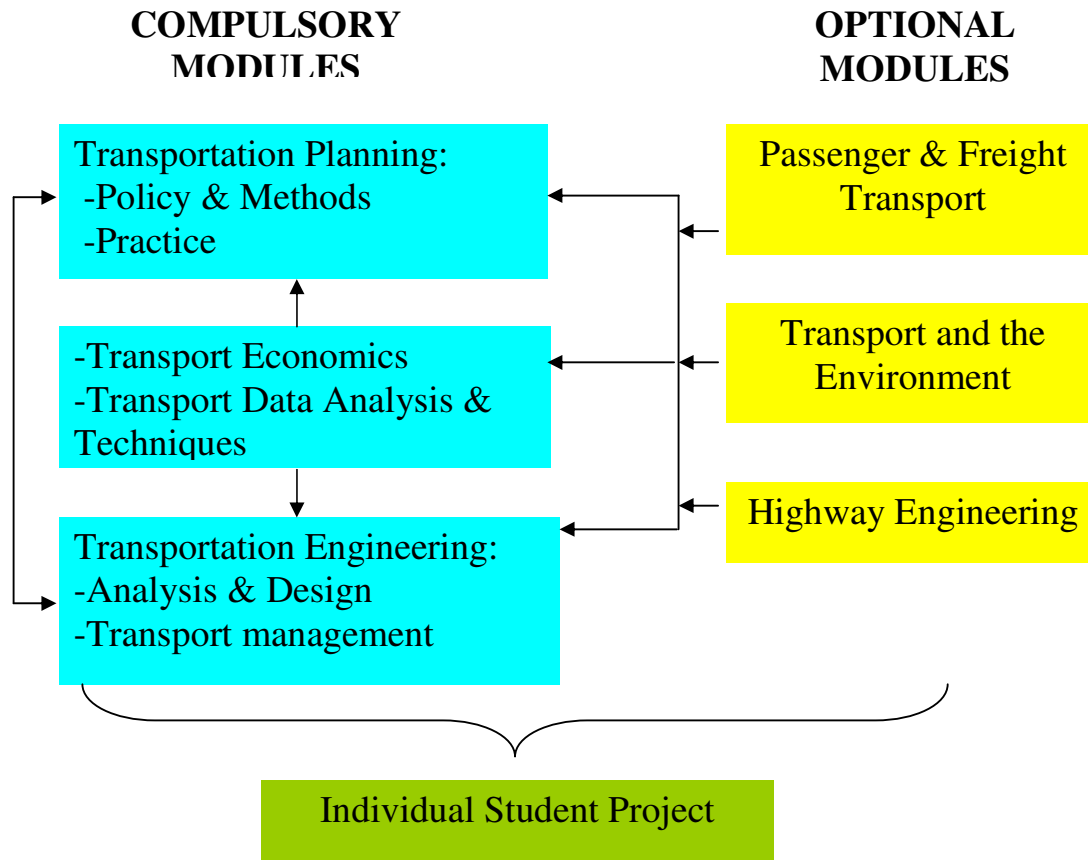
- Gain a sound knowledge and understanding of the key issues and processes in transportation planning and engineering.
- Be provided with education and training relevant to the situation in China.
- Develop their skills in critical appraisal and analysis of transport options and systems, in independent research and in oral and written communications in English.
- Be provided with an integrated, multi-disciplinary coverage of transport education and training at postgraduate level.
- Be provided with relevant in-career postgraduate training if they are professionals working in transportation planning and engineering.

This paper will highlight some personal reflections of the authors on the educational, managerial and quality assurance lessons learned from the first 12-months of the Programme.

BACKGROUND

The MSc programme in Transportation Planning and Engineering (TPE) at Southampton started in 1969, and now runs 1 year full-time and 2 year part-time options for students from a broad spectrum of academic and industrial backgrounds. The course consists of 6 compulsory modules of 15 credits each, and 3 optional modules of 15 credits each from which 2 have to be selected (Figure 1). The final part of the programme involves an individual project leading to the production of a Dissertation.

Figure 1. MSc Transportation Planning and Engineering course content.



The concept of having a satellite version of the TPE course evolved through the UK China Joint ITS Centre for Research, Development and Training (UCIC). This was set up in 2002 through a joint agreement signed by the UK Department of Trade and Industry (DTI) and the China Ministry of Science and Technology (MOST) designed to promote cooperation on Intelligent Transport Systems (ITS) research and deployment between the UK and China.

Two specific goals of UCIC were to produce high quality academic products which met both countries' interests and provide training to ITS researchers, engineers, managers and local government officers from China. After several dedicated short courses had been run in Southampton for Chinese ITS practitioners, it was decided to trial the delivery of our full MSc TPE programme through the Beijing Jiaotong University. The key attractions for Chinese students were seen to be:

1. A one-year MSc from a 5* top-ten rated UK Civil Engineering School. (The MSc courses delivered by the traffic school in Beijing Jiaoting were all 2-year programmes).
2. Reduced fees over the equivalent course in the UK (£6000 compared to £10,000)CHECK??

3. All lectures and studying undertaken at BJTU with 30% of the lectures delivered by staff from the University of Southampton (UoS).
4. Experiencing western learning styles that would develop skills in critical assessment, debating, literature searching, short report writing and presenting.
5. Internet access to all the same facilities available to students studying at the UoS (library, e-journals, online English courses etc).
6. Gaining a first class insight into best practice in UK and EU transport planning and engineering.
7. Excellent employment opportunities from UK and EU companies working in China and a skills base that would prepare students for PhD research.
8. The opportunity to undertake the dissertation in the UK.

The course started in September 2005 with 12 full-time students enrolled. All but one had first degrees in an engineering discipline and all had passed the basic English competency tests (IELTS or TOEFL) at 6.0 equivalent or above.

KEY LESSONS LEARNED

Western learning styles and ‘student centred learning’

A key motivation for taking the course expressed by the students was to experience western learning cultures, particularly ‘self-centred’ learning of which their prior experience was negligible. From the outset we became aware that as lecturers we were subconsciously conforming to the ‘Level 1: teaching as assimilation’ rationale (Biggs, 2003) where International students are recognised as being different from local students but should be made to fit in like locals. In this sense, we were delivering material as if we were teaching to the mixed UK/international classes on the UK course. Partly as a result, we experienced the initial problem of students not contributing in class which is a recognised characteristic of Confucian Heritage Cultures (CHCs), (ibid). The ‘inside/outside’ rule that determines when it is appropriate to talk (Scollon & Wong Scollon 1994) was very much in evidence and we noticed that the students were quite loud when socialising amongst themselves but were the opposite in class. Our self imposed ‘English only’ in-class rule, designed to help improve their spoken English, probably did not help in this regard.

The philosophy that talking in class (‘inside’) is inappropriate is a big issue and conflicts with the central goal of modern western teaching methods which is student centred learning. Getting the students to participate in class was a major challenge, particularly given the nature of the lecture delivery where 30% were given by UoS staff (who would expect in-class participation) and 70% by BJTU staff, who may discourage such behaviour. We could not follow the UoS course model where learning is enhanced by actively breaking students up into mixed groups to undertake specific tasks. Volet and Ang (1998) found that this did have a positive effect on participation but that locals and CHCs preferred like-with-like tutorial groups.

In terms of our own lecture delivery, we found ourselves conforming to some of the characteristics under Biggs (2003) Level 2: ‘Teaching as accommodation’. Speaking slowly and deliberately, extending lecture slots to twice their normal UoS length (90 minutes instead of 45), and taking additional time to describe simple terms which we

would assume UoS students had certain prior knowledge e.g. ‘catalytic converter’, ‘deregulation’.

Student expectations and the student experience

The first student intake was regularly evaluated to identify their expectations of the programme and how these views changed during their period of study. Issues related to programme delivery, assessment and communication were identified. Periodically, student feedback questionnaires were issued in addition to the standard end-of-module feedback forms.

We felt that anonymous feedback forms were still not bringing out students’ true feelings regarding their progression and there were too many scores in the ‘very positive’ categories with regard to material delivery, learning outcomes, resources and feedback. Of concern at the outset was how the staff/student pastoral care and mentoring system would function given that the students were enrolled with UoS and had all the same rights as their counterparts studying in the UK. We presumed that the ‘inside/outside’ rule (Scollon & Wong Scollon, 1994), related to when CHCs find it appropriate to talk to lecturers in-class would also apply to the student-supervisor relationship, particularly in matters of pastoral care. The students had a local mentor in the form of the BJTU course director but could also contact any of the UoS lecturing staff with issues as they arose. The module feedback process at UoS allows students to give anonymous comment on all aspects of material delivery and the ‘personal tutor’ system on matters related to individuals and relationships. We realised that the BJTU students would be unlikely to criticise the Chinese lecturers on the course to the BJTU course director or to us, despite our best efforts to inform them of their rights as UoS students.

We were also unclear about the types of pastoral care and mentoring they had become accustomed to during their previous degrees in China, and to what extent the definition and roles of the ‘tutor’ differed between the two universities. According to Jaques (1990), the tutor role is seen as being:

1. ‘a friendly parent’
2. an agent or go-between linking the academic side of the university experience with the personal side
3. a guardian keeping a watching brief on problems that the student is likely to encounter
4. a guide to help the student develop as an individual and prepare them for life beyond university

From the formal and informal feedback we received, the students appeared unprepared for the more ‘stand-off’, student-centred style western learning approach which was very much in contrast to the tutor/lecturer directed learning they had been previously accustomed to. Their expectations of two core text books per module from which the majority of the material could be assimilated did not materialise, and the experience of being expected to independently source novel texts and case study examples, in line with the western, ‘lower power-distance’ learning culture, was an initial shock. The student’s did adapt well to this once they had been instructed in how to fully utilise their UoS on-line library search facilities.

The learning environment, teaching and assessment

Of particular interest was the impact of the learning environment on student progression. Would our Chinese students taking the course in Southampton fair better than their counterparts in Beijing who would not be exposed to English culture on a daily basis? We were immediately aware that to some extent, the Chinese students on our UoS course were at a disadvantage in that we were not conforming to the characteristics of Level 2: 'Teaching as accommodation' (speaking slowly and deliberately, extending lecture slots to allow for the description of simple terms; Biggs 2003) which we had deliberately done at BJTU. The need to cater for a mixed student cohort and the possibly incorrect assumption that the 24-hour new cultural experience of studying in the UK would somehow raise the base knowledge level of international students were the reasons behind this approach.

The agreement set up between UoS and BJTU was that the course would be delivered entirely in English. Three members of UoS staff would make eight trips in total to deliver 5-day intensive lecture slots, covering material directly related to UK and EU transportation engineering and policy. The BJTU staff would deliver the remaining 70% of the lectures, in English.

We were not sure how the students would react to the vastly different lecturing styles of the two sets of personnel. We assumed that there would be an element of initial 'culture shock' (described by Kiley, 2000), but not to the same extent as the Chinese students studying at the UoS.

Stage 1. First shock (categories adapted from Kiley, 2000)

Associated with the radically different teaching and learning environment, and potentially, opposing requirements of the BJTU and UoS learning styles. The process of remote registration and induction into a foreign university supplying the course content while at the same time having to fit into a new local environment with its own unique enrolment processes and potential problems (money, accommodation and food). There was also the realisation that they were on a new course with no local support from previous students who were completing or who had previously undergone the experience.

Stage 2. Honeymoon

When the students had been through their first intensive week of material delivery by UoS staff and had been individually briefed on the dual learning experience and their specific rights as UoS students.

Stage 3. Learning real differences

The students became more aware of the real differences between their previous learning styles and the ones used and expected by UoS. Feelings of self doubt, losing confidence and increasing stress arose, particularly after the first module assessments were undertaken where students became aware of the different marking structures used (UoS compared to BJTU). Their ability to effectively communicate in written

English was also seriously tested and all felt concerned about their inability to communicate their work.

Stage 4. Feeling bad

It was difficult for us to gauge just how isolated the students felt during the initial months of the course. The lack of feedback on individual problems, potentially because of the perceived stigma attached to showing weakness or emotion to staff was of concern.

Stage 5. Turning point: accepting and letting go

Following the first semester, the students were acclimatised to the different learning style and had readily embraced the 'student-centred' aspects of the course (student presentations, in-class debate etc). The UoS marking structures which occasionally saw them receiving average marks considerably below what would be considered acceptable on a BJTU course did no longer cause anxiety.

Stage 6. Recovery and New confidence

With successful completion of the first semester exams, the students felt that they were coping with the rigors of the course and became more assured, relaxed and conscious of having met the challenge of adjustment.

In terms of teaching and learning, there were still areas that concerned us:

- The lecture timetable was arranged so that a member of UoS staff would be visiting BJTU every two months. Towards the end of the course, we noticed that the standard of spoken English was not improving and in some cases, declining, suggesting that some material could have been delivered in Chinese, although no evidence was found to corroborate this.
- Despite all the BJTU lecturers attending induction courses at UoS the previous year, the standard of English amongst some was poor and their ability to deliver the material effectively in English was questioned. Additional English classes were provided for staff and students separately during the course.
- The students made full use of the previous exam questions and model solutions that are provided to all students studying on UoS courses. After the first semester exams we were concerned with the extent to which students were learning by 'backwash' (Biggs, 2003), learning what they felt would come up in the exam based on previous papers and hence the assessment determined what and how the students learn. We came across cases where passages of text had been learned and replicated in exams to explain certain models and concepts which we had not experienced with students at UoS. This potentially demonstrated the extent to which the students felt unable to express themselves adequately in written English.
- With this in mind, it could be argued that our current approach promotes surface learning as the students learn to meet presumed assessment requirements and do

not adapt and use the information gained in the way it would be in reality. According to Entwistle and Entwistle (1997), this manifests itself in several ways, but most noticeably as:

- Reproducing content from lecture notes without any clear structure
 - Reproducing the exact content used in the lecture
- The current assessment tools for the course are largely convergent, (requiring unique answers to specific questions, Guilford 1967). They are also norm-referenced, where the student's exam marks reflect where they came relative to their peers. The current assessment mechanisms often do not reflect an individual's performance in class, their ability to ask probing questions and create arguments. We could therefore be making judgments about the students rather than their overall performance.

Course management and administration

The students paid their course fees to BJTU who then split the revenue between themselves and UoS according to the agreement. BJTU had to abide by UoS quality assurance procedures in terms of teaching standards and course administration. All the students had to gain a IELTS/TOEFL score equivalent to 6.0 before they were allowed on the course. It became evident that even with a score of 6.5, some students were not sufficiently proficient in spoken or written English to cope with the rigours of the course. Not being immersed in the English culture 24-hours per day, we felt it important to run pre-sessional English courses using an independent language teacher which ran during the month before the course commenced.

'Blackboard' was used as the main information dissemination and communications medium through which course notes, tutorials and general information was passed from UoS to the students. The time difference between the UK and China worked very well in terms of allowing the students reliable access to information sources via UoS. Their working day coincided with our UK period of darkness and the students found accessing library material and the internet easy using their ATHENS accounts.

Of concern was the workload for the lecturers (both from BJTU and UoS). The former were teaching the students early in the morning and late in the evening to allow the working day for other lecturing and research commitments. This initially did not seem ideal but because the optimal time for accessing the UoS on-line facilities was between 10:00 and 16:30 Beijing time, it gave the students the best part of the working day to undertake coursework and research. The UoS staff in effect doubled their normal teaching load by having to give the same lecture series to both sets of MSc students. In terms of assessment, all coursework was double marked by BJTU and UoS staff and students received feedback on all submissions according to UoS quality assurance procedures.

Plans for modification

The course is currently suspended for the 2006/07 session while a new contract is agreed between the two universities. From the experience of the first years course, several alterations will be made:

1. Agreeing a fairer distribution of workload between the BJTU and UoS staff to reduce the latter's administration costs
2. Identifying more effective procedures to pass tuition fees from BJTU to UoS
3. Fully utilise the capabilities of Blackboard to enhance the learning experience of the students. Specific ideas would be to pair up UoS students with BJTU students for joint assignments and peer review exercises.
4. Identify methods to integrate the students experiences into the course modules to make the learning experience more rounded.
5. Investigate the potential for a 2-year part-time option for the course in BJTU, specifically targeted at transport professionals in industry.
6. Better understand the student target market and the process of post graduate course selection in the Chinese academic system.

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