



Research Report

**The Internationalization of Cooperative Education: A Thailand Perspective**

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As the world moves to a situation of increasing globalization, cooperative education has experienced growth in demand for international placements. However, this globalization of cooperative education has not been accompanied by research to support the outcomes of such growth. Here we report on a case study involving research into Thai students' experiences of international work placements in a variety of overseas countries, and overseas students completing work placements in Thailand. The research findings found similarities in this exchange between non-Western and Western countries, with other exchange arrangements between two Western countries. As might be expected, the students encountered some difficulties with immigration, language and communication difficulties. Advantages reported included perceptions of improved self-confidence and career enhancement. The research also found that cultural differences are of particular importance in international exchange arrangements between non-Western and Western countries, or countries of different cultures. The findings reported here provide placement coordinators with an understanding of some of the challenges students face in a country different to their homeland and we conclude with recommendations to smooth this sometimes difficult transition. *Asia-Pacific Journal of Cooperative Education, 2003, 4(2), 1-6*.

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Cooperative education (co-op) programs worldwide have experienced a student-driven increase in demand for international placements. These placements are typically carried out as exchange arrangements in conjunction with other tertiary institutions. Securing international placements is a complex and resource intensive process (McCallum & Wilson, 1988; Reeve 2001; Reeve, Schultz & Laslett, 1998), which frequently proves problematic (Heller & Geringer, 1984; Lee & Swinth, 1986) and there are now international organizations dedicated to facilitating such exchange (e.g., International Association for the Exchange of Students for Technical Experience [IAESTE], 2003). In recognition of the difficulties associated with international co-op exchange, the World Association for Cooperative Education (WACE) recently produced a set of guidelines for facilitating international placements (Reeve et al., 1998). This comprehensive document provides suggestions for addressing the numerous logistical difficulties involved in securing suitable international placements. However, there have been few

reports of students' or employers' experiences of international exchange placements in the literature (but see, Coll, Owusu-Banno & van Loon, 1999; Dowdle, 1996; Gorman & Scott, 1996).

The strong interest in the internationalization of co-op was highlighted at the 12<sup>th</sup> World Conference on Cooperative Education held at Suranaree University of Technology in Nakhon Ratchasima in Thailand in July 2001 the theme of which was "Globalization of Cooperative Education: Adoption of Borderless Systems". The present inquiry adds to the co-op literature in that it builds on a similar study of students' perceptions of local placements in Thailand (Coll, Pinyonattagarn & Pramoolsook, in press; Coll, Pinyonattagarn, Pramoolsook & Zegwaard, 2002), and of students involved in international exchange arrangements between New Zealand and other Western countries (Coll & Chapman, 2000a).

Co-op has been exhorted worldwide as an effective means for the development of graduates with desirable work competencies (see, e.g., Hodges, Rainsbury, Burchell &

Brown, 2001; Rainsbury, Hodges, Burchell & Lay, 2002) and this is also true for international placements in which technologies may be transferred (De Lange, 2001, 2002) or graduates may add an important cultural dimension to their education (Myers, 2001).

Coll and Chapman (2000a) found that New Zealand and European students reported a number of advantages in being involved in international placements, including perceptions of enhanced career profile. However, the greatest growth was not in technical skills, but in terms of personal growth with student reporting increased self-confidence and enhanced communication skills as a result of their international placements. Similar perceptions were reported by Gorman and Scott (1996) with these authors reporting that the difference with international placement experiences came mostly in terms of personal development: the placements produced more balanced, well-rounded students with better interpersonal skills (see also, Dowdle, 1996; Cass, Faraday, Schultz & Ward, 2001). As Hodges et al. (2001) point out, such skills are valued by modern employers of business students and Coll, Zegwaard and Hodges's (2002a, 2002b) studies suggest this is also the case for other disciplines such as science and technology.

## Context

The context for this inquiry, namely the tertiary education system in Thailand and technology and engineering at SUT, is described in detail elsewhere (see Coll & Pinyonathagarn, in press) and we briefly summarize the main features here.

Suranaree University of Technology (SUT) is situated in the province of Nakhon Ratchasima in Thailand and is the first university to operate as semi-autonomous institution responsible to, but not under direct control of, the Thai civil service. The University was established over 10 years ago to serve the peoples of the eastern provinces. It is the first institution in the country to use cooperative education as an educational strategy for preparing students for Thailand's workforce. The program was developed from documentary reports, literature, and faculty visits to North American tertiary co-op providers in an attempt to achieve best practice in development of co-op in Thailand.

The University is organized under five institutes with schools the next level of administration (Suranaree University of Technology [SUT], 2000; Teekachunhatean, 2001a). Institutes and Schools are: *Social Technology* - incorporating General Education, English, Management Technology, and Information Technology; *Engineering* - with Agricultural, Transportation, Chemical, Mechanical, Computer, Ceramic, Polymer, Electrical, Telecommunications, Civil, Metallurgical, Environmental, Industrial Engineering and Geotechnology; *Agricultural Technology* - with Animal Production, Crop Production, Food Technologies, and Biotechnology; *Science* - with Physics, Chemistry, Biology, Mathematics, Remote Sensing and Laser Technology, and Photonics; and, *Medicine* - with Environmental Health, and Occupational Health and Safety.

After beginning studies in his or her major field, a student is required to take a co-op placement comprising a trimester

out of a total of six trimesters plus one month of the term break resulting in three work terms each with a duration of 12-13 weeks. The University runs an international exchange arrangement which is the focus of this study (Teekachunhatean, 2001b).

## Research Objectives

The co-op program at SUT, based on an international model gleaned from the literature, and in-depth consultation with overseas institutions has been implemented and maintained at SUT to provide what the University believes is superior education resulting in multi-skilled graduates with workplace competencies desired by Thai and overseas employers. Here, we have conducted an in-depth case study of students' perceptions of their international work experiences as it pertains to the Thai perspective, including reports from Thai students who did placements overseas, and overseas students who did work placements in Thailand. These exchange arrangements are purely for work placements and do not include a study and work exchange arrangement. The research question for this study is: *What are Thai and international students' views on their overseas work-placements?* In particular, we wished to probe students' views on the best and worst features of their overseas placements.

## Theoretical Basis for the Inquiry

The research reported here subscribes to an interpretivist philosophy in which the role of subjective experience (of participants and researchers) is recognized and acknowledged (Guba & Lincoln, 1989, 1994). This view means that the most appropriate research approach is via qualitative means of inquiry typified by the use of in-depth techniques such as interviews, examination of documentary evidence, unobtrusive observation, and so forth. The subjective nature of such studies proves to be both an advantage and a disadvantage. The main advantage lies in the extra depth of understanding gained from intensive data collection methods like interviews. As Patton (1990) points out, a questionnaire-based survey may provide an overall view of a learning context (e.g., the success or otherwise of SUT's international co-op program), but interviews provide underlying reasons for the findings of a survey - which may ultimately be of more value to co-op practitioners (e.g., why SUT's international program has been successful, or ways in which it might be improved).

Interpretivist inquiries whilst recognizing the importance of context and subjectivity are prone to problems with reliability and validity. Guba and Lincoln (1989) provide some guidelines to avoid such problems. In particular they and others (e.g., Denzin & Lincoln, 1998) recommend the *triangulation* of data collection. That is, the gathering of data from multiple sources, particularly by the use of different methods (see, Coll & Chapman, 2000b, for more detail as this issue pertains to co-op inquiries). Interviews in particular are prone to misunderstandings and we have thereby employed the notion of the translation interface in which no new terms were introduced during discourse, and

only the meaning ascribed by participants was deemed to be valid (Johnson & Gott, 1996). Interpretations of data are supported by the so-called thick description (Merriam, 1970) including a detailed description of the context of the inquiry (see above), and portions of verbatim transcript reproduced from interview transcripts (see 'Research Findings' below).

## Methodology

### *Data Collection and Analysis*

The main data-gathering tool used to gain a view of the students' views consisted of interviews of a cohort of five Thai students who completed their placements overseas and three international students who completed placements in Thailand. The interview protocol was based on that used by Coll and Chapman (2000a) and consisted of a 35-point checklist of issues that the authors considered might influence student perceptions of their placement experiences (e.g., costs, immigration, travel, health, loneliness, work culture, etc.). Interviews were conducted in Thai for the Thai students and in English for the international students. Interviews were tape-recorded, and for the Thai participants transcribed verbatim in Thai, and translated into English. Two external individuals bilingual in Thai and English with no contractual interest in the research project checked all interview transcriptions. Pseudonyms (using common Thai nicknames) have been used in any quotations to protect the identity of participants, allowing them to respond freely. Other data of relevance were obtained from examination of student placement reports.

Data analysis involved the use of *Concept Profile Inventories* (CPI) (see, Coll & Chapman, 2000a). The CPI procedure consists of examination of interview transcripts for expressions and statements that could be construed as evidence for students' perceptions (in this case of the advantages and disadvantages of their overseas placements). These expressions were summarized and formed the unit of analysis. By examining the entire set of expressions in the transcripts, we were then able to gain a global perspective of the participants' views of what represented advantages or disadvantages. These views were then placed into a series of categories which form the *Conceptual Inventory* for an individual participant. Commonality of views among participant concept inventories was deduced from examination of the individual inventories, and used to summarize the research findings. Our interpretation of the research findings are described here and are supported by extracts from the verbatim transcripts.

## Research Findings

### *Student Perceptions of the Benefits of their International Placements*

#### Interpersonal Skills and other Gains

One of the principal benefits reported by the Thai students was enhancement of their communication skills, specifically, their English language skills. So, for example,

Thai students in Malaysia and Croatia communicated with work colleagues and local citizens in English. Sao commented that "this is the most beneficial skill for co-op abroad. My English skills, especially pronunciation and conversation, have been improved very much." Some students also reported picking up a bit of local language. Sauy commented that her language competency in English improved because "I had to speak English every day" and going on to say "I also learned to speak a little Malay too," because "people in Croatia don't speak much English."

The Thai students clearly identified new business culture experiences as important gains. Tum pointed out "I now understand more about overseas companies and how they work. Their working situation is quite different to Thailand." Thus, it was evident that the participants felt they had gained a better understanding of different cultures, this it appears, gave them more some insight into how culture can influence workplace customs as seen in Tor's comment: "I understand more about overseas companies and how they work. Each company has their own policy and their own way. Laws, culture also affect their work. In Malaysia there are two hours after lunch on Fridays because Muslim men have to pray."

International students working in Thailand also reported enhancement of English language skills. Samantha commented that her placement "improved my language skills" and reported picking up some Thai language at the same time. However, any language skills were closely linked to gaining knowledge of Thai culture as well as language, as seen in Jenny's comment that she learned to "understand more about other countries cultures and know-how." She went on to say this "allows us to have a critical point of view on yourself, and to acquire an open mind." However, whilst this was seen as a benefit, it was impacted on by placement duration with Tum commenting: "Because I just stayed there for three months, it is quite short to learn everything in a different culture."

Interestingly, the students did not specify that they gained in self-confidence as such. However, the above comments suggest that this did occur, mostly as a result of enhanced language skills and understanding of different cultures. Jenny when discussing her perceptions of career enhancement, provided evidence of her enhanced confidence:

I feel now that I am not a new graduate. I have work experience. I have learned how people work in the real world. I have more self-confidence and am ready to work. I think these are advantages and many companies look for this kind of staff, even with new graduates."

#### Career Enhancement

All of the students reported that they felt an international placement enhanced their career prospects. Son said: "I think I will have better employment prospects and I will be considered before other candidates," and Sao likewise commented: "I hope so, I hope it should be better. I met lots of people overseas and different cultures." This, he felt, would help satisfy immigration requirements:

“Yes of course. I hope this will now be fine for me,” and Ton saying “I now know how to make contacts when I would like to go abroad again.”

One reason that international placements were deemed beneficial to career aims for Thai students, was that it was considered to provide good evidence for language ability. Tor comments: “Absolutely. At least that can guarantee your English ability.”

#### Travel, Lifestyle Issues, and Home Contacts

The participants experienced differences: cultural, climatic and others from their home countries. Climate, although different to home for Thai students, was generally similar enough to be of little concern. Tor said: “The weather in Malaysia is very nice, a little bit cooler than in Thailand.” Even in colder countries the cold was seen as novel and interesting rather than particularly off-putting. Ton commented about the weather in Croatia that is was “very good. I like cool weather.” The international students, as might be expected, found Thailand rather hot: “It’s too hot for me,” commented Samantha.

The placements were of relatively short duration (3-6 months). Nonetheless, the participants reported forming strong ties with work colleagues and other locals. Tor points out: “I think that it is a good time to make a lot of new friends,” and Ton said “I had a great chance to participate in different cultural activities with my work colleague.” Tum likewise said that he “formed a good relationship of a friend to remember.”

Local travel was typically accessible for the participants and this enabled them to explore their host countries: Tor said: “Transportation in Malaysia is very convenient. I took the train around Kuala Lumpur nearly every weekend. I went to visit my Malaysian friend and her parents in another town too.” Few, however, reported engaging in any unusual recreational activities with Tor saying she enjoyed “normal Muslim activities” and Tum likewise enjoyed “some traditional dancing that I hadn’t seen before.”

The short duration of the placements may have mitigated against any concerns about contact with home. Home contacts were maintained by phone calls as seen in Tum’s comment: “I frequently made a telephone call.” But overall communication was not seen to be a big issue for the participants as there were a variety of options open as Tor pointed out: “I called my parents at least once a weekend, often wrote to my friends and also used email.”

#### *Student Perceptions of the Difficulties of their International Placements*

##### Immigration Issues

Immigration procedures varied depending on the relationship between the countries, and, for example, Tor said:

I did not have a visa the first time because we had planned for the co-op in Malaysia for only two months. I could get a passport stamp for just one month and then

another month. Unfortunately, I needed two weeks more [to complete the placement] but I could not get a longer time. So we had to get a visa. I had some problem with the visa, but the company took care of the process.

Pre-planning did alleviate immigration issues for students with Ton unconcerned about immigration procedures, because “I had allowed enough time for preparation.”

Overall, however, immigration procedures surfaced as a major logistical difficulty for the students. In some cases this was due to the fact that there was no embassy in the students’ home country: Tum comments: “It took a long time, to wait for the visa because there is no Croatian embassy in Thailand. We had to send the application form to Indonesia and so it took a long time to get the permission to enter Croatia.”

##### Language Difficulties

Despite seeing enhanced language skills as a significant benefit, all respondents reported communication problems both at work and in daily life, particularly at the beginning of their placements. Ton said: “This is the most difficult problem for me at the initial co-op period. Because in the first two months, my English was not improved very much.” Whilst this was a problem initially, it soon improved. Ton continues: “However, much later on, I can speak fluently and can communicate much more efficiently.”

Language problems were acute for international students placed in Thailand with Samantha saying she found it “difficult to do the internship because I was unable to communicate well with others.” She felt it would be better to “improve people’s English skills [i.e., in Thailand] because in some countries there are not a lot of people who can speak English.”

##### Placement Preparation, Placement Tasks, and Employer Expectations

The participants generally considered that they were under-prepared for their overseas placements. Jenny comments that coordinators need to “improve the local know-how” and the Thai students commented likewise.

Placements were not always deemed directly relevant to studies but students felt they gained knowledge and skills that were useful with Jenny seeing her placement was “relevant to my studies,” Tor likewise commenting that her placement “project covered my studies, it was very useful.” Tum likewise said his placement “was all about crop production” clearly relevant to his program of study.

Unreasonable employer expectations were not deemed much of a problem: “What the company wants is students to get the feeling of working with people from different cultures, and to learn how to apply knowledge in the real work.” Other comments included “my employer just wanted to exchange knowledge about agriculture in Thailand” with Tor the only participant to point out that he had “to learn new things in a very short time, to adjust myself to a new environment.”

The final major issue was duration of placements, with all respondents considering that their placements were too short in duration as seen in Tor's comment that "two and half months is just too short to complete the project." Another reason this was considered a problem was because of the language issues described above as seen in Tum's comment that "I think for language skills the time should be extended to around one year."

A few students reported being homesick or lonely, but because of the short placement duration and the communication options described above this was not a big issue. Likewise, finances were not deemed a problem for Thai students: "It wasn't expensive to live there [Croatia]," "I got enough salary for living," nor for international students in Thailand with Jenny saying it was "no problem."

### Discussion and Conclusions

The research findings reported here provide some insights into student experiences as part of international exchange arrangements across different cultures. Interestingly, similar issues were raised by the students as were raised in a previous Western-based study by Coll and Chapman (2000a), although it should be noted that it is possible that this is a feature of the methodology used (i.e., a similar interview protocol was used in both studies). Hence, immigration problems were an issue, self-confidence was an advantage, but there were new issues raised, mostly to do with language (as might be expected). Likewise, cultural experiences added to the learning experiences, something not easily achieved in one's home country (see e.g., Cass, Faraday, Schultz & Ward, 2001), and as reported by Gardner (2001) and Waryszak (2000). Placement preparation and support were not generally provided as desired.

Gunn (2001) points out that communication skills are important for co-op and non-co-ops, a finding confirmed by Hodges et al. (2001). Friedrich and Gunn (2001) argue that international co-op has the potential to enhance students' interpersonal skills in a manner not easily achieved via local co-op placements. The findings here suggest these participants agree that this is the case.

### Implications and Recommendations

Given the modest sample size and highly contextualized nature of this study, it would be imprudent to attempt to over-generalize these findings. Nonetheless, they provide an indication of some important issues for international students and here we make some suggestions that co-op practitioners may wish to consider.

First, is the issue of immigration: as has been reported elsewhere, good lead times are essential in reducing student stress over immigration procedures.

Likewise, the duration of the placements needs to be longer, say six months. This seems especially relevant in the case of international placements where language and other enculturation factors (e.g., into a different working environment) are important. Although it should be noted

that being away for a short time can act to alleviate homesickness. Better preparation of students is needed before embarking overseas. On-going placement support by faculty during placements is essential.

Given that the co-op program at SUT was set up as a model for co-op in the nation the findings from this case study provides some food for thought for other practitioners in Thailand. The study also highlights common, in some cases predictable, problems associated with international work placements. It is interesting to note that these issues are similar to other exchange programs, irrespective of the country of origin and destination although there were some differences (e.g., language, living costs, etc.) that are peculiar to exchanges between Western and non-western nations. Hence, the study adds to the body of knowledge in the area of international co-op exchange and presents findings that confirm similarity of issues across different educational contexts, whilst identifying some differences. Additional research in other education exchange arrangements may help to better understand the complexities of internationalization of co-op.

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