

Outside the Comfort Zone - Technical Development in Thailand

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Abstract

We always learn a lot when involved in assisting others. Being involved in a development program in Thailand was a rewarding three year journey. What began as a culture shock right outside the comfort zone has led to professional development, international collaboration and personal friendships.

Experiences and lessons are drawn from involvement in the Thailand – Australia Science & Engineering Assistance Project (TASEAP).

Keywords: professional development, international, technical

Introduction

The role of technical staff is definitely changing. University learning environments along with school and faculty structures in many cases have undergone significant change (Bullen et al 2000). Change is constant and can vary from new tasks or projects to complete reorganisation of schools and faculties. The need for professional development is critical to continued personal growth and being able to meet the needs of the organisation. Required capabilities, in many cases go well beyond traditional technical expertise.

This paper looks at personal development in a context of providing training and development in technical aspects for people in another country. John Dewey's statement that "All genuine education comes about through experience" is a cornerstone on which we base our laboratory and practical teaching. Roger Schank in his paper "What We Learn When We Learn by Doing" (Schank 1995) clearly identifies the benefits of learning by doing and builds on work by Dewey. It holds true for our own education. When we experience new things, learning for us is an inevitable outcome. Quite often, getting worthwhile experiences places us very much outside our comfort zone. Being involved in a program to help other people in a foreign country is one of those experiences.

TASEAP Program

From January 1998 until December 2000 three technical staff from Australia were engaged in the Thailand – Australia Science & Engineering Assistance Project (TASEAP). They were Gary Rasmussen and Les Dawes from engineering at Queensland University of Technology and Piers Brissenden from science at the University of Adelaide. All were practitioners in laboratory work and technical management with little experience in significant training projects of this type. The purpose of the technical development component was *"to enhance the management, improvement, and execution of generic procedures and processes for the efficient utilisation of university laboratories to support both teaching and research activities"* (TASEAP 2000).

Major activities included:

- Needs analysis of engineering support staff development.
- Workshops and university visits for training in laboratory management and operations for science and engineering.
- Needs analysis for asset management training and information systems.
- Workshops and university visits for training in asset management for science and engineering.
- Fellowships in Australia for technical development for science and engineering.
- Network forums and university visits with Thai fellows for science and engineering.

Only three technical staff were appointed in this extensive program funded through AusAid and the Royal Thai Government. Fourteen million US dollars in Australian aid was provided to assist

thirty six science and engineering faculties across twenty one public universities throughout Thailand. At the same time and operated from the same office in Bangkok was an equipment procurement program worth one hundred and forty million US dollars in World Bank loan funding. The technical development component was one of many, such as curriculum development, university management, research development and the like. These components were all undertaken by Australian academic staff.

To say that this experience, at the beginning, was outside the comfort zone is probably an understatement as this account from Gary reveals;

"I arrived in Bangkok on a direct flight from Brisbane soon after midnight on Thursday 15 January 1998. The only place outside Australia I had been was New Zealand with my family and friends, eleven of us in total, in September of the previous year. It hardly qualified as preparation. Here I was arriving in an Asian mega city with four weeks of a completely new type of work ahead. I looked out of the plane window through the yellow smog haze under the high tarmac lights and wondered what on earth I was doing here alone. Was I apprehensive? You bet I was!

The TASEAP long term engineering team leader met me after I cleared immigration. This was done for first timers, after that you were on your own. Through the terminal doors and it all hits you at once. High temperature and humidity, even for a Queenslander, and the smell of mixed fuel fumes that sticks in the back of your throat. At least the traffic is reasonable in the early hours of the morning so I was settled into my hotel apartment by about 2am. "We will meet in the foyer at 8:30am to go to the office, good night".

Science and Engineering Programs (or 2 + 1 = 3)

The technical development program was initially undertaken on two fronts. Science and engineering were being managed as separate entities. After a needs analysis carried out by Gary in January 1998 engineering faculty visits and workshops were conducted by Gary and Les in June and November 1998.

Les remembers responding to Gary's email from Bangkok in February 1998 in words that can't be printed here. *"Gary suggested that I apply for a short term advisor position recommended in his needs analysis to help him develop a resource kit and then present this at 2½ day workshops in Thailand. In June I found myself in Bangkok having arrived late on Saturday night. At least I had a day to get acclimatised and I wasn't alone. After being dragged around Bangkok's klongs (canals) and walking what seemed like a marathon in 38 degree temperatures and humidity in the mid 90's, I wondered what was I doing here and would I survive.(well outside my comfort zone) On Monday a visit to the office didn't fill me with confidence. On Tuesday we had a pre-workshop visit to check out the room we were presenting in and to talk to the host university about what we were presenting. Wednesday 8.00 am, workshop 1 of 8 was about to commence. Gary and I were seated at the front of the room in large leather lounge chairs. We had met the Dean of the Faculty of Engineering, Dr Bundit, the day before. He was opening the workshop of 40 people at King Mongkut's Institute of Technology in North Bangkok. In attendance were heads of department, academics and technical staff. I was feeling apprehensive and a bit overwhelmed with the task ahead. Dr Bundit went on to say "We are extremely fortunate today to have two young gentlemen who have done a good job, if not an exemplary one, in running their own laboratories and workshop facilities back in Australia, to share with us their experiences in running and reforming their organisation. They are here to show us what a properly managed technical support team and facility look like. I can guarantee that there is going to be a lot of take home value out of this workshop because I know these two gentlemen have painstakingly put in many hours to specifically address our needs." Here was the Dean of Faculty telling his staff that we were experts. Well, we did know our stuff and had put in loads of hours. The proof would be in the reception and that turned out to be great. All of our workshops and material was well received with plenty of questions and interaction. I began to feel more comfortable, but never totally."*

In November that year Piers Brissenden was also conducting a series of similar activities in science departments as part of the Ecology sub-program. Gary and Piers were both heading to Thailand for activities in November and met for the first time on the aircraft. Les followed a week later. This was the third visit for Gary, second for Les and first for Piers. A strong friendship developed and continues today.

Words from Piers at that time recall some experiences.

"Well that's it! I've just finished my final report. Hopefully the Thai universities will follow up on my recommendations and have all their problems solved by Christmas (no harm in being optimistic). The last two weeks have been pretty flat out with two visits being outside Bangkok for two days at a time. I've visited 8 universities and gave 7 workshops. The attendance varied from 26 people to 4 and had pretty good participation and feedback. The important thing was that I was taken for lunch at nearly all of them. The Thais really know how to enjoy food and whenever I said it was time for a break their eyes lit up and people were heading for the lunch room. I think I am going to miss that (free lunch I mean). Anyway, enough of work; let me talk about my free time.

I went to visit the bridge over the river Kwai last weekend and booked into a tour run by the State rail authority of Thailand with three other advisors from TASEAP. We left from a Bangkok station at 6.30am and headed out towards Kanchanaburi - 200km to the NW. All was going smoothly until 9.30am when the train tee-boned a concrete truck and derailed the first carriage. These things happen -especially in Thailand. So we got out and waited patiently in a small country town while the tour organisers arrange 4 buses. (4 buses? Yep, pretty big tour - like 200 people and we 4 are the only foreigners). We ended up two hours behind schedule but saw the bridge, the train track, a viaduct, a temple, the river and one of the war cemeteries so we had a pretty good day (at least better than the concrete truck driver). The really fun part was the train trip home where, we were beset upon by young Thai girls who were keen to talk and have a photo taken with us. As it turned out we had joined a group of 150 hospitality student from Bangkok Uni who had gone out on a field trip for the day. The students in our carriage were quite happy to talk to us and we ended up learning a fun game which involved guessing the number (in Thai) of fingers a group holds out. (I even won a round!)"

Although no previous contact had been made or any common directives given on what to present the engineering and science activities covered very similar topics. Piers presented his material while Gary and Les presented theirs at selected universities throughout Thailand. Each region was covered with staff in other universities in the region invited to the workshops. Being technical people, the very nature of the work, and having to overcome many obstacles bound the small team together. What was somewhat of a daunting experience for individuals became a creative work in progress for the small team. Levels of confidence rose sharply and that comfort zone sometimes settled in for a while. Personal development was occurring with lessons learned often becoming the topic of conversation in the informal, and necessary, debriefing sessions. It doesn't matter who wrote the quoted text below. We have all said it.

"We liked to arrange university visits so all three of us could be back in our hotel at the same time. Some visits out of Bangkok would take two or three days and often we would leave the hotel well before sun up to catch an early flight or taxi to an outlying university. The schedules were always hectic and where ever you went an afternoon session in a traffic jam getting back would really finish you off. Walking in through those big glass doors of the hotel and feeling the cool air was just so good. It was a delight to sit, Carlsberg in hand, with our feet on the window sill looking out on the bustle of Bangkok below. This was a time for relief and debrief. Where had we been, what had happened, how can just three of us hope to make any difference in developing the capabilities here? We also often reflected on what we did in that other place of work so far away, both in distance and in daily task. One observation was that here we could really focus on one main task while at home we were torn between so many. One of the things I miss most, besides the Thai food, is those after work, window side, chats."

Asset Management Program (or working together)

That November of 1998 another needs analysis was carried out in relation to training for asset management. It was obvious that the team was well positioned to take on this next phase so in April 1999 another month long session of workshops was conducted. This time the team was a fully functioning unit working on the same activity. Obstacles that often arose in the TASEAP office and program operation were overcome more easily and a way of working to ensure the best outcome was developed. The context of operation had not changed and the challenges were still significant. What had changed was the abilities and confidence of the team. This was later to be extended to the larger team of six Thai staff and the three Australians.

Fellowship Program (or mai pen rai)

A year after the asset management component contact was made by the TASEAP office again in relation to a fellowship program. Six Thai staff spent a month in Australia followed by a month of work together in Thailand. This proved to be one of the most beneficial activities of the technical development program.

During the two months working together a new team was developed. The Thai fellows were from a diverse range of disciplines and both technical and academic staff. They represented universities in regional areas of Thailand and Bangkok.

The main themes of development were:

- Management of Laboratory Areas
- Management of Laboratory Equipment
- Laboratory Health and Safety
- Quality Assurance and Calibration of equipment
- Procedures and Processes for Utilisation of equipment
- Working as a Team
- Establishment and development of Network Systems
- Planning Short and Long Term
- Services to Industry and Income Generation
- Test Authority Accreditation

Much was learned from the experience by all involved. Aspects of team work and planning were an every day activity especially in Thailand. The logistics of undertaking a country wide series of technical staff development forums in a short time frame were difficult. Many challenges faced the group and some adversities. With a positive approach and much reflection on issues that arose the job was accomplished with excellent outcomes. The Thailand Australia relationship became truly strong as all worked together.

Comments from the Thai fellows about the forums like; *“The people who attended the forums are the ones who are eager to solve the issues at their workplace”* where the audience consisted of lecturers, laboratory technicians, and administration staff indicate willingness to work together in achieving common goals.

This comment from the Thai fellows might be applied to our universities. *“Despite many problems, most universities do not give much importance to the technical development issue. The people who are involved in these issues are mainly the technical staff. Therefore, this forum serves as a platform for these technical staff to discuss ways to solve the issues.”*

While in Australia learning and preparing for the month in Thailand the Thai fellows were quite apprehensive of the task ahead. They were not totally clear what really was going to happen and how the forums would be accepted. This type of activity was not normal for them and networking of technical staff almost non existent. A great deal of trust had to be developed and faith that the new team could carry out the task. It is probably fair to say that a lot of reliance was placed on the three Australians to carry the program in the beginning. It is also extremely pleasing to comment that in the end the Thai staff carried the load and exceeded their own expectations. The last forum scheduled for Hat Yai in the south was cancelled due to severe flooding. It was decided to reschedule for December with the Thai fellows conducting it on their own. The last forum was a success in many ways and was an excellent finish to the program. Apprehension had turned to confident application of newly acquired skills. The learning from experience had certainly manifested itself well in a short (and intense) time.

After TASEAP (or collaboration and friendship)

The technical development component of TASEAP ended with the last forum in Hat Yai December of 2000. Collaboration and friendship have continued ever since. Maejo University, Chiang Mai, in particular has taken up the challenge of continued structured development of their technical areas. This has been lead by one of the original fellows, Dr Nopmanee Topoonyanont. Dr Topoonyanont has visited QUT again and Gary has returned to Chiang Mai two times to work with them in Maejo University. Gary and Nopmanee co authored a paper

“Learning Environments – Laboratories at the Cross Roads” for the 7th UICEE Annual Conference on Engineering Education, Mumbai, India, February 2004 (Rasmussen, Topoonyanont 2004). Relevance to every university can be seen in this extract from the paper about the Maejo project.

This example shows that changes of this type are possible and can have a university wide impact. Imperative aspects are;

- Awareness - of the problems and wish to improve.
- Partnership - academic and technical staff work together.
- Support - senior management are supportive and recognise the needs.
- Drive - mechanism to initiate and progress the development.

In this case the change process has been a bottom up approach. It is proving most successful due to the enthusiasm and ownership of staff at the operational level where the needs can be met.

Piers, Les and Gary maintain contact with each other and with many they met and worked with in Thailand.

Outcomes

The main aim of the technical development component in TASEAP was providing staff in science and engineering faculties with applications oriented knowledge and skills in a number of management, quality assurance and safety areas. One of the primary aims of the Thai Fellowship program was to learn from each other by sharing knowledge and experiences. Not expected, was the immense satisfaction of contributing to professional development of our Thai colleagues along with our own personal development.

Personal outcomes noted by the Thai fellows included:

- Development of interpersonal relations between Thai and Australian team members, sharing of cultures and friendships.
- Increase in knowledge of systems relating to laboratory management, quality assurance and occupational health and safety.
- Appreciation and experience in developing an effective team and achieving planned goals and objectives.
- Networking with forum participants to formulate strategic initiatives for common issues.
- Heightened awareness of management issues in the Thai public higher education system.
- Heightened awareness of the importance of interactions between academic and technical support staff for effective management.

Personal outcomes noted by the Australian contingent included:

- Personal development.
- Friendships with Thai staff, Australian university staff, and career referees.
- Ongoing linkages with Thai universities.
- Opportunities for continuing work.
- Recognition by our own university of our capability and initiative.
- Experience in working in another country.

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Figure 1 – The full team (2000)

Conclusion

"We don't receive wisdom; we must discover it for ourselves after a journey that no one can take for us or spare us."

- Marcel Proust 20th century French writer

The things we do are not always comfortable and in fact pushing the comfort zone boundary is essential to growth. This experience was a journey of discovery for all of us and has become a benchmark of sorts and a reference point in so many ways.

For all concerned, Australian and Thai alike, culture shock and a wish to be spared at times has led to the receipt of wisdom. The journey continues.

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