

## AJCE Activity 2010

### Young Professionals Exchange Programme (YPEP) 2010

-A bridge of friendship connecting Australia and Japan-

**Keiichi KANAI**

Chair, Professional Development Promotion Sub-Committee, AJCE  
CTI Engineering Co., Ltd.



Young Professionals Exchange Programme (YPEP) was established in 1996 according to the Memorandum of Understanding between AJCE and ACEA (present Consult Australia) to promote good relationship and friendship between Japanese and Australian young consulting engineers, in view of possible future collaboration among participating firms. In the past 15 years, more than 100 young engineers from Australia, New Zealand and Japan attended this programme, and it has been attracting attention of other organizations like FIDIC, as a good example of successful overseas training program. In 2006, after a decade of active and meaningful exchanges, we added an important component, "Pre-visit Dialogue", to the programme, which requires trainees to communicate with host firms' personnel for several months before the visit on various issues; technical, cultural or personal.

The "Pre-visit Dialogue" helps the participants to understand each other well in advance and thus enables the actual training to start much easier. Last year, 6 Japanese young engineers from 5 consulting firms visited 5 Australian firms in 4 cities for 3 weeks.

In the post-training meeting held by the 6 trainees to share their experiences with AJCE's young professionals, they reported that they had very stimulating and fruitful 3weeks, full of technical exchange, discussion, site-visits, seminars and entertainment after work, of course. They also reported that they were really impressed by the difference between two countries on work environment, work habit and work-life balance.

I hope that all 6 young professionals will continue to develop their skills further, capitalizing on the precious experience, and maintain the network with the Australian engineers, which will be their valuable asset in the future.



Signing Ceremony of MOU in 1995

This year AJCE and its member firms will be welcoming Australian young professionals in October. I have no doubt that this year's programme will be a big success again, and add a new page to YPEP's long outstanding history.

#### Trainees of YPEP 2010

NO.	Company	Name	Host Company	Office
1	P.T.Morimura & Associates, Ltd.	Takamune Nagata	Steensen Varming	North Sydney
2	CTI Engineering Co., Ltd.	Hidenori Hanahara	Opus International Consultants	Brisbane
3	Oriental Consultants Company Limited	Takayuki Sato	BG&E Pty Limited	Perth
4	CHODAI CO.,LTD	Sumihiro Sawabe	Kellogg Brown & Root Pty Ltd	Brisbane
5	Nihon Suido Consultants Co., Ltd	Kazuhiro Kishi	Arup	Adelaide Melbourne
6	CTI Engineering Co., Ltd.	Asuka Ukese	Arup	Adelaide Brisbane

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**YPEP 2010 Report**



**Takamune NAGATA**  
 YPEP2010 Trainee  
 P.T.Morimura & Associates, LTD.

**1. Host Company**

Steensen Varming (SV), my host company is originally a Danish building services engineering firm. SV is based in Australia ever since SV involved in the building services design of Sydney Opera House in the 1960's. Around 30 staffs work at the main office in Sydney.



The main office in Sydney

**2. Pre-visit Training**

After the first meeting at AJCE, I sent an e-mail to Barry who was my mentor. I told that I am interested in the differences in the ways of business operation between Australia and Japan. It was very difficult to write e-mails in English as it was my first experience in communicating English through e-mail. Despite of this, I thought we could get to know each other well through the pre-visit training.

**3. Visit Training**

At SV, I learned various practical matters, the Australian standards in particular. I compared the energy standards of Australia with that of Japan. It was surprising to know that the internal heat loads such as man-made lighting load, etc. are much lower than those in Japan. It was also

remarkable that Green Star, the Australian green building rating system is used in about 80% of the recent projects completed by SV. Although we have a similar system called CASBEE in Japan, its application is much less.

On 13<sup>th</sup> October, I went to Canberra. The National Gallery of Australia has a huge air handling unit I had never seen before.



The huge AHU at NGA

**4. Acknowledgment**

Despite of my inexperienced English, I could pursue the trainings with satisfaction. I owe much thanks to Steensen Varming for their kindness and hospitality. I would like to extend thanks to CA, AJCE and PTM. for giving me a precious opportunity.



Engineers of Steensen Varming

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**YPEP REPORT in 2010**



**Hidenori Hanahara**  
YPEP2010 Trainee  
CTI Engineering Co., Ltd.

**1 Work-Life Balance**

What do you think about engineers who have 10 years career? In general, they are called as young professional engineers. I have been working for 10 years in my firm. When it comes to my specialized field of disaster mitigation planning, I can advise young engineers. But not engineers' lifestyle. Through this exchange program, I wanted to learn not only the knowledge about professional work, but also Australian lifestyle.

**2 Overview of Exchange Program**

- (1) Host Company  
Opus International Consultants
- (2) Program

Table1. Schedule of exchange program

Date	Contents
6 Oct. ~8 Oct.2010	Guidance Arrangements(program details) Blue dog training <sup>*a)</sup>
10 Oct. ~15 Oct.2010	Site survey <sup>*b)</sup> (Christchurch in New Zealand)
18 Oct. ~21Oct.2010	Site survey at South Bank <sup>*c)</sup> Interview(Disaster management, director of QLD) Presentation and discussion(in Opus) <sup>*d)</sup>

- a) Safety Training: Learned safety at construction sites such as BLUE DOG TRAINING.
- b) Site Survey: On September 4th, an earthquake of magnitude 7.1 hit Christchurch, NZ. I joined disaster response team in Opus and went to



Fig1. Damaged Heritage (need to demolish)

- site survey.
- c) Site Visit: South Bank is located in the right bank of Brisbane river. As you know, South Bank is the venue of EXPO88. Now this Area is redeveloped.



Fig2. Kaiapoi Town (north of Christchurch)



Fig3. Site Survey in South Bank

- d) Presentation: Through three weeks of training, I learned the difference between Japanese and Australian ways of work-life style. This issue was presented and discussed



Fig4. Presentation of Exchange Program

**3 Conclusion**

I had valuable experience in work-life balance in Australia and was encouraged to further nurture and enhance relationship with my family, colleagues and our clients. Many thanks to Opus, CTIE, CA and AJCE for providing me a valuable opportunity and support.

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### YPEP 2010 REPORT

**Takayuki SATOH**

YPEP2010 Trainee

Oriental Consultants Company Limited



#### 1. Introduction

I had an opportunity to stay at BG&E for three weeks in October 2010. This report is on visit-training and pre-visit training in YPEP 2010.

#### 2. Pre-visit Training

Before the visit to Australia, Pre-visit training took place for smooth implementation of the exchange program. Via E-mail, the training started from self-introduction, then to specialized subjects and scheduling of visit-training between host company and trainee.

#### 3. Visit Training

##### 3-1 About My Host Company

My host company "BG&E Pty Limited" is a highly skilled group of consulting engineers that is supported by expert structural and civil engineers. I visited Perth head office for the exchange program. Perth is beautiful city with mixture of traditional and new buildings.

The office which was rebuilt from a warehouse is very "cool". In addition, office space is very large and comfortable, which made me envious.



Perth office

##### 3-2 Training Program

###### 1) Working Style

Standard working hours are between 8:30am - 5:30pm. However, employees can choose work hours as long as the total work hour per week is satisfied. Office becomes empty at around 6pm. I felt the working environment is very different from Japan.

Staffs' drinking hour is provided in most Friday afternoon from 5pm. Majority of staffs participate

and exchange opinions. I felt that we need to follow such a good practice.



Drinking hour in the office

###### 2) Projects

During my training, I joined two big projects. One is GERI (Great Eastern Highway / Roe Highway Interchange) project. Another one is Gateway Vision project. GERI project is on the design of new interchange, and the Gateway Vision project is on planning and design of new road link for Perth airport. I joined site visit, attended meetings, and made calculation for traffic analysis.

#### 4. Life in Australia

In the off time, I enjoyed Australia's life with BG&E staff everyday. I enjoyed dinner at staff's home, drinking hour, climbing, sailing, bike ride, surfing, Fremantle visit and more. It was a precious experience for me to touch Australia's unique culture and lifestyle, and to watch Japan from another aspect.



Dinner at staff's home

#### 5. Acknowledgments

Thanks to everyone in BG&E and CA and AJCE, I got a great experience and had many fun times. I hope this program will continue and more engineers experience this valuable training.

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**YPEP2010 Report - My experience in Australia -**



**Sumihiro Sawabe**  
 YPEP2010 Trainee  
 CHODAI CO.,LTD

**1. Introduction**

I had training at KBR as YPEP2010 trainee in their Brisbane office, Civil Group.  
 I have given various opportunities and was able to exchange knowledge through the work in office, site visit and home stay with David's family.

**2. Work Experience**

I had training in Civil Group of the Brisbane office, where I assisted the plan of drainage facilities, and checked the drawings of the LRT design project in the Gold Coast city. Though I was not used to make drawings in my work in Japan, a young engineer in KBR, Trung helped my drawings. So I could accomplish assignments. It was a valuable experience.  
 I was also able to visit Clem7 Tunnel Control Center, Brisbane Metropolitan Transport Management Center (BMTMC) and construction site of water pipeline (Pringle Hill Tunnel) in Sunshine Coast. We were able to exchange ITS technology in Australia and that in Japan. I recognized the importance of water engineering in Australia through the site visit.

**3. Cultural Experience**

I enjoyed visiting pub and Japanese restaurant with young engineers in KBR and friends after work. It was a memorable experience visiting Koala Garden and whale watching in Gold Coast. Surely it was one of the Australia's greatest weekends. Friendly relationship with KBR's staffs was splendid experience for me.  
 I stayed in David's house in the second weekend of my training. During this home-stay, I could explain Japanese culture and custom while enjoying Australian food.  
 I cooked myself sometimes as the apartment is equipped with a small kitchen. Steaks I bought in a neighboring supermarket were large in size, tasty and reasonable price as well in comparison with those in Japanese market.

**4. Summary**

During YPEP2010 Program, I had much precious and valuable experience with KBR and made a lot of friends.  
 I thank CA, AJCE, Anna san, David san Leon san and engineers in KBR Brisbane Office for their heartfelt hospitality.



Civil Group at KBR Brisbane office



David's family

## AJCE Activity 2010

### Training Report of YPEP

**Kazuhiro KISHI**

YPEP2010 Trainee

Nihon Suido Consultants Co.,Ltd



#### 1. Introduction

I heard about the Young Professionals Exchange Program in the past, but I was aware that I wouldn't have a chance to participate in this program because of my ability in English. Despite of these difficulties, I decided to challenge in this exchange program because I thought it may be my last chance to participate in YPEP.

It was quite fortunate that I was selected as a trainee. I thought it would provide me a golden opportunity.

In this report, I present pre-visit training and visit training in Australia and what I learned in this exchange program.

#### 2. Pre-visit Training

In pre-visit training, I exchanged E-mail with Hilary-san in ARUP. (She was a trainee in YPEP2009.). As I didn't have much experience in English E-mail, I studied a book on English E-mail. This was a valuable experience.

I received reports on water issues in Australia, covering shortage of water and water recycling. So I could understand outline of water issues in Australia before visit training.

#### 3. Training in Australia

##### (1) Schedule

Oct 5<sup>th</sup>; Introduction CA, Sydney

Oct 6<sup>th</sup>-11<sup>th</sup>; ARUP, Adelaide

Oct 12<sup>nd</sup> - 21<sup>st</sup>; ARUP, Melbourne

Oct 22<sup>nd</sup>; Young summit, CA, Sydney

##### (2) ARUP Adelaide

I had a training at ARUP, Adelaide office. ARUP is a very big international engineering company whose head office locates in London.

Together with Asuka from CTIE, our training in Adelaide office was about 1 week.

Adelaide is a state capital in South Australia. There are many parks covered by grass. It was a very

memorable city for me.

The training in Adelaide was composed of many sight-visits. We visited GInelg wastewater treatment plant. It introduces membrane, UV and chlorine water treatment system. We visited South Australia Water, and Adelaide zoo that employs rain water recycle system. Further, we visited Coorong Park by a cruise.

When we visited SA Water, we were lucky to meet with four staffs in SA Water and we talked about shortage of water in SA and its countermeasures. In SA one must pay a fine if he uses sprinkling water beyond the limit.



Murray movable dam



Dinner with Adelaide staffs

(3) ARUP Melbourne

Melbourne is a big city in Australia, and it is well known to Japanese .

In Melbourne office, there are 15 staffs who worked for water group. It is a very big office with many working groups. My training was about two weeks. My host was Rhys-san who has worked for ARUP for two years.



Rhys-san and Melbourne office that was very large

After we talked about experience in Adelaide, we discussed about my training plans.

In Melbourne we had many sight-visits, too. We visited Western Water Treatment Plant (WTP) (very large WTP, the area of WTP is 11,000ha!), Eastern WTP (standard WTP having a recycling water system.), and tennis parks where they built a membrane plant.

I learned a difference in sludge process between Japan and Australia. In Japan we use many processes and try to reduce volume of sludge. However in Australia their final process is drying under sunlight and do not reduce volume of sludge. Sludge drying sites are very large. As sludge is stable due to digestion process, so its smell isn't bad.

Australian water recycling guideline describes various items in detail than that of Japanese. Perhaps they intend to use wastewater for drinking in the future. But many Australian don't agree to use wastewater for drinking now.

On last day in Melbourne I had a chance to present my outcome in the training. I introduced Japanese wastewater technology to water-group's staffs in Melbourne. I felt they were interested in Japanese technology such as two-story settling tank.



Area of drying sludge in Western WTP

**4. What I Learnt in YPEP2010**

Through my training, I learnt a difference in work/life balance between Japanese and Australian engineers. I think this issue is very hard for Japanese young engineers.

I felt office in Australian firms was very composedly. They surprised of our long working hours. They advised that I should be working normal during my stay in Australia. I think they place priority in spending time with their family. Further, they try to take long vacation. This may keep good motivation for work, so they seem not tired.

I was impressed by their friendly culture. Like shaking hands saying "Nice to meet You!" and calling colleagues with first name. In Japan our style is bowing and exchange name cards and calling each other by family name.

I think Australian young engineer stands on equal position with their client due to their friendly culture. This is very important practice for pursuing business smoothly.

In the office they talk about various topics. In Melbourne they have two coffee breaks each day. They communicate naturally even in short time, so I thought coffee breaks were very wonderful custom.

**5. Acknowledgment**

I thank ARUP staffs, particularly Hilary-san and Rhys-san. I owe many thanks to them. I would like to extend my thanks to AJCE, CA, our company and my family.

I hope to contribute in promotion of the YPEP between Japan and Australia by making use of my experience in YPEP2010.

## AJCE Activity 2010

### YPEP2010 REPORT



**Asuka Ukese**  
 YPEP2010 Trainee  
 CTI Engineering Co.,Ltd.

#### 1. Introduction.

In YPEP2009, CTI Engineering (CTIE) hosted a young engineer from ARUP, Australia. This year, I participated in YPEP2010.

My host firm, ARUP is an international consulting company, whose head office locates in the United Kingdom(UK). About 10,000 employees are working in 37 countries in the world. As they have offices all over the world, they can carry out projects easily in overseas. In the Australia office, many employees come from various countries such as UK, Spain, India, China and so on as well as Australia.

In this year, I had training from 5<sup>th</sup> to 22<sup>nd</sup> October at Adelaide and Brisbane offices of Arup.



Picture.1: At ARUP Adelaide office

#### 2. Pre-visit Training.

Hilary was the person in charge of my training who came to CTIE for YPEP2009 last year. She belongs to Water Group where I had training. The Group implements projects in water supply, waste water treatment, etc.

In the pre-visit dialogue for two months, I communicated with Hilary about travel schedule in Australia, accommodation, training program, etc. by e-mail. ARUP gave me assignments on the water shortage in Murray River and its countermeasures. Water shortage is serious

problems in Australia. My work was to compare water problems between Australia and Fukuoka city, Japan.

#### 3. Visit Training in ARUP

##### . Work Experience

During my training, I visited various project site such as the Murray River Mouth, wastewater treatment plant, water desalination plant, zoo, etc. The most interesting project for me was the water recycling system in Adelaide.

Adelaide has been facing water shortage as it has scarce rainfall (about 500mm/yr). It is very important to use recycled water efficiency. Treated wastewater is delivered to many buildings, houses through the pipelines which are distributed throughout the city of Adelaide. This water is used for non-drinking purpose, toilet, park, garden, car wash, etc. South Australia Water is the government entity that manages utilization of water. They check whether people use water properly or not every day. I felt the importance of proper utilization of water. In Japan, as we have sufficient rainfall, we don't usually pay much attention on this matter.



Picture.2: Glenelg Wastewater Treatment Plant

. The Life and Water Problems Concerning the Murray River.

During my stay in Australia, I watched the TV news everyday for studying English. Especially, I was interested in the Murray River problems. The Murray River is an important resource of water in Queensland and South Australia. Recently, inflow of water is reduced because of less rainfall, increase of water usage by irrigation, increase of water utilization due to population growth. As the result, water shortage occurred in the Murray River. Some wetlands nearby the River dry up. As a countermeasure, the government of Queensland has imposed plan to control the usage of water drawn from the Murray River. As a result, the plan will cut 800 jobs. Many farmers oppose this plan. I am anxious to know how the government solves these problems.



Picture.3: Water problems in Australia.

#### 4. Pre-visit Training

##### . Work-Life Balance

Basically, the business hour in ARUP is from 9:00 to 17:00. Some people come to office early morning and go back home early evening. They usually don't work over time. Most of staffs go back home by 18:00. This is quite different from our company. I was impressed that people separate clearly private life from work. People spend their time with their family, friends after working as well as holidays.

I recognized that clients and consultants cooperate well in a project in flexible and efficient manner in the course of project development. In addition, it seems that Engineer's position in Australia is higher than that of Japan

In Japan, it is a challenge for us that while keeping good relationship with client, we have to overcome pressure about improvement in quality of deliverables. We also need to improve work environment while keeping good motivation, controlling over time, etc. at the same time. . It was good opportunity for me to think about work-life balance in the future.

##### . Education of Young Engineers

The rookie employees in ARUP have to take training for two years. The contents are improvement of technical skill communication with client, etc. I observed that this is similar in Japan.

To become a Chartered Engineer (CEng), they have to submit the documents on work experience and undergo an interview. Similarly, it is very difficult to be qualified as a Professional Engineer (PEJp) in Japan. YPEP2010 gave me a good hint and motivation to prepare for PEJp.

#### 5. Lifestyle in Australia.

During my stay in Australia, I rent an apartment near the office. I thought that rental fee is high.

Many people are concerned about their health. They exercise everyday by walking, cycling, boxing, etc. after working.



Picture.4: People exercise near river.

#### 6. Acknowledgement

I would like to appreciate CA, ARUP, AJCE, head office of CTI, river division in Kyusyu branch office of CTI. Without their support and encouragement, I couldn't have rewarding experience. I hope that many young engineers will have same experience through future Young Professionals Exchange Program between Australia and Japan.



Picture.5: At ARUP Brisbane office

## AJCE Activity 2010

### YPEP2010 Young Summit Report

**Asuka Ukese**  
 YPEP2010 Trainee  
 CTI Engineering Co.,Ltd.



Young Summit was held on the last day of YPEP2010 in which the details are reported below..

#### 1. Agenda of Young Summit

Date : 22<sup>nd</sup> October, Friday

Venue : Consult Australia National Office

Time : 2:00pm Opening

2:10pm Discussions and Presentations

3:20pm Afternoon Tea

3:35pm Discussions and Presentations

5:00pm Closing

#### 2. Outline of Young Summit

Trainees and young engineers from member firms of CA joined the Young Summit. Trainees reported about their training for three weeks. On the first day of YPEP2010 in Australia, manager of CA asked us what we wanted to learn during our training. We answered that we wanted to learn not only technical aspect but also Work-Life balance, training for engineers and culture in Australia as well. At the Young Summit, we reported about our professional training for three weeks and difference in Work-Life balance , in-house training between Australia and Japan.



Picture1: Presentation by Mr. Sawabe

#### 3. Contents of Young Summit

##### 3-1. Work Style and Work-Life balance

We reported difference and similarity in Work-Life balance between Australia and Japan as described in the followings.

##### (1) Similarity between Australia and Japan

- Working hours is 9:00~17:00 including lunch.
- Atmosphere of working (Everyone works intensively and quietly).

##### (2) Difference between Australia and Japan Firms in Australia

- Office space is very large and comfortable.
- Phones don't ring often (Office is very quiet)
- Staffs go back home by 6:00pm (In general , they don't work over time).
- There are many women engineers.
- Overtime work is allocated for additional holiday.
- All the annual vacation and holidays are paid in case they are not taken. Some people return salary for additional holidays. Some people have few months of vacation.
- Many people change firms or go to government entities.
- Position of government staffs and consultants are almost equal.
- Depend on projects, they are allowed for extension of time and additional cost.
- Specifications are much in detail than that of Japan. (I saw spec. of about 200pages).
- Engineers can exchange technical information even if they don't belong to the same company .
- A project scale is large and size of a consulting firm is also large in general.
- They carry out projects in due consideration of environment.
- Depending on the size of a project, JV or Alliance is formed between consultants and

employer. (Alliance is introduced in a big project like construction of rail road, pipe lines, etc.)

3-2. Qualification and Training

(1) Similarity between Australia and Japan

- They need qualification of CPEng (Chartered Professional Engineer) like PEJp (Professional Engineer Japan)
- CPD Program is employed.
- "On the Job Training (OJT)" is exercised.
- Training program for new employees. Training period is longer than that of Japan.

(2) Difference between Australia and Japan Firms in Australia

- Employees need to submit reports about their projects and take an oral examination to become a CPEng.
- In the State of Queensland, if engineers don't have "RPEQ" certificate, they are not qualified for a projects.



Picture2: Presentation at Young Summit

3-3. Response of Young Engineers in Australia

Young engineers in Australia showed interest that Japanese engineers often work over time. When one of the trainees showed Japanese engineer's working hours and life style in a graph, everyone was very surprised. Many Japanese engineers take lunch in a very short time (about 15-30 minutes). In addition, they work for a long time. Engineers in Australia also expressed interest that deadline of a project is confined in February and March in Japan due to disbursement of budget within a fiscal year. Finally, I thought that we could jointly learn about difference in working

style between Australia and Japan. Young engineers in Australia told many times that Japanese engineers work too much. I think this is true.

4. Conclusion

Member of CA said that they were very glad to know that we could have good experiences in training for three weeks.

When we started our training in Australia, we were very afraid that we might face various difficulties during our training for three weeks in Australia. But after three weeks of training; we could learn not only Work-Life balance and training of engineers but also had valuable experience in Australian culture and social life. .

Though we couldn't make impressive English presentation, we could convey our spirit and message to young engineers and CA staffs in Australia. When we speak in English, most important thing would be to express what we want, not beautiful speech. Many non-English speaking foreigners know about this point very well. We have to peel off our misconception that "Japanese is shy". We are as competitive as foreign engineers in technical skills. So let's be proactive as international consultants.



Picture3: After Young Summit

## AJCE Activity 2010

### The report of official event YPEP REPORT in 2010



**Hidenori HANAHARA**  
YPEP2010 Trainee  
CTI Engineering Co., Ltd.

#### 1 Outline of YPEP Activity

YPEP is a program that exchanges the young engineers mutually between Consult Australia (CA) and Association of Japanese Consulting Engineers (AJCE). Participants have an opportunity of working at the host firm while learning culture and social life and lots of other things in Australia. It began in 1996, and now over 100 professionals participated in this exchange program. In 2010, 6 Japanese young engineers had training in Australian consulting firms. The visit training period was about three weeks.

#### 2 Pre-visit Training

After selection of trainees, we started pre-visit training. The training was implemented in the followings:

- 1) Exchange of information about trainees and host firms such as special area of interest.
- 2) Outline and difference of technological standard between Australia and Japan.



fig1. Group photo at Sydney



Fig2. Group photo at CA

- 3) Details of training contents and itinerary.
- 4) Communication (culture, social life,)

#### 3 Farewell Party

After the Young Summit, we had a dinner in the nearby restaurant. Of course, all conversation by the Japanese trainees was in English. Recently, English is used as an official language in international firms. I am certain that all the trainees will acknowledge this trend.



Fig3. Farewell party in the nearby restaurant



Fig4. KARAOKE

#### 4 Acknowledgements

I would like to thank AJCE, CA, host firms and our firms for giving us with splendid opportunity to participate in YPEP 2010.

Japan is a host country for YPEP 2011. We hope Australian trainees will have a wonderful experience and discovery in Japan as we had in Australia.



My Friend



Aussie Beef



My Baby?



Chinese?



The reporting workshop on YEP2010

