Grandfather a work inspiration

ADELAIDE motor mechanic Michael Clinch has been voted Australia’s NAIDOC Apprentice of the Year.

Clinch, who grew up at Koonibba on the state’s West Coast, completed his apprenticeship at Repco.

He was inspired to pursue his trade by his grandfather, who told him he could be anything he wanted to be if he put his mind to it and was committed to it, and whom he often watched fixing cars.

Skills Minister Senator Chris Evans says the award plays a critical role in encouraging other young people to take up training or an apprenticeship.

“‘The Apprentices of the Year are living proof of the opportunities that are available with a qualification,’” he says.

The number of indigenous workers who begin an apprenticeship has increased by 18 per cent in the past five years, from 10,614 in 2007 to 12,554 in 2011.
TRAINING AND EDUCATION

(Online tertiary education) doesn’t mean the death of campuses or traditional contact between teaching staff and students. (But) the way we teach and the way students learn may change quite dramatically.

– Skills Minister Senator Chris Evans
Superfast wireless promises to bridge bush-city divide

The Ngara system is one of several innovation award finalists

CHERYL JONES

AUSTRALIA’s geography and the CSIRO’s strength in wireless technology have driven the development of the world’s fastest rural wireless internet broadband system.

The CSIRO’s Ngara system promises to bridge the digital divide between city and country users, says team member Hajime Suzuki.

Although the technology is not being deployed in the National Broadband Network, he hopes it eventually will be, giving country people access to the internet services of the future and boosting regional economies. Suzuki says Ngara would deliver to the bush internet speeds close to those being rolled out in the cities. He is one of a 45-strong team, led by Jay Guo, that has made the finals of the information and communications technology category of this year’s The Australian Innovation Challenge awards.

The CSIRO ICT centre in Sydney, which spawned the WiFi technology used in laptops and smartphones worldwide, launched the Ngara research program in 2009.

Wireless is the only broadband technology that can link country users to the internet economically, Suzuki says. “It costs too much to lay down fibre in rural areas.”

However, wireless systems are much slower than cable systems. The team came up with ways to increase data transmission efficiency between users and the telecommunications towers, and between the towers. One breakthrough is the deployment of more antennas at the towers, and sophisticated software to process the signals. This enables each tower to handle more users without reducing data transmission speeds. It also cuts the number of towers needed.

The annual The Australian Innovation Challenge awards are run by The Australian in association with Shell, with the support of the federal Department of Industry, Innovation, Science, Research and Tertiary Education. A panel of eminent Australians is judging the challenge in seven professional categories, plus a backyard innovation section open to the public.

Another finalist is Queensland computer scientist Christopher Drake, who is commercialising a new weapon against computer fraud. The CryptoPhoto anti-fraud token lets users verify internet sites before making online transactions. Drake, who also made the finals of the awards last year, spent two months at Silicon Valley this year pitching the system to ICT and venture capital companies. He says he is finalising licensing deals with big internet service providers, and he expects to see “large-scale adoption” soon.

A team of physicists at the Australian National University led by Thomas Symul has made the finals with a device to generate strings of random numbers for applications including the production of encryption keys to secure internet transactions. The quantum random number generator delves into the strange world of quantum mechanics to measure intrinsically random events. It generates a stream of truly random numbers at record speeds. Symul says, adding that many seemingly random number strings generated by computers are only “pseudo random”. Canberra’s Quintessence Labs is commercialising the technology. Symul expects banks, big firms, the military and governments to adopt it.

Sandra Mau and her team at start-up company See-out have made the finals with CeeQ facial recognition software that can search the internet for photos of users concerned about their privacy and online reputation.

The company, a spin-off of the Queensland research laboratory of National ICT Australia, is commercialising the application, which is being trialled as a free service on Facebook. Mau says few photos posted on the internet are tagged, so facial recognition technology is the only way to find them.

Meanwhile, members of the public can quickly hire workers to do small tasks such as housework or running errands through a new online service, Airtasker, conceived by finalist Tim Fung of Sydney. Users log in to the site and give details of the work. “Runners” quote on the jobs and, if hired pay a percentage of the income to Airtasker.

Fung says the company has raised more than $1.5 million in venture capital.

Winners of the seven professional categories will receive $5000 and enter the final. The overall winner will receive an additional $25,000. The backyard innovation winner will receive $10,000.
Hajime Suzuki is part of a team that has developed the world’s fastest rural wireless internet broadband system.
(Online tertiary education) doesn't mean the death of campuses or traditional contact between teaching staff and students. (But) the way we teach and the way students learn may change quite dramatically.

– Skills Minister Senator Chris Evans
From whispers to a roar

Getting the hang of Chinese languages will be crucial in the Asian Century, writes David Wilson

Want to turbocharge your chances of making progress this century? Learn Chinese. That is the message from the Australian Workforce and Productivity Agency.

In its report, which addresses Australia’s skills and workforce development needs to 2025, the agency also advises next-generation job seekers to gain skills in Asian culture and business in readiness for an Asian Century with a strong Chinese flavour.

Chinese languages are among the world’s most spoken. Learning them is said to be hard because of their tonal nature. But it is easier than you think, says health-tech guru Alison Hardacre, who speaks five Asian languages, including Cantonese, and has used them throughout her eclectic career. She says that in contrast with European languages such as French, Chinese is free from “complicated verb conjugations or tenses that trip you up”.

Once you get used to the tone of Chinese languages, which takes about three months of application, you can put together sentences and be understood, Hardacre says.

Then, to improve, you should speak Chinese as widely as possible. Speak with fellow students, Chinese international students, people at restaurants and more.

“When you speak with other people, you can learn more-complicated sentences and ideas and start to be yourself in Chinese, which is fun and very fulfilling,” Hardacre says.

A grasp of Chinese can boost your career, whatever path you take, she says. What’s more, learning it will reflect your commitment to an international career, which is always a positive, and expose you to a range of vocational possibilities.

Hardacre mentions another plus: learning a language pays broad cultural dividends, exposing you to new ways of thinking and expanding your horizons. “The more you learn the better,” she says, adding that because Chinese people are proud of their language, any grasp of it will stand you in good stead in business.

Hardacre learnt Chinese by living with a Chinese family in Melbourne. A mix of formal classroom study and absorbing the language in your everyday life works best, she says. She advocates doing a home-stay with an Australia-based Chinese family or travelling around China. However you tackle the language, attaining reasonable fluency takes about three years, she says. According to TAFE.

Sydney Institute, 1.3 billion people – one-fifth of the world’s population – speak some form of Chinese as their native language. Mandarin Chinese is one of the United Nations’ six official languages and is the standard literary and official lingo of China. Based on the Beijing dialect, Mandarin is spoken by about 800 million people.

Mandarin’s counterpart, Cantonese, is comparatively niche – mainly limited to south-eastern China, including Macau and business beehive Hong Kong.

However, Hardacre says Mandarin’s popularity is growing in Hong Kong. Because, generally, Mandarin dominates, it is more useful than Cantonese, she says.

Sydney-based Chinese-to-English translator Elle Wu agrees. “Mandarin Chinese should always be the first choice,” she says, noting that whereas Cantonese speakers normally understand Mandarin, the reverse does not apply, especially in mainland China.

Learn Mandarin by hiring a qualified tutor who speaks the standard version, Wu says. Or expose yourself to the environment where Mandarin is spoken. “Staying in China for a year or two would definitely be helpful.”

The hardest part of adapting to Chinese business culture is getting to grips with its greater intimacy, Wu says. Many Chinese prefer to do business over dinner or a bottle of wine. She adds that Chinese people are not keen on routine. “Instead, they are always trying to think out of the box and to take short cuts.”

For more information on Asian culture, see Asialink (asialink.unimelb.edu.au).
Future fluent ... Alison Hardacre is multilingual.
Part of the grieving process

Course Vocational graduate certificate in bereavement counselling and intervention.

Grief may be a real and raw part of our lives, but those who help us through bereavement are specialists at what they do.

Bereavement counsellors work in a variety of settings, from hospitals and palliative-care services to prisons, schools and private practice.

“Most people respond to grief with resilience, but a significant number of people experience complications,” the director of the Australian Centre for Grief and Bereavement, Christopher Hall, says. “A counsellor can assist that person to find their own meaning of their experience of loss.”

Accredited under the Australian Quality Training Framework, the vocational graduate certificate in bereavement counselling and intervention is designed for counsellors, social workers, health workers and psychologists.

For entry, students must hold a degree, advanced diploma or diploma in a counselling-related field, or possess appropriate on-the-job counselling experience.

Duration 10 months part time.

Time Mondays, 5-9pm.

Where Australian Centre for Grief and Bereavement.

When February to November.

Link grief.org.au.
FED: Swan joins G20 facing troubled world

Treasurer WAYNE SWAN has left behind the political argy-bargy over the federal budget, jetting off to Mexico City for this weekend’s G20 Finance Ministers’ Meeting.

Discussions will centre on the more troubling issues of Europe and the US.

Mr SWAN will then travel to Washington for talks with US Federal Reserve chairman BEN BERNANKE, and and International Monetary Fund managing director CHRISTINE LAGARDE.

Senator CHRIS EVANS takes over as acting Prime Minister, while Mr SWAN is overseas and Prime Minister JULIA GILLARD is in Laos and Bali.

AAP RTV cb/wz/ohs
HE high level of media interest this week in the Gillard Government’s white paper on Asia surprised me, to be honest. I thought it would be considered too boring and highbrow for the general media to pick up on.

The wider community is a lot smarter than politicians, the media and public servants like to believe and there clearly is an appetite out there for information about where our economy is heading, where the opportunities are and the threats to our economy, way of life and safety in a volatile world.

While there were plenty of negative comments, many deserved, the Asian white paper is an important contribution to raising awareness of just how fortunate we in Australia are.

As Europe sinks under the colossal weight of its self-inflicted debt and the US stumbles on with an occasional statistic pointing to recovery – despite piling on debt at unsustainable levels – we sit within a region that has been growing continually for three decades. Critical policy decisions such as the teaching of Asian languages in our schools, sending our best and brightest to Asia to study the ways they do business, offering more scholarships to Asian students to study here along with a desire to promote more Asian business skills on company boards are all important and should be supported.

However, those measures are at the margins in terms of our nation making the quantum leap needed to ensure we both maximise the economic benefits of the so-called Asian Century and avoid economic devastation. There is a real risk we will lose large sections of our critical manufacturing, skills and investment, through complacency driven by a belief our location and fondness for cheap Asian resort holidays gives us credibility, and an automatic right to success as part of this region’s unquestionable period of economic growth.

I don’t have all the answers to how we maximise the benefits of Asian growth, but one thing struck me during a business lunch this week with some serious business heavyweights from South Korea.

South Korea is an amazing example of how you can have a large, sophisticated, globally competitive manufacturing sector producing products of truly world class quality.

South Korea has transformed itself in half a century from a war-torn economic basket case to one of the great manufacturing economies. At the outset, it took the traditional route to developing its manufacturing base with protection, subsidies and low-cost labour. Today it has evolved into the most amazing country of high-quality manufacturing, from mobile phones to ship building.

South Korea has done this while allowing its wage costs to grow in line with GDP. It’s no longer a low wage/labour cost nation. Its GDP per person is $30,000, larger than New Zealand and Israel and not far behind Japan at $34,000 and Australia at $39,000. South Korea has embraced high-quality education and believes high levels
of funding for research and development are not a nice thing to do in the good times but basics in any company's business plan for growth. They have not been afraid to invest in research and development, technology and skills. This has enabled them to embrace automation and technology as a competitive advantage.

Some of the world's great manufacturing companies now come from South Korea; this country didn't sit on its hands and bemoan the rise of China and rising wage costs. It poured billions into technology and invention.

The company I was lunching with employs 1200 people in its R&D division with an annual budget of $500 million. It's a company in a competitive and long-standing industry sector.

The equivalent company here, I would bet with some confidence, wouldn't invest 5 per cent of that amount in the same activity.

By all means get excited or worried about China and India, depending on how you view life, but it's time we looked further north to the really great Asian Tiger, South Korea, to see how you develop a truly great manufacturing sector, have good wages and a rising standard of living.

Many are convinced we can't sustain a manufacturing sector against threats from China. Go tell that to the Koreans. They would smile politely with a slight bow knowing it can be done.

It's time Australian companies bought a ticket to Seoul and stopped complaining.

Kevin Foley is a former Labor treasurer