

My job

From a degree to a career



AT WORK: Brent Laws.

DIVERSE ROLES

NAME: Brent Laws, 29.

JOB: Senior geologist, A-Cap Resources.

DEGREE: Bachelor of Science (majoring in Geoscience), at UniSA, Mawson Lakes campus.

COURSE: Three years, Honours four years.

STUDY: The Bachelor of Science provides a broad science education through a combination of majors and minors from the science disciplines of applied physics, biology, chemistry, computer and information science, environmental systems, geospatial information systems, geoscience, mathematics and more. The course aims to produce graduates who have a good understanding of the sciences they elect to study, while the emphasis on laboratory and field work is designed to give graduates the necessary skills to apply their knowledge in their chosen careers.

CAREER: I graduated from UniSA in 2003 and have worked in three countries in the past six years. I am employed as a senior geologist for A-Cap Resources in Botswana, Africa, and have worked in Laos and, of course, Australia.

Given that geology is such a diverse field, my degree has been beneficial in making an easier transition from being a student to the professional working world.

The quality of the UniSA lecturers and the real experiences they brought to their teaching were very important to me in completing my degree. The lessons learnt from real examples and practical projects at uni may not be used straight away after graduating but it is uncanny how many times the lessons come to the fore in different circumstances once a geologist starts plying their trade.

I am really enjoying the challenge of working in Africa and the opportunity to work with a skilled team that has a passion for the project of developing uranium resources and exploring for more.

Of course there are the benefits of experiencing life in a different country. I previously worked in Laos, on a fly-in/fly-out roster from Perth, working along the infamous Ho Chi Minh Trail.

One day you can be in the field working in the dust, soaking up the sun or sweating it out in the jungle, the next you're working on geological or resource models in the office.

FURTHER INFORMATION: Future student inquiries – 1300 UNI NOW.

Students knock on doors of a global school

The International Baccalaureate is gaining popularity among our schools. NIE Manager **MARTINA SIMOS** looks at the reasons for the rise in participation.

THE International Baccalaureate is a global education program that has nearly 750,000 students in 2718 schools across 138 countries. This alternative education system has been adopted by more primary schools in South Australia than in any other state in the nation.

The program provides international education through school, with a curriculum focused on delivering a qualification recognised by universities worldwide.

In SA, 18 private and 28 public schools have adopted the program. While observers say the program is world-class, the uptake has sparked questions.

Melbourne academic Kathryn Hegarty, a research fellow at RMIT University, says this is a "strong signal" that "something is not working in our present system of curriculum".

Dr Hegarty, whose research interests include tertiary curriculum development and the preparedness of Year 12 students for higher education, said more debate was needed on the quality of education on offer in public schools. "We tend to take decisions that put more programs in when things aren't working rather than stop and say why aren't they working," she says.

"If you are putting in something like the IB, you are really challenging the fundamental role of public education in our social democracy and I think that's a major issue.

"The IB challenges the fundamental philosophical tenets of a state education and we haven't debated it in the kind of way we need to to be clear about why we are doing it.

"I do believe it should be available and accessible but I think we need to have a fundamental conversation on what is its role and function and are we saying that our government schools don't cater for university admission and we need the IB to fill that gap?"

Dr Hegarty says while she is aware the IB offers many benefits to students she has concerns that the curriculum in the final two years (the diploma program) is "elitist" and it could disadvantage students who may not have the prior cultural knowledge of curriculum areas such as the arts, history and literature.

"Certainly, elitism does become more evident in the final two years. We have lots of students who go to the IB for Years 11 and 12 but it is still focused

“Are we saying that our government schools don't cater for university admission and we need the IB to fill that gap?”

on cultural knowledge and academic knowledge which is very much about professional and upper middle class futures," Dr Hegarty says.

"If your family is interested in the arts, values literature and engages in those pursuits as leisure, you have a huge advantage over kids whose families have not historically had those opportunities or who might simply be focused on earning a living or who might not have had that education themselves."

Dr Hegarty says if IB is to be a democratic option, which can be accessed for all students, then it must be resourced so all students can develop the skills re-

quired for its curriculum. If state schools are not equipped to make this transition, the risk is that they will fall out of the IB," she says.

"We need to ensure senior secondary challenges this and offers all students opportunities to engage their academic and employment dream."

The regional representative for IB Asia Pacific Australasia, Greg Valentine, says any student who is average or above average and has a reasonable work ethic can successfully complete the diploma program and be well-prepared for university studies.

He says Australian students are "above world average" and that success in the senior years in any high school program demands a sound work ethic.

Last year, 28 students from

three IB programs – the primary years program, the middle years program and the diploma program. Now there are 120 schools in Australia alone and 33 of those are from SA.

There are 90 more schools in Australasia waiting for authorisation to operate as IB schools.

IB world schools pay an annual school fee for each program they are authorised to teach but if schools offer two or more programs they pay a reduced fee.

They pay \$11,150 for the diploma program \$9300 for the middle years and \$8100 for the primary years. Assessment moderation costs extra.

The driving success behind the program, Mr Valentine says, is the teachers who view the IB as "good teaching and learning" in a global society.

He says the IB is not a collection of subjects but has a central philosophy with core components which require students to take part in active community involvement.

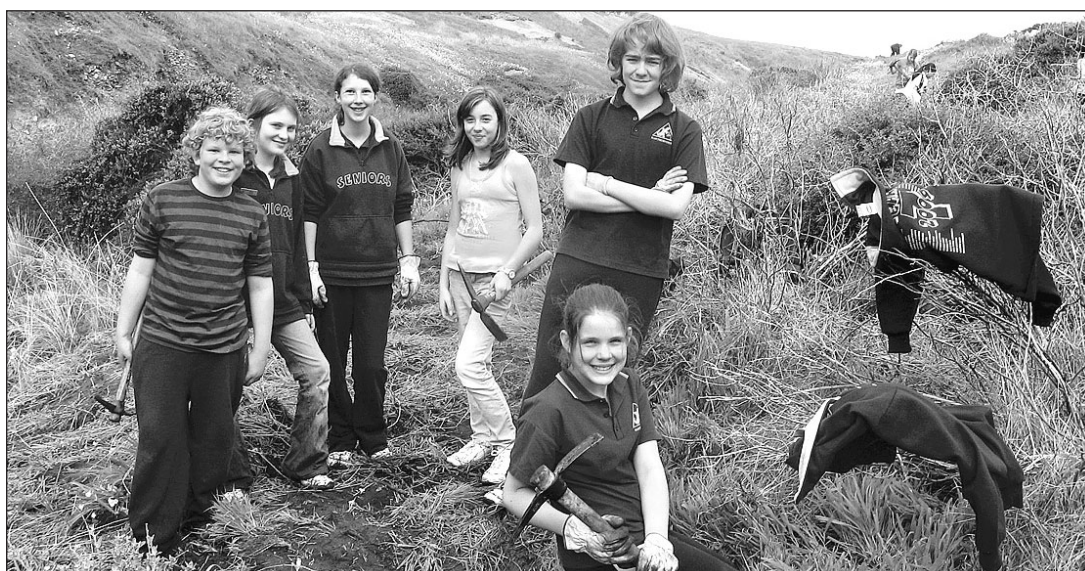
He says the philosophy, the international mindedness, the inter-cultural understanding, the second language learning, community service and opportunities for students to impact on the world all make it appealing to teachers.

"They are very comfortable with it pedagogically. I think there is a very strong drive in Australia at the moment and a recognition that we've got to prepare students in our schools for a life in a more global world," he says. "We might be geographically isolated but we're not technologically or culturally isolated anymore."

As an independent body, the IB has flexibility to make quick curriculum changes – a feature he says is not found in a state or national curriculum and is apolitical.

"We're just going to do it because it's good teaching and learning and I think there's too many occasions in education where we seem more concerned about what the impact of a decision will be on the election than what we are about the impact in the classroom," he says. "Sometimes change takes too long in bureaucracies."

Director of SA State School Organisations, David Knuckey, says the IB has a specific educational framework which is appealing to parents concerned with the variation of education standards in the education sector.



CONSERVATION: IB students on a tree-planting outing at Cape Jervis.

Webcam



CAMERON ENGLAND

SEARCH OVER

AN INTERESTING development, which is not unique to, but facilitated by the Internet, is the phenomenon known as crowdsourcing.

That basically is taking a job which usually would be done by an employee or a business and outsourcing it to the masses.

A basic example is the internet-based T-shirt company, Threadless Tees. Threadless is a T-shirt company but it has outsourced the design of its products to its customers.

In the company's words, it "invites anyone in the world with an idea for a T-shirt design to submit artwork, which is voted on through our community of over one million registered users".

"Each week the company prints and sells the highest-scoring T-shirt designs and rewards community members thousands of dollars for their designs, slogans and reprinted favourites," Threadless says.

The beauty of this model is the designs which are produced are the product of built-in market research mechanisms. They are virtually guaranteed to succeed.

A Swarm of Angels uses the crowdsourcing model in an attempt to fund and produce a feature film.

The idea is that 50,000 people contribute about \$50 each to the project, allowing the creators to raise the money independent of a film production company.

Contributors can have input into the development of the script and the first voting day was held three years ago to make decisions about certain aspects of the film.

The project appears to have slowed, with the website taken offline but updates still can be accessed via Twitter.

Crowdsourcing has been monetised by Amazon, which has a service, called the Amazon Mechanical Turk.

The name comes from "The Turk" - a chess-playing automaton which toured Europe in the 18th century beating all and sundry at the strategy game.

It later was revealed there was a human chess master hidden inside the contraption.

Amazon's service allows companies to have usually simple, repetitive tasks completed by workers for a small fee.

The jobs, known as Human Intelligence Tasks, are ones which cannot be done by computers, or for which the cost of compiling the program to do so would outweigh the benefit. The workers are paid either in cash or Amazon vouchers.



AFTER my recent column on blogging, a reader sent in a link to a blog set up to showcase photographs taken by members of the University of the Third Age (U3A) at Campbelltown. Check it out at <http://photoshoot21301.blogspot.com/>



MAKING PROGRESS: IB students at Glenunga High, Lachlan Creed, Hannah Hill, Thomas Zhu and Cristina Valero. **Picture:** ANDREA LAUBE

"If you look at enrolling your child at an IB framework at a young age you can examine it, discuss, consider it, decide if it's the academic program you want for your child and then be certain you can carry that through their entire schooling," he says.

"It's a consideration for parents, particularly in the modern age when you have seen the standard of literacy and numeracy and the basics of maths and science in this country. Those skills have been declining and an international system that is subject to greater rigour and scrutiny would be attractive to parents."

Year 12 International Baccalaureate students Cristina Valero, 17, and Lachlan Creed, 17, are considering studying medicine next year and say the appeal of the IB program is the international curriculum and that languages are compulsory.

Cristina says she liked what the IB offered after researching it and talking to teachers before making a decision. "It also offers a much broader aspect I think than SACE does and you get to do a few really interesting subjects. Languages are compulsory so we get a chance to

do something that maybe we wouldn't have done if we had taken SACE because you don't have to do languages," she says.

"It's a heavy workload. At the moment, I do five hours a night but then that's leading up to exams and extra revision."

Lachlan says studying the IB can be "stressful" but acknowledges it will benefit him.

He says he studies up to four

hours a night and spends time studying at the weekend. "Enjoy any breaks you have in Year 11 because you won't get as many in Year 12. But it's not all doom and gloom," he says. "It is a great program nonetheless."

The requirement IB students get involved in their community has helped protect local birdlife.

A cluster of six schools six years ago partnered with Black-

wood High School, which is an authorised IB school for the middle years program, to become involved with Greening Australia in establishing another Glossy Black Cockatoo location. The aim was to plant trees at Fisheries Beach, Cape Jervis, as a food source to encourage another population.

The students dig holes in rocky terrain before planting trees. Currently there are only two populations of the birds on Kangaroo Island.

Blackwood High teacher Chris Rebbeck says the program fits into the IB's middle years program, requiring interaction in environment and community service. "The students are contributing to their community by planting the trees and by increasing the environment for the benefit of the birds down there," he says.

"The Years 8 and 9 (students) from Blackwood High act as mentors... because a whole range of students go on this excursion."

The primary schools in the cluster are Blackwood, Belair, Coromandel Valley, Bellevue Heights, Hawthorndene and Eden Hills.

WORLDWIDE RECOGNITION

■ The International School of Geneva founded the international baccalaureate program in 1968, developing a pre-university curriculum and external examinations for a group of students who wanted to pursue overseas university studies. The original purpose was to facilitate the international mobility of students, by providing schools with a curriculum and qualification recognised by universities around the world.

■ The IB offers three programs for students aged 3 to 19.

■ The diploma program, for students aged 16 to 19, started

in 1968 and is now offered by 2002 IB schools around the world. There are eight authorised schools in SA, and 59 in Australia.

■ The middle years program, for students aged 11-16, started in 1994 and is now offered by 740 IB World Schools. There are 12 authorised schools in SA, with 22 partner schools, and 25 authorised schools in Australia.

■ The primary years program for students aged 3-12, started in 1997 and is now offered by 561 IB schools around the world. There are 13 authorised schools in SA and 43 in Australia.