ATIE York is almost a rarity in Australian higher education — one of the women who make up 16 per cent of the students enrolled across the nation in engineering courses.

The 20-year-old is heavily outnumbered in the third year of her mechanical engineering degree at Swinburne University, one of five women among 119 men.

That imbalance — which has shifted little despite years of effort to persuade more females to enrol in engineering — wouldn’t have seemed so unusual decades ago. Now it is exceptional.

Apart from engineering, only two other major fields of university study are now dominated by males — IT and architecture and building. In the other eight — including the arts, business, education, health and science — women are in the clear majority, and overwhelmingly so in six of them.

Women students now outnumber men in 34 of Australia’s 39 universities. Of Victoria’s eight, only at Swinburne are men clearly in the majority, while RMIT’s gender balance tends to shift from year to year.

All of which suggests that policies to turn around the historic male dominance of our campuses has been a raging success. But have they been too successful? Is it time for a little positive discrimination the other way?

In Ms York’s case, the fact her father worked as a mechanical engineer may have affected her course choice, as well as her brother doing the same degree at Monash University. But she says her physics and maths teachers at St Margaret’s in Berwick had the most influence. Their enthusiasm for their subjects “made me want to take them further”. Does she mind being part of a tiny group of women among so many men? “No, in fact it helps to get a bit more attention initially until you become friends with them and then they treat you like anyone else,” she says.

The spectacular rise of women among higher education students began in the 1980s but was given added impetus by a federal publication in 1990, A Fair Chance for All. This identified women among six groups under-represented in Australian universities: Aborigines, the poor, the disabled, those from rural and remote areas, and those from non-English-speaking families. Each was to be targeted to boost their share of the student population “to reflect more closely the composition of society as a whole”. In 1980, women comprised 45 per cent of Australia’s 333,000 tertiary students and were heavily outnumbered by males in agriculture, architecture, business, engineering, law and science. Only in the “typically female” areas of the arts and humanities, education and health were they in the majority.

Men had dominated the university campus as students and lecturers for 135 years until 1987, when the balance changed. Today, of the 1.15 million local and overseas students enrolled, 56 per cent are women, but among Australians starting university the difference is even greater, with the female proportion nearing 60 per cent.

This gender divide, now firmly established in higher education, starts in school where girls outperform the boys, stay on in greater numbers to year 12 and then apply in greater number for university. On enrolment day, women are in the majority and stay that way; they tend to do better in their assignments and examinations, continue on...
while males drop out, and finally graduate in far greater numbers.

Of the 185,000 Australians who graduated last year, nearly 110,000, or almost 60 per cent, were women. Joining them were 60,000 overseas female graduates along with 55,000 international males.

An Organisation of Economic Co-operation and Development report in 2008 predicted that universities in 10 of the world’s developed nations would have 60 per cent or more female enrolments by 2025 while the OECD average would be 59 per cent — a figure Australia will soon reach. It was not clear what social and economic impacts the gender inequality might have but it would take decades to restore equality, the report said, adding “There is a need to review policies on educational equality by noting it is not women who are now at a disadvantage, and also by paying attention to the achievement of boys.”

So is there a case for equity schemes here to boost male enrolments? Margaret Vickers is deeply sceptical. An education researcher at the University of Western Sydney, Professor Vickers is known for her large-scale analyses of variations in school completion rates, including the effects of Vocation Education and Training programs in schools.

“Sure, let’s get more boys excited about going on to higher education and into fields dominated by women. They would then have access to all the occupations a degree offers, but how do you achieve this?” she says.

“You have to go back to the secondary schools, which are still run as institutions that work better for calm and bidable people – the girls! Boys are more likely to want to do things their way but schools don’t offer enough diversity when many boys would rather pull car engines apart than sit still in a desk all day.”

Professor Vickers suggests a good equity program for boys would be boosting their intakes into TAFE diploma courses and the paths leading from these into university degrees. This could increase male graduation rates by facilitating transfers and credits from TAFE to higher education. An alternative would be to encourage boys to enrol in TAFE institutes that now grant their own degrees.

Meaning, academics used to worry their female students were concentrated in undergraduate degree courses. Not any longer. Many more women than men are now undertaking postgraduate programs and they outnumber men in masters by course work, masters by research and in doctoral studies. They are also moving increasingly into academic common rooms.

Having long been the majority at the lecturer and tutor levels, the proportion of women among senior lecturers has jumped over the past decade from 32 per cent to more than 42 per cent. Among professors and associate professors, the rise has been from 18 per cent to 27 per cent.

Even at the peak of the academic pyramid, women are now pushing men off the vice-chancellors’ chairs. Today, 10 of the 39 vice-chancellors are women, three in Victoria. Of the 39 deputy vice-chancellors, 17 are women. So it cannot be long before more men are displaced from the top spots they have held since Sydney and Melbourne universities were founded in the early 1850s.

RMIT University’s vice-chancellor, Margaret Gardner, is one of the 10 top women. She also notes that vice-chancellors typically are drawn from the professoriate. “To have the experience in senior academic roles, you have to have been a professor,” she says. “So the number of women who were qualified to be a vice-chancellor was low but that situation is changing. As more women graduate with PhDs, become lecturers and senior lecturers and then professors, so will more become vice-chancellors.”

Age, Melbourne
17 Jul 2012, by Geoff Maslen

Education, page 11 - 863.73 cm²
Capital City Daily - circulation 165,061 (MTWTF–)
The imbalance has to be addressed field by field.

MARGARET GARDNER, RMIT

Katie York, studying mechanical engineering at Swinburne, is heavily outnumbered.

Professor Margaret Vickers
Let’s talk facts

By PETER HALL, Higher Education and Skills Minister

WHILE much has been written and said about changes to funding for the state’s vocational education and training system, the one fact that has been missed is that the Victorian Coalition Government has actually committed more not less funding for training over the next four years.

When the former Labor Government introduced the current uncapped demand-driven system in 2008 – with full implementation beginning in 2011 – little did they imagine the massive cost blowout they would trigger and the proliferation in training providers competing with TAFE institutes for government funding.

Labor in its budget calculations, forecast the cost of funding training would reach $855 million in the 2011-2012 financial year.

The fact is this figure blew out to more than $1.3 billion – a $400 million black hole.

This cost was unfunded and unexpected and due to an explosion in courses with low job outcomes.

For example, since 2008, enrolments in courses like fitness trainers grew by 1955 per cent and customer contact by 2234 per cent, while apprenticeships have only increased by 10 per cent.

Anyone who has had to run a household budget, especially during difficult financial times, knows you have to live within your means. And importantly you have to direct your resources to where they are most needed and do the greatest good.

As a consequence this government has locked in over the next four years around $1.2 billion in annual funding to support Victorians accessing vocational education and training.

This is an extra $1 billion over the next four years.

The changes the government announced in May provide increased hourly subsidies for training in areas of skill shortages and high value to the Victorian economy.

Every apprenticeship course will receive increased funding.

At the same time, lower subsidies will be provided for courses that have shown disproportionate increases in enrolments, such as many lifestyle courses including fitness training, customer contact and management, and for courses where there is a comparatively lower return to the Victorian economy, or little likelihood of meaningful long-term employment.

From next year, all providers will receive the same amount for training, whether they be TAFE, Adult Community Education, or private providers.

TAFEs have significant advantages with their exclusive right to the TAFE brand, their long-established reputation and their significant asset base that has been paid for by the Government and the Victorian taxpayer.

TAFE currently delivers 82 per cent of the highest subsidised courses.

With its established industry links from which to promote “preferred provider” type arrangements, I believe our TAFE institutes have a strong and positive future ahead of them.
class action

OKLAHOMA!

Bulli High School
July 18-21
Tickets are $12 for adults, $10 for concessions at the door - or call the school on 4284 8266
This classic musical, set in 1906 in the American west, has plenty of drama, romance, comedy and singing as it follows a conflict between farmers and cowboys.

NANOTECHNOLOGY EXHIBITION
University of Wollongong Science Centre and Planetarium
Opening today 5.30pm
Full of easy-to-understand information about nanotechnology, this exhibition features an exciting nanocam show in the planetarium where you can see into the tiny nano-world, plus many interactive exhibits including a microscope through which you can read a complete copy of the bible printed on the area of a small coin.

ILLAWARRA CHRISTIAN SCHOOL PRESENTS 30 YEAR SPECTACULAR
WIN Entertainment Centre
August 3, 7pm
Illawarra Christian School’s Cordeaux and Tongarra campuses join for an evening of music, dance, drama and memories, with input from over 1000 students and staff, past and present.
For tickets see www.wec.org.au

YOUNG SCIENTIST COMPETITION
Children fascinated by science have the chance to share in thousands of dollars for their school as part of the Young Scientists of the Year Award.
Open to three primary school age groups - seven and eight years, nine and 10 years, and 11 and 12 years - this year’s competition asked kids to explore the theme “energy and the environment”.
Science and Research Minister Chris Evans said Australia’s young scientists were vital to the future prosperity of the nation.
The winner’s school in each age group gets $3000, with $500 for each winning student or group.
Enteries must be received by September 21 and will be judged by a team of scientists, with the winners announced in mid-October.
Relevant training provides the bedrock for a brilliant career

It's no secret that a skills shortage still exists in the region. Trade-qualified job-hunters are chasing after the next big opportunity, and Central Queensland is one place awash with opportunities.

Having a trade qualification may be a significant advantage for someone in the market for a job.

Whether you're interested in working in construction, mechanics, tourism and hospitality, hair and beauty or the arts, the first step in the right direction is to get the right training.

Regular training and learning opportunities are an investment that helps employees to prosper and develop their careers while giving a business a highly skilled workforce and a competitive advantage in the market.

Registered Training Organisations (RTOs) are providers and assessors of nationally recognised training. Only RTOs can issue nationally recognised qualifications.

In order to become registered, training providers must meet the Australian Quality Training Framework 2007 (AQTF 2007) standards. This ensures the quality of Vocational Education and Training (VET) services throughout Australia.

The training organisation register lists nationally recognised training providers, and details of relevant state or territory registration authority.

Types of RTOs
RTOs include TAFE colleges and institutes, adult and community education providers, private providers, community organisations, schools, higher education institutions, commercial and enterprise training providers, industry bodies, and other organisations that meet registration requirements.

Benefits of using an RTO
Registered training organisations (RTOs) are recognised as providers of quality assured and nationally recognised training and qualifications.

RTOs can:
- Deliver nationally recognised courses and qualifications
- Create new accredited courses in response to specific demands
- Ensure that employees utilising these services are given the appropriate hands-on training in their working environment.

Those that undergo training can enjoy learning when the material is relevant to their interests and many will be eager to apply their new skills and knowledge in practical situations.

Staff that possess diverse skills are generally more satisfied and positive in their jobs. This decreases the occurrence of work-related stress and improves the overall work environment.

By investing in their training, employees often feel:
- their employer has confidence in them to do the job
the business values them and is giving something back over and above wages. As a result, employees will become self-starters and develop further competencies such as leadership and teambuilding and be more willing to undertake further training.

Training is also a perfect opportunity for employers to get to know their staff better, and for staff to develop stronger working relationships. Some information courtesy of www.training.com.au.
**TAFE funding**

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Minister for Higher Education and Skills