

dale spender

Australia's top swimming coaches have recently learnt something new. That today's young champion swimmers don't read the training schedules and technique tips that their coaches write out for them. What has worked with past generations doesn't 'click' with the techno-savvy teens. They are quite clear that they learn best by watching, and then by doing it for themselves. These are some of the skills they have gained from looking at screens – and then experimenting and playing with the information.

While some coaches deplore this dumbing down, and lack of deference, others see it as a challenge to provide the highly committed athletes with the information they need – in the form they most readily understand. For their charges don't want to follow rules – they want to see what they can do for themselves.

This conflict between the old routines and the new individuality is being played out across the entire education sector. The net generation (including the swimmers) haven't suddenly become less intelligent, or more difficult. It's just that they have caught on to the skills that are needed for the information age. Though this is not necessarily how many of our educational policy makers see it. Many want to maintain the standards that they valued in their classrooms. This is one reason there is so much fuss about what we now teach in schools.

There were no such protests in the past in the press, the profession, or among the parents, yet the baby boomers' curriculum was basically a 19th century model intended to train willing workers for the empire - and the industrial era. The 'disciplines' were strictly divided, recorded, and transmitted – and quite out of touch with daily life.

Of course there were always mutterings about the point of it all. Teachers were routinely asked why the class had to memorise the names of the kings and queens of England, or why they had to learn how and who got rid of rust in

wheat. But the establishment answers were always the same: 'Because it is in the exam'.

AND YOU NEED TO PASS THE EXAM – TO GET A GOOD JOB!

And this system worked. THE GOOD JOB – preferably for life! – was the carrot that seduced countless students. They didn't question or rebel – they followed instructions: they memorised masses of often meaningless materials to get their qualifications and their 'ticket for life'. They became the reliable and diligent workers who could take orders, and fit in to a workplace production line.

But that was before the computer came along and upset the whole orderly process.

And what changes there have been in the last decades throughout society. The order and repetition of the mass production era has given way to individual creativity and job flexibility of the 21st century economy. With a computer (and an adequate network), information can be made - and sold - just as readily from home by an individual, as the mass-produced cars and coats and coffee pots had once been made by teams of workers on the factory floor.

And Australians have caught on quickly; instead of going off to work for the boss, 25% now work from home (for some of the time): they can even be the boss in this new-work world.

But to be in charge, to work on your own, to have to come up with new ideas and information is nothing like the old forms of work that were called for in the office, or on the assembly line. There was no thinking for yourself in the old system; you just did as you were told. You followed instructions so that everything that went out the factory door - be it soap or sofas – was exactly the same. Quality control meant - one standard for all.

This is why Jack Welch, the boss of General Electric, once told his employees to leave their brains in the car park. The last thing he wanted at the workplace was some bright spark making 'improvements', or introducing a bit of creativity for a better performance in the rigidly controlled production process.

And this is what the change is all about; thinking-power. In today's information economy what everyone needs to do – is use their brains!

More than 70% of Australians now make something at the workplace that you can't drop on your foot: it's some form of information. Everyone from IT programmers to film makers, from architects to call centre agents, from lawyers to accountants and climatologists, from data entry personnel to bureaucrats, image consultants, entertainers and swimming coaches – even politicians and teachers – they are all using their brains to make information. Which can be traded for goods from China and other nations.

The prosperity of Australia now depends on the creativity and ingenuity of the workforce: on the ability to come up with systems and solutions and ideas (and training techniques) – that are *new*. For no-one is prepared to pay for what they already know: it's what they don't know that they want to buy.

And when it comes to creating information that is new, the old education system provides few guidelines.

In the old economy, learning was something you did for required periods before you set out on your career. Everyone started in classes on the same day, at the same age, and made their way through much the same systems, doing pretty much the same subjects, until they finally sat for the same exams at school, tech or university. Quality control – one standard for all! Once you got your qualifications it was even possible to get by on much the same skills for most of your working life.

But this old routine won't be of much use to the 70% (and growing number) of Australians who now need the skills to make information. In their daily lives they must come up with new ideas, new ways of doing things, and as they observe, experiment, analyse, evaluate - and try again – they are learning all the time.

This is the big difference between the old education which helped students study (and memorise) the information that was set down in textbooks (or set out in training guides) and was already known – and the new education, which should

provide the resources to make sense of, and manage, the unknown. It's the difference between being a *receiver* of information and a *creator* of information in an ideas economy.

This information making is highly skilled work and requires the most advanced form of education. The job of delivering the right information calls for more than raw creativity: it relies on critical analysis and assessment, on experimentation and evaluation. These are the high order thinking—skills, and there is a greater demand for them today – for more individuals – than there has ever been in the past.

And this is where there is all the trouble over what we should be teaching.

It's no coincidence that most of today's educational policy and decision makers went through the old education system, and that they maintain that it was a wonderful experience that worked for them. There are even those who insist that the curriculum should remain the same; that today's students should study the same Shakespearean works and do the same history they did when they were in school. Anything less is 'dumbing down'.

Such nostalgia is understandable among baby boomers. The problem is that in their lifetime, the world of work has changed. What is needed now is an education revolution that can catch up with the economic revolution that has taken place.

For it is no coincidence either that the baby boomers are not all that skilled when it comes to dealing with the new. Many don't like change - not even to the curriculum, or to teaching and coaching methods. Most have difficulty with every new widget and gadget that comes on the market, and it is well known that they often have to rely on their kids to set up their phones and program their videos. Their education was not designed to prepare them for the skills of on-the-spot information making.

This is why the educational debate is *not about content*: it is not about whether the curriculum includes black armband history or civics – although both could be equally useful as sources in a classroom. The educational challenge is about how

students manage information – it's what they *do* with it that counts. The old ways of teaching and learning, of studying information, don't go far enough; another level has been added. Students need to learn how to manage, manipulate, and modify the content, how to use it to make something new.

It's not about studying what happened to indigenous people – it's about what can be done to solve the problems. It's not about cramming for exams and reproducing information: it's about checking it out and coming up with ideas and policies. It's not even about reading/ memorising training guides: it's about making sense of all the observations and to be able to put them together to 'do' a better performance.

Currently many of the information skills that students need for earning and living are learned outside educational institutions: (they are just so brilliant at doing and creating for themselves). This is one reason they don't buy the old notion that what you learn in school or university will set you up for life.

But if they excel at digital activity and inventiveness, students now need more support and guidance when it comes to evaluation, and critical judgement. They need to know when one idea, one solution, one way of doing something - has more going for it than another.

What they don't need are rules about how much Australian history they should be able to reproduce, or how many Shakespearean speeches they should be able to quote. Rather, they are desperate for expert supervision and guidance from teachers and coaches who can provide meaningful feedback on their information performance for 21st century life.

Which just raises one issue: who will train the teachers and the coaches for their new role?