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STANDING COMMITTEE ON EDUCATION AND VOCATIONAL TRAINING

Reference: Teacher education

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON EDUCATION AND VOCATIONAL TRAINING

Tuesday, 7 March 2006

Members: Mr Hartsuyker *(Chair)*, Mr Sawford *(Deputy Chair)*, Mr Bartlett, Ms Bird, Ms Corcoran, Mr Fawcett, Mr Michael Ferguson, Mr Henry, Ms Livermore and Mrs Markus

Members in attendance: Mr Bartlett, Ms Bird, Mr Fawcett, Mr Hartsuyker, Mr Henry and Mr Sawford

Terms of reference for the inquiry:

To inquire into and report on:

The scope, suitability, organisation, resourcing and delivery of teacher training courses in Australia's public and private universities. To examine the preparedness of graduates to meet the current and future demands of teaching in Australia's schools.

Specifically, the Inquiry should:

1. Examine and assess the criteria for selecting students for teacher training courses.
2. Examine the extent to which teacher training courses can attract high quality students, including students from diverse backgrounds and experiences.
3. Examine attrition rates from teaching courses and reasons for that attrition.
4. Examine and assess the criteria for selecting and rewarding education faculty members.
5. Examine the educational philosophy underpinning the teacher training courses (including the teaching methods used, course structure and materials, and methods for assessment and evaluation) and assess the extent to which it is informed by research.
6. Examine the interaction and relationships between teacher training courses and other university faculty disciplines.
7. Examine the preparation of primary and secondary teaching graduates to:
   (i) teach literacy and numeracy;
   (ii) teach vocational education courses;
   (iii) effectively manage classrooms;
   (iv) successfully use information technology;
   (v) deal with bullying and disruptive students and dysfunctional families;
   (vi) deal with children with special needs and/or disabilities;
   (vii) achieve accreditation; and
   (viii) deal with senior staff, fellow teachers, school boards, education authorities, parents, community groups and other related government departments.
8. Examine the role and input of schools and their staff to the preparation of trainee teachers.
9. Investigate the appropriateness of the current split between primary and secondary education training.
10. Examine the construction, delivery and resourcing of ongoing professional learning for teachers already in the workforce.
11. Examine the adequacy of the funding of teacher training courses by university administrations.

The Inquiry should make reference to current research, to developments and practices from other countries as well as to the practices of other professions in preparing and training people to enter their profession.

WITNESSES

Committee met at 9.03 am

BROCK, Dr Paul, AM, Director, Learning and Development Research, New South Wales Department of Education and Training

CAPPIE-WOOD, Mr Andrew, Director-General of Education and Training and Managing Director, TAFE New South Wales, New South Wales Department of Education and Training

KELLY, Ms Trish, General Manager, Human Resources, New South Wales Department of Education and Training

KNOX, Ms Kerryanne, Principal Liaison Officer, New South Wales Department of Education and Training

CHAIR (Mr Hartsuyker)—I declare open this public hearing of the House of Representatives Standing Committee on Education and Vocational Training inquiry into teacher education. The inquiry has examined a broad range of issues which impact on how well we are preparing teachers for their complex, demanding and critical role in educating our children. It has generated considerable interest across Australia, and to date we have received some 160 submissions. We are now nearing the end of our schedule of public hearings, having visited Victoria, Queensland, the Northern Territory, South Australia, Western Australia and Tasmania. We have also held several hearings in the ACT. Today is our first hearing in New South Wales. A record of these hearings will be made available through the parliament's website.

I welcome the witnesses. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. I now invite you to make some introductory remarks.

Mr Cappie-Wood—Thank you very much. We welcome this inquiry, which certainly recognises and highlights the relationship between teachers, training and student outcomes. At the outset I would like to place on record a copy of the department's submission to a New South Wales upper house inquiry into the recruitment and training of teachers. This particular submission and the document resulting from the New South Wales upper house parliamentary inquiry were not available at the time of our original submission to this inquiry, so I would like to now attach that to our submission. It covers a range of issues being addressed by this inquiry, so I am happy to pass those on.

I speak on behalf of the New South Wales Department of Education and Training and thus address the inquiry as arguably the largest single employer in Australia, certainly the largest employer of teachers in Australia. My primary interest as an employer is better student outcomes. If it does not result in that, then I think we have lost the plot somehow. You will have to accept that we have researched this thoroughly, and we reinforce often that this is about better student outcomes.

Our written submission to the inquiry is divided into three parts: recognition, relevance and resourcing. I would like to say a few brief things on each of those. In terms of recognition it is acknowledged, I suppose to the complete obvious, that the quality of teaching graduates is crucial to student outcomes. We have led progress across the state and the nation in defining and meeting quality standards for teaching. New South Wales supports a national system of teacher accreditation but, in so doing, I think it should be formulated in such a way as to recognise the role that state and territory teacher accreditation authorities can play in that outcome. There is no doubt that my colleagues from the New South Wales Institute of Teachers will have more to say on that particular issue.

I will turn now to relevance. A key issue is relevance of both course availability and course content. My colleagues from the Board of Studies will discuss the latter, but I wish to emphasise the former. The number of primary school teachers graduating from New South Wales universities over the past several years has increased significantly, up to 40 per cent. At the same time, however, in terms of the department New South Wales has an oversupply of primary school teachers. This is an issue because at the same time we face a looming shortage of secondary school teachers in maths, science, technology and applied sciences, both nationally and locally. We have 16,000 teachers on our employment list waiting to be employed, and they are predominantly primary school teachers. So we have an imbalance.

I suppose the patterns could be seen as the expression of student preference. We have a situation where more students are interested in primary rather than secondary teaching. It could be seen as a waste of resources as well as doing a disservice to our teaching graduates, by giving them an expectation beyond the capacity of the employer to absorb that number of primary school teachers and by allowing teacher education courses to be entirely demand driven and not informed by a supply-side planning issue. So the planning issue is to try to have a better match.

Teacher workforce planning is a somewhat complex issue and, as such, planning is crucial for the continued relevance of those teacher education courses. To avoid the problem emerging further, we have called for greater consultation between state and Commonwealth governments, universities, employers and the teaching profession to plan in some detail the university provision in this area. We cannot afford to give people expectations that cannot be matched by the capacity for employment.

In November 2005 MCEETYA, which, as you well know, is the education and training ministerial council, endorsed a formal bilateral consultative mechanism between the Australian government and the states and territories to discuss work force planning more generally in the context of university funding. Perhaps we should look at a multilateral consultative mechanism to be developed which would more focus on the issues of relevance of teacher training courses. This formal consultation would involve not only the state and Commonwealth governments but also universities, non-government employers and the teaching profession.

I will move on to some comments around resourcing. Clearly I have concerns about the relevant supply of teachers. Also, it is about the resourcing of teacher education. From our perspective the three most important priorities in resourcing teacher education should be, firstly, to abolish immediately the fringe benefits tax we pay on our scholarship schemes to attract the right teachers into the teaching profession; secondly, to reconsider the HECS levels for maths and science students more generally; and, thirdly, to increase funding for teacher practicum.

I will start with the fringe benefits tax. I mentioned before that we have a looming shortage of maths, science, technology and applied studies areas. At the department we fill this gap by offering such things as scholarships and accelerated teacher training programs. These are quite effective incentives. However, they also attract a very hefty fringe benefits tax of something like 94c in the dollar. In 2004 the department paid $15 million in scholarships and accelerated training programs. $6 million of that was paid back to the Commonwealth as FBT. So it is effectively halving the impact of that particular program.

It is untenable for the Commonwealth to fund university teacher training courses without reference to state and employer needs and then for the Commonwealth to impose FBT on state initiatives to train teachers in particular areas. It could be seen as effectively paying twice for the teachers we need. The FBT could be abolished as a matter of urgency and we would be very happy to turn that straight back into more scholarships for the very areas that we do need. This is not a blame game or anything like that; it is just saying that there is a better way of employing the available resources to the targeted areas we need.

In terms of HECS for maths and science in particular, we need to recognise the current levels of HECS for disciplines like maths and science. In particular, we should lower them for maths and science students. That is not maths and science students who are more generally going into teaching. This is about just attracting more maths and science students to do degrees in maths and science. We then would like to attract them to do education. But, unless the pool is widened, we are going to face a fundamental issue. That issue has been reinforced by Julie Bishop in her speech to the Press Club just last week.

In terms of teacher practicum, the Australian government has provided increased funds for practicum. We welcome this, but it continues to be an area of real concern. We believe that consideration might be given to ensuring that this is a protected item in university budgets to ensure that it actually reaches the end of a complex funding pathway and is delivered in full force, if you like, in terms of the dollars provided at the front line.

In conclusion, we need to work together. Addressing the needs of teacher education in the future is not something that can be done by individual parties. This review I think provides a welcome opportunity to air and hopefully move forward with the issues. It is not the first such review. My colleague to my right will happily elaborate on that shortly. But it is a matter where recognition, relevance and resourcing need to play a part. I would be happy for my colleagues and me to answer questions. Thank you.

CHAIR—Thank you for your opening remarks. I was interested in a point or comment in your submission where you say that universities cut resources for teacher education by approximately 50 per cent from the mid-eighties to the mid-nineties. Could you expand on that cut, where you believe it has come from and the impact on the beginning teacher?

Mr Cappie-Wood—I am sure my colleague Paul Brock will have something to say on that. Looking at the budgets that have been applied to teacher education through the university sector, it is fairly transparent that the resources being provided for this outcome have reduced. This has happened as a result of a variety of policy decisions at the university as well as at the systemic level, if you like, and how that is played out with the federal funding formulas. We can track that—it is not always easy to track, but in being able to track it to some degree it can be seen that

there has been a reduction in overall resourcing available to the universities. As I said, that could be an internal university issue or it could be a result of some of the policy changes, but overall it is a concern to see the relative scarcity of resources now given the complexity of the outcome we are trying to achieve. Paul might like to add to that.

Dr Brock—For the Ramsey review in New South Wales, I conducted a survey to investigate how many reviews into teacher education had been undertaken by both Commonwealth and New South Wales governments between 1980 and 1999. There were 21. I wrote a monograph summarising the insights of all those reports. Rather cheekily, I called it something like '20 years of sound and fury but signifying...' because there are two recurring themes when you look at the survey. The first is how regularly the same recommendations are made throughout 20 years and the second is how sad it is that those recommendations often did not go beyond the window sill.

CHAIR—We have looked at similar things ourselves.

Dr Brock—There are two superb reviews. Professor Kym Adey's study, done I think in 1999, was a fantastic piece of work. In the same year, I think, Senator Rosemary Crowley did a very fine review. There is so much to be learnt from those reviews and so much unnecessary wheel reinvention when you look elsewhere. The Auchmuty report of 1980 is fantastic. Faculties of education within universities need support. If you look at the Dawkins universities like the former CAEs, education and health continue to be fairly significantly important components of those amalgamated or former CAE universities; education often has a high profile in those institutions. For example, I imagine the University of Western Sydney would retain that high profile for education. In other universities, like the sandstones, education traditionally would not have been a very powerful player. Faculties of medicine and engineering would hold a higher profile. So when you look at the university sector I think you have to be careful not to have a one-size-fits-all view, because the way faculties of education are treated in the allocation of resources really does vary from university to university.

I think it is fair to say that over the last decade at least, and probably longer, there has been a continuing decline in full-time appointments in faculties of education, particularly in the curriculum areas. As state and Commonwealth governments increasingly make higher demands—and necessarily so—in areas like child protection, Aboriginal education, health and safety issues and so on, there is a danger that the curriculum areas like English, maths and science get put under considerable constraint and pressure from a resourcing point of view. It would be very interesting for the committee, for example, to look back over the last 10 or 20 years at the extent to which numbers of full-time appointments and the major curriculum content areas of teacher education in those areas of universities have declined to become casualised positions for teaching. I think it would be a very interesting thing for you to do.

CHAIR—On the issue of the supply and demand of teachers, it is certainly fairly apparent that the current policy settings are definitely exaggerating that supply-demand imbalance for particular types of teachers. Your submission talks about the fact that there are 50,000 permanent teachers, 30,000 casual and temporary teachers and 21,000 teachers seeking employment—and you break that up between primary and secondary. How much of that unemployed pool is geographic and how much of it is actually unemployed people willing to travel to wherever it may be?

Mr Cappie-Wood—That does vary. There is no doubt that you could see a proportional split as to where the population is currently distributed. Many of the teachers who are on our list for permanent employment may be working casually in our system and in the Catholic or the non-government system at the same time. But this is an expression of desire to work in the public education system and it is one that we try to look at very carefully. At the same time that has to be matched to our casual-teacher arrangements as well.

Ms Kelly—Since we put in our submission to the inquiry last year, we have actually resurveyed our employment list and now we, as Andrew said, have probably close to 17,000 people. We have removed about 5,000 names. We do that to ensure its currency. When we look at our workforce planning, we actually divide our state into five geographic locations with similar demographics. We look at the people on the list and we look at where they are most likely to be offered their first appointment, which helps us pinpoint where our areas of shortage are. In the primary field, for example, we have an overall supply of people willing to teach in all parts of the state. However, there is perhaps from time to time an individual school that for a range of reasons is less attractive to teachers than are parts of the state. In our pressure points of maths, science and technology we are able to identify which geographic locations we will have the most pressure in. To a large extent that tends to be rural New South Wales and western and south-western Sydney. For example, in the technological and applied study area we have a significant number of teachers on that list who want to work in the Newcastle area, but they are not prepared to be mobile and go to, say, rural New South Wales.

CHAIR—You talked about the issue of practicum. One of the things that we have been looking at is partnerships between universities and schools. Two of the things that come up repeatedly are the ways in which we reward the participating mentor teachers in practicum and the difficulties that some universities are having in placing students. You as an employer group probably have a big role to play in being the catalyst in assisting the interaction and cooperation between universities and schools. We asked a number of universities: would you favour conscription of mentor teachers? The suggestion came back fairly firmly that they would rather have a cooperative mentor teacher than a conscripted mentor teacher. So I put to you the question: what role do you think you could play to enhance cooperation between universities and schools, which in some cases is better than others?

Mr Cappie-Wood—I am sure that a number of my colleagues would like to chip in on this one. Teacher training as a degree course is very much vocational education and training. It is training for a specific employment outcome.

CHAIR—You will get no disagreement from us.

Mr Cappie-Wood—To that degree, it has always been seen that there is a relationship between the employer and the prospective employee in this regard. To the extent that the universities get some practicum moneys—and more could always go into that area—how do you get the best use of that and how is it best matched? We have a variety of emerging partnerships with universities that are giving us some encouragement in this area. One that I was just talking to one of my regional directors this morning about is called Classmates. It works with the University of Western Sydney. This is actually looking at secondary teacher training. It is really aimed at being a postgraduate program where the teaching of students in schools is giving acclimatisation and is looking at the reality of pedagogy at the school level. Originally it worked

through a number of schools. Now it has spread to five. The numbers will be increasing each year as the understanding grows.

Apparently it is working very well. The various unions are engaged in this as well and they can see it is beneficial. It revolves around participating in a range of professional development programs at the school level as well as some of the schoolteachers lecturing at the university. So again it becomes more of a partnership arrangement than necessarily just: 'Here we are. Where is the next student? And, PS, who is available for a couple of periods to go and look after them?' We have to be much more focused about this. UTS and the University of Wollongong are looking at better placement of trainee students and to make sure we match them absolutely with the very best faculties we can in schools to say that you have the very best staff and to see how that can work. They are looking at how we can use some of our curriculum consultants to work with those university students to make sure they can understand what is happening and how they can work with us.

For instance, Wollongong University is trialling a new way of doing things: students come into the schools on a regular basis and get experience et cetera. This is literally customising the process of practicum in a variety of different ways. It is not just saying that it is a mandatory process or otherwise that we have to deal with this, but saying that we want to attract the very best and retain the very best in the public education system. That means we have to think from our side what we are doing there and it means that we have to try to reprioritise some of our thinking and our resources to be able to make sure that works. At the same time we are looking at having a reasonable expectation from universities to participate in thinking of different ways of doing things. We have to think about how to redo timetabling and all sorts of other bits and pieces to make things work, but that is what we have to do. This is the supply we rely upon. This is the lifeblood of our system. We have to attract the very best into that. I know Paul has been looking into this as well.

Dr Brock—Yes. I spent nearly 12 years of my career as a teacher educator—whether that is a baggage or an insight. The whole issue of the relationship between the role of the university and the role of the school as learning sites is really complex and we have to be careful that it does not become a blame game. There are things that can be properly learned in a university environment and probably only in a university environment. There are things that can be properly learned only on site.

I used to refer to the zone of benevolent neutrality that often would take place in the practicum. The young student—they are not all young anymore; you will know from your data that we are now getting very high proportions of second- and third-career people coming in—would go into the school and he or she would say: 'I see how jolly busy my supervisor is. I do not want to load them down with all my problems, so I will not really confide in them the issues that I have.' The supervising teacher would think, 'I remember what it was like as a young student teacher going into prac and being terrified I was going to fail, so I will leave them alone.' There builds up this zone of benevolent neutrality whereby communication breaks down for what are often very understandable reasons.

So I think the first principle in the practicum is that you have to acknowledge what is proper university learning and not rubbish it, and acknowledge the school. There are things you can only learn on the job and there are things that you will never learn in a practicum but you will

learn later on. I think if people recognise those two principles first of all, a lot of the problems associated with the practicum will not vanish but can be negotiated.

The second point is that it is very important not to rush teacher education students quickly back into a school environment after leaving school. You talk about maths and science shortages. I think one of the reasons we do not have maths and science teachers is that, unfortunately, too often maths and to a lesser extent science is not taught in engaging, riveting ways that encourage people to proceed to be a maths or science teacher. I have a PhD in English—you might think I have a prejudice against maths—but I studied maths at uni too. I think maths promotes by exclusion. The point I am making is that you need the university to shake up what may have been the perceptions of the young people going immediately into university. They think they know what teaching is all about. Maybe they need a few years away from the school environment to examine, 'What do I really think a teacher should be?' If you rush too quickly back into the school environment you have not got that distance away from the school experience; you do not have the detachment that you need.

The third point about the practicum, which Andrew has spoken about before, is that we have to be really clever at finding ways, as you referred to, Chair, of rewarding with some kind of accreditation the role of a practicum supervisor, whether it is a mentor in the school—and I am sure Trish will talk about our teacher mentor program later—or whether it is a supervisor in the school. We have to find clever ways of linking up with universities and the New South Wales Institute of Teachers so that it does not just become a few shekels that are thrown to supervise the practicum but rather it is acknowledged as a professional role with some kind of accreditation either through university certification or some VET award under a registered RTO. But as you suggested, Chair, and as Andrew said, we really have to look seriously at those sorts of partnerships so that it is recognised as a professional role and it gets some kind of formal accreditation in the process.

Mr Cappie-Wood—I would like to pass to Kerryanne Knox, who has recent experience at the school level of dealing with a practicum arrangement.

Ms Knox—I would like to comment on it because I think one of the things we have to promote as a professional group of people is our obligation to actually give back to the profession—to make sure that, when we are enticing our staff to take university students on, everyone realises it is not just for financial remuneration.

CHAIR—I do not think anyone is doing it for the financial remuneration.

Ms Knox—That is exactly right. It is only a very small carrot, isn't it? But we certainly have to send that message home—and also to universities—that it is our obligation and we are very happy to do that because we do believe that teaching is a noble profession.

As for academic partnerships with universities, I think this is probably one of the most exciting times for principals and for schools. With the release of the professional learning funds to schools we have been able to set up partnerships that we have never been able to do before. We have also been able to use networks of schools to link in with local universities to provide really innovative programs for some of our young education students to come in and trial different ideas and see how things work.

Recently I was in the Riverina area and there were some fantastic partnerships occurring between Charles Sturt Uni and some of the Riverina schools. They were really exciting the schools and in some ways re-energising some of the staff in those schools. These partnerships are extremely beneficial not only for the education students but for our staff in our schools as well. It is wonderful to see some of those innovations happening. It is a very exciting time and we have to continue to look outside the square in building those relationships between the universities and schools and ensure that the partnership that occurs between the schools and universities when these students come into our schools is one that is open and transparent, that we know the expectations and that they know how we are actually going to work with these students in our schools. I think that the Institute of Teachers and the standards that are now being put into place will help in that communication process.

CHAIR—One of the reasons advanced by some teachers for not participating as a mentor is lack of time. It has been put to us that if time were offered to mentors to assist their students, that would be a factor in getting more teachers to participate. I am interested in your thoughts on that. Obviously there is a bottom-line budget cost to that.

Mr Cappie-Wood—There is. In areas where there are schools which have a potentially high number of new teachers we have introduced a formal mentoring program, in which we invest $5 million a year. That is covering I think close to 90 schools and has been very successful. We look at that and evaluate that very carefully. It is clearly a question of applying dedicated resources to making sure that those early years are, literally, as formative as possible in terms of getting the right foundation for those new teachers, particularly in areas where you might get a reasonably high turnover of teachers—rural and remote areas et cetera, where to attract some of the teachers out there we have to give incentives that they will be able to cycle back to other opportunities if they so wish. You are always going to have new teachers in some locations. To be able to target the mentoring program around those locations is a very important factor.

Mr SAWFORD—It is interesting that you put the submission in the form of a trinity in terms of recognition, relevance and resourcing. It reminds me of an '83 election campaign book. I can start with the resourcing part of it. I found the anomaly of the fringe benefits tax. I think this committee does have to come to terms with that. I would like to see it tied—

Mr Cappie-Wood—We would be very happy.

Mr SAWFORD—and basically the tying would be to encourage diversity in terms of entry into teacher education. That diversity should cover a couple of areas that I do not think are ever very much focused on—that is, people from provincial and regional Australia getting access to teacher education courses, which seem to be diminishing at a rate of knots, and young people—or mature aged people for that matter—from disadvantaged areas. I do not see that remarked on often. But that could be tied, and I think this committee might be able to do something about that. Is there any comment you would like to make on that?

Mr Cappie-Wood—We would be very happy to see a tying because we see this as trying to improve the offering of those scholarships and other related stratagems to get the right people into the right subject specialties.

Ms Kelly—We would also have a potential pool of people to take up those extra scholarships based on the pool of applicants that we received for our current scholarship program. I think the FBT would provide in the vicinity of 110 extra scholarships. We could have offered those this year, in 2006. We actually have quite an interesting mix of people taking up our scholarships. We certainly have some school leavers, but we also have some people who are career changers and we have gone into universities and promoted our scholarships in the maths and science faculties. We are promoting, to people doing those degrees, considering taking on teacher education. We need to do more work in that area through our teach.NSW campaign, but there are people who are interested. We believe we could absolutely go out tomorrow and offer those scholarships with that FBT money.

Mr SAWFORD—And maybe do something about the gender imbalance as well?

Mr Cappie-Wood—Indeed.

Mr SAWFORD—I think your suggestion of HECS being pegged in education is absolutely a commonsense approach. I do not know what my colleagues think of that, but I know it is one that I will strongly support. At the same time, we in this country seem to be pussyfooting around about maths and science. The truth is that 20 years ago we had almost 100,000 university students studying pure mathematics in some form or another. We have fewer than 14,000 now. The truth is that the profession, the universities and the state education departments have actually dropped the ball. I think you, Andrew, made the point that the pool for maths and science is so small. Unless it expands a great deal—doubles, triples, quadruples—then nothing of great consequence will happen. How do we do that?

Mr Cappie-Wood—I will flick this to my colleagues, but we have to do it at literally every part of the chain—and it is a chain. It is making sure, as Paul said, that we can reinvigorate, at the school level, the teaching of maths and science so that it is something that we draw more students into at that level. Without that, we are not getting kids going through, wanting to do university degrees and hopefully attracting some back into teaching in our schools. So if you have a smaller pool of teachers you are not going to enthuse the students. It will be seen as a self-fulfilling prophecy. In fact, we should have seen this very conversation a generation ago, because we are already a generation behind in terms of matching the demand and recognising that, if Australia is going to compete on the international stage, it is in high-order jobs. The middle-order jobs are going offshore and the service level jobs are here. We have to compete at the high order, and that means we have to have our attention very focused on this.

We are focusing a lot of our activities on what incentives we can use to attract people to be maths and science teachers, such as retraining, helping people come in from other professions and everything under the sun. Trish might talk about some of those activities. We have to attract them from a variety of sources. Those are just the supply side issues, if you like, associated with trying to make sure we have adequate numbers of maths and science teachers in all parts of this state. We do not have the luxury of saying, 'No, thanks. We won't teach kids in certain places or teach them certain types of things.' We have to be everywhere for everyone. That means we have a particular issue. We are turning to technology for distance education and making sure we can link up virtual classrooms with the very best physics, maths and science teachers across the state, but that can only work so far. It is a very important support.

Mr SAWFORD—Some people might argue that the curriculum in our schools in the last 25 years has been far more verbal than visual or special, far more to do with synthesis than analysis, far more to do with presentation than organisation and far more to do with expression than comprehension. In other words, the balance is out of kilter. If the balance is out of kilter, and I believe it is, then of course you will have a reduction, a diminution, of effort going into mathematics and science and the areas where you need other things like analysis, logic and so on. What is your comment on that?

Mr Cappie-Wood—People have made comment to me that it is interesting that you can do science these days without going near a piece of maths. That is seen to be an overseas trend as well. Paul and I have had numbers of conversations about this issue. I wonder if Paul would like to make a comment.

Dr Brock—That is called a Hail Mary pass. I will do a Nixon. I misspoke once. I think I suggested teacher education students spend several years away from schools. I do not mind them going into schools in their second year but I would like to see them away in the first year. I think they need at least one year away from schools before they go back into schools.

This is an area on which you can spend hours chewing the fat. Assertions and counterassertions are constantly made about the quality or rigorousness of the curriculum. For example, in the late eighties and early nineties I was heavily involved in the national curriculum stuff. We had to reject the first science national curriculum that was put up out of Queensland precisely for what you just said. It was mushy—or 'mooshy', as Peter Costello was quoted as saying the other day—it was unfocused, it was not particularly rigorous and it did not have much science in it. I tend to be on the other side of those arguments. I get tired of people constantly criticising the lack of rigour in the contemporary curriculum. I think the contemporary curriculum in my field, English, and in mathematics is incredibly challenging.

The particular problem for science is in the areas of physics and chemistry. I do not think the biological sciences are under so much threat as far as that sort of criticism is concerned. It is a question of difficulty. If kids are being turned off because it is either too rigorous or too mushy then something clearly has to be done. But you can only lead a horse to water; you cannot force those kids to go on and do mathematics or science at university.

I think Trish is much better placed to talk about this than me. Trish can talk about what the department is trying to do with the accelerated teacher training programs attracting people from industry. One of the nice things that we are finding is second- and third-career people going into teaching now. I saw recently a figure from one of the universities of 40 per cent of their intake now being mature age students from other careers. These are people who were bored with sitting behind computers, drawing things or sitting in offices of departments and desperately wanted to go back to personal relationships. They are coming into teaching because of the nature of personal relationships.

Mr SAWFORD—You will not have that in 25 years time if we continue to go the way we are with maths and science, because they will not be there.

Dr Brock—Your former colleague Ross Free in nineteen ninety—

Mr SAWFORD—Four.

Dr Brock—set up a really big campaign to address this lack, this dearth, of science teaching. I do not know where that went or what happened to it. This is only piecemeal stuff. People who have won Young Tall Poppy Awards, for example, are now getting out into schools. Do you know those awards in science?

Mr SAWFORD—Yes.

Dr Brock—I am on the selection panel. They go into schools trying to stir up people. The New South Wales government's ministry of science recently held a fantastic exhibition here in Parliament House and in Hyde Park Barracks focused absolutely on science. We had hundreds and hundreds of kids from Catholic, nongovernment and our schools in there over two days being exposed to science and doing experimental stuff. It is about capturing the imagination of kids to make them interested in and keen on science. In fact, I would like to send information to you about the Ministry for Science and Medical Research, which undertook that expo, because it has been very successful. We will not see any effects of that until the extent to which these kids go on and enrol in science courses is known. It is a very difficult issue.

Mr Cappie-Wood—One of the other aspects is to engage industry in this. I have heard several high-profile industry groups saying they cannot commit to Australia unless they know there is a certainty of a skill pool here. Gone are the days of location, location, location in terms of saying: 'Nice harbour, therefore, we'll set up in Sydney.' They want to know about the certainty of the skill pool they are going to require 10 years out and, hence, what is happening in schools now that is going to mean that there are university graduates, which will ensure they have a certainty of supply which in turn means they are going to commit to investment in this country.

They want to work with us and see how they can help in the invigoration of the learning environment in schools so that, when it comes to the question of practical application, it is not theoretical practical application done in the science lab at school; it is actually seeing this happening in the workplace and seeing the practical application that is part of real life. They are happy to talk with us—and these are the more thoughtful employers in the industry—and ask what they can do to make it live and make sure that we have the curriculum support materials, the practical demonstrations, the industry visits et cetera.

Quite frankly, they can see it as an opportunity because they will be able to market themselves as future employers at the same time. From their point of view, there is also the capacity to engage the future and be able to help in the development of any form of understanding and appreciation about what it can lead to. Again, that is something we have to see. It is a disassociation of saying: 'This is a curriculum. It is a high school certificate that you aim for,' and saying, 'What you are aiming for is a career and a fulfilling life.' You can understand that further than saying that all you are aiming for is a higher school certificate and potentially a university position and understand where that might lead to. We also have to think at other levels about career planning and engagement with industry as part of this learning journey.

Dr Brock—As a coda to that, we recently completed a massive survey. We got 27,500 submissions to the survey on the future of public education. One of the things which came out

very strongly from that survey was the need to really reinvigorate and perhaps almost change the culture of careers advisers or the role of career advice in schools. It was a really strong message that people are just not happy—and this would not just be true of New South Wales—with the level, the nature, the calibre and the kind of advice that youngsters get as they proceed through school. Our New South Wales government is doing something about that.

Mr SAWFORD—I have a question about resourcing. With regard to the practicum, it seems to me that maybe state governments are going to have to take a far greater responsibility for remuneration, for providing the time and, more importantly than either of those two, for the recognition. I think the profession lacks recognition. That is the responsibility of a whole range of people, including the state departments. At the beginning of your executive summary, you acknowledge that there is a diminution of input from state and territory governments for teacher education. I think that is true. It is too limited, and it has happened over the last 25 years. I seem to remember in my time of being involved in teacher education that the state education department had a very powerful and I think a very positive role in teacher education. I do not see that these days, and I see that as a fault. The partnership is not between university and school; it is between university, school and the education department.

I am not convinced about recommendation 1, and the Victorians have done this as well. I know there is a devolution of responsibility away from the bureaucrats onto the poor devils in the school, but I think the departments have to take some responsibility for education, and I cannot see 20 people on a board doing that. I think it needs a far more active role in terms of a state department. I have some quick questions. Why has there been that diminution of influence and input into teacher education over the last 25 years? How did that happen? How would you remedy it?

Dr Brock—I will give a quick answer to the first part. God, these South Australians do not like Victorians and New South Welshmen, do they?

Mr SAWFORD—No, no. We are the same. It is just that you are the last two we have spoken to.

Dr Brock—I will give a quick historical answer. In the old days in New South Wales—I do not know about the other states—the old teachers colleges, which then became the CAEs, were under state statute. The state government had a lot of power and a lot of control through those old teachers colleges. When they became amalgamated universities—I have forgotten what we used to call them; Trish is also old enough to know—that state control all went. There was a name for it. That is all gone, Rod.

Mr SAWFORD—I know.

Dr Brock—That is not an answer about the present, and you want to know—

Mr SAWFORD—You are very powerful still. You are the employer.

Dr Brock—That is why it happened. I will now throw it over to those who can give you an answer.

Mr Cappie-Wood—Okay. In terms of the employer's role, there is also the employer's purchasing power. We are looking at that very issue. An institute of teachers to examine standards is fine. They will look at what is being taught and then try to make sure that it meets our requirements. At this point in time, there are several things that it is mandatory to teach teachers for them to be acceptable in New South Wales schools. We place pressure upon that. I would have to say that deans of faculties are not necessarily the most responsive at all times to the needs of the employer.

You asked what we are going to do as an employer. What we are going to do is start saying, 'If the quality isn't going to be good enough, we're not going to employ them.' That is a sanction. We are looking to see how quickly we would move to that environment. That is the ultimate sanction. The market will respond accordingly. In other words, people will say: 'Don't go to this university. You can't get employed.'

The institute is clearly a part of this, and the recently established one, which has clear standards, is one in which we play a very strong part in looking at the professional standards. That is not to say that we control it, but we play a very strong part in establishing what that is, along with our colleagues in non-government and Catholic systemic schools. That is absolutely fundamental. If we are not up there looking like we are monstering everyone, it is because we have other mechanisms by which to influence them.

You are asking where our standing is in supporting teachers. Trish will talk very briefly about teach.NSW, but I would like to point out that these are recognition awards and scholarships that we have, and this grows every year. Every year, we have to produce a bigger poster, because it keeps growing—the print gets smaller. I would like to hand that over and say that we take it very seriously, not only in terms of recognition but also to make sure that we can further the continued professional development of teachers in partnership with industry. We have a very strong Premier's scholarships system that is supportive of further specialised learning by teachers, and that has great industry support. That continues to grow every year.

Ms Kelly—Teach.NSW is the arm in the department for promoting teaching and the standing and status of teaching. We put about $1.8 million into our campaigns each year. It traverses a whole range of the things that we have been talking about. Just yesterday, we commenced promoting our 2007 graduate recruitment program at universities across New South Wales. We do that in partnership with universities, so it is another example of a partnership. We recruit at least 400 outstanding graduates each year to our public schools. The feedback that we are getting from our principals in the main is that that quality is good, although there is some variability. As we see it, the role of the institute will be to accredit those programs to get us the consistency.

Picking up on the science theme: through teach.NSW we go to a lot of science expos. We take with us our young, energised science teachers to promote the teaching and learning of science and science as a career generally. We have also looked at another partnership recently, aside from the industry ones that Andrew talked about, and that is with the Australian Council of Deans of Science. We have commenced dialogue with them to look at how we can have complementary roles in promoting maths and science generally, and then, of course, each of us will have our own particular interests. For us it will be the articulation into teaching.

I want to mention just one other activity. I will leave you some material about teach.NSW that touches on practicum and partnership with universities and schools. We have a program that is called Beyond the Bridge, where we work with universities for them to select students who apply to do their practicum experience in south-western Sydney and Western Sydney. That is a very good partnership because it introduces students to teaching in those areas. It provides, as Kerryanne said, a partnership where our teachers in schools get some rewards from nurturing and mentoring those students. We find that some of the myths that there are around some of our schools in some of those areas are very much dispelled. That is another example of our teach.NSW campaign.

Our slogan is: 'Teach and make a difference'. It is a very well-known slogan. We took 19,000 inquiries on our customer service line last year, and they ranged from mature aged people to people from overseas, people from interstate, people wanting to return to teaching and people who are in universities who want jobs with us as graduates.

Mr BARTLETT—Firstly, congratulations on that program. 'Teach and make a difference' is a very effective campaign from what I can see. What sort of impact has it had on the gender ratio of applicants or entrants into teaching?

Ms Kelly—That is still an issue not just for us; it is a national and international issue. Through teach.NSW, one of the other themes is to look at positive male role models. We run programs in our schools with male role models in primary teaching. We not only use teachers; we use some of our ex-students, who talk about what teaching has provided to them. So, again, we are trying to get that message through. But we have work to do, like everybody.

Mr BARTLETT—Has the campaign had any effect on numbers?

Ms Kelly—I do not think we have seen any discernible effects yet. We are probably holding our numbers steady in terms of the gender balance. The issue for us, like all other education systems, tends to be skewed in the primary area. That is where we really need to try and have a balance.

Mr BARTLETT—You have introduced scholarships to address areas of particular subject shortage. Why would you not introduce scholarships, then, to encourage males into teaching in primary school?

Ms Kelly—We did have a look at that. In fact, the Catholic system here in New South Wales got a special dispensation from antidiscrimination legislation to do it. My understanding, from the feedback from their pilot, is that it really was not very successful and they were unable to fill their places. We think that it is probably more important to promote teaching to boys and girls, men and women, and to continue to use some of those positive role models so that men see that it is an attractive career.

Mr BARTLETT—But if, as you say, the figures show no discernible difference, that is obviously not working to attract more males.

Ms Kelly—I think it is early days yet. Our teach.NSW campaign only started at the end of 2002. Our program looking at the male mentors and role models probably really kicked in in

2004. So it is still early days, and we will continue to look at other ways that we can promote teaching to boys and girls, men and women, particularly in the primary area.

Mr BARTLETT—I would like to think that those strategies will increase the number of men coming into teaching, but I am somewhat sceptical.

Dr Brock—It is also a cultural thing, isn't it? Your profession has the same problem. We have just dropped down to 45th, I think, in the OECD countries in the number of women politicians in the Australian federal and state parliaments. It takes a long time to shift culture. Under Gough Whitlam, for example, and later when they opened up the University of Western Sydney and free universities, the hope was that within a few years there would be a transformation in the profile of people going into university from western and south-western Sydney. That took a long time. And people argue today that it still has not made the massive shift that everybody expected at the time. So I think we are up against a cultural set of expectations about who goes into teaching. I think engineering has had the same problem with the lack of women going into engineering. Your profession has the same kind of issue.

Mr BARTLETT—But with teaching we have seen a decline in the number of men; it is not—

Ms BIRD—Not in primary school.

Dr Brock—No, there is an upward shift in primary schools.

Mr BARTLETT—Well, very marginal, but over the long term there has been a decline, hasn't there.

Dr Brock—It has always been a feminised profession.

Mr BARTLETT—It has been. But at 20 per cent we still have a long way to go. I will just ask you about these subject related scholarships. You make the point—and Rod mentioned it as well—about the issue of FBT and so on. You mentioned that you would be able to fund more scholarships if it were not for the fringe benefits tax. What sort of waiting list do you have? What sort of unfunded demand do you have of people who would take up scholarships?

Ms Kelly—In our 2006 program we have offered 230 scholarships across maths, science and technology, and we had 60 of those for Aboriginal people. We could have easily offered in the vicinity of another 100 to 200 scholarships, from the calibre of people who applied, and we already have waiting lists for each of our categories. Should some of the students not continue beyond the university census date, then we would replace them with somebody else.

Mr BARTLETT—So you are saying that the reason you are not offering more is simply that issue of FBT?

Ms Kelly—It is funding, yes.

Mr BARTLETT—I suggest that that needs to be balanced up in the broader context. New South Wales takes $100 million a year in payroll tax out of the universities in this state. I am very aware that for my own university, the University of Western Sydney—and when I say 'my

own', I mean it services my electorate particularly—that was $9.8 million last year. That needs to be looked at in that context. If even a fraction of that were to go back into scholarships, you would be able to fund those scholarships. So I think this statement is somewhat disingenuous in that respect.

I will just go back to a broader issue, though, that you have raised before, Mr Cappie-Wood, about the quality of teacher training. You talked about imposing higher standards of quality and expectations, and you stated that you would refuse to employ people of inadequate quality and that that would force the universities to lift their game. I think that is a good approach, but how effective will that be, particularly in areas such as maths and science where you have skills shortages? How effectively will you be able to demand a higher quality when you really have to take almost any teacher who is on offer in some of those subject areas?

Mr Cappie-Wood—The first port of call is in using purchasing power, if you like. We have not imposed that yet. We are looking to see what impact the first tranche of activity of the New South Wales Institute of Teachers and the standards they are imposing has on the standard of students coming out of the universities. If that proves inadequate as a means of us ensuring that we are getting the quality that we expect and would look for, then we may well move to the employer's right to impose a quality check on that and to be able to send messages that graduates from certain universities may not be adequate for those. So we are looking, first of all, to the teachers institute to be a fundamental bedrock in terms of the standard of teachers coming out of the universities. If necessary, we would then look at the second layer, our purchasing capacity.

Mr BARTLETT—You made the comment that deans of education faculties are somewhat insensitive to the needs of the education system.

Mr Cappie-Wood—Yes.

Mr BARTLETT—What processes are or could be in place to more effectively communicate your needs and to get the sort of response that you need from education faculties?

Mr Cappie-Wood—We meet with them regularly, so it is not as if—

Mr BARTLETT—Are they insensitive to your—

Mr Cappie-Wood—they are a disembodied process.

Mr BARTLETT—Are they unresponsive?

Mr Cappie-Wood—They take their professional responsibilities to heart. But they do see us as being considerably separated from the role and responsibility of a university as to opposed to the role of an employer to dictate in that. That has always been so. This is not just in education.

Mr BARTLETT—Sure, although when we had teachers colleges there was a closer connection.

Mr Cappie-Wood—There was an absolutely closer connection there, but we are living now with the environment that we have and we have to work out how we can influence them. We talk to them regularly. We have set mandatory expectations in a limited number of areas that we expect them to be able to incorporate into their teachings. To some degree that has worked, but some resent our involvement because they do not see it as necessarily our right or responsibility to tell them what to do.

Mr BARTLETT—Could that process be better formalised to make it more effective?

Dr Brock—It is formalised. There is a body called the Teacher Education Council in New South Wales with which the department negotiates these issues. There may come a time when it might be more effective to work individually with each university, because each university has its own characteristics, pressures, demands and issues. Trish is better qualified to talk about this perhaps than I am, but I think there is a reasonable amount of involvement. The other thing is that you cannot be too hard on universities. Remember an earlier point I made: universities, particularly faculties of education, are under ever-increasing pressure. There are fewer full-time people, particularly in the curriculum areas. There are greater pressures upon them to give more and more content. For example, 20 years ago at the University of Sydney I think there were some 18-20 people in one way or another working in my field—English literature, literacy, language, ESL and so on. You will not find 20 there now. In fact, the number of students they are required to take has increased and the teacher-student ratio has blown out as well. They are working under pressure as well in having to deliver. As Andrew said, it is all a matter of better communication, give and take and cooperation. Certainly some of the universities very heavily engage with this department in addressing the mutual needs of both sides. Trish has more experience with that.

Ms Kelly—We do meet formally with the Teacher Education Council annually and we share with them our seven-year projections for supply and demand of teachers. From their perspective, obviously they are quite demand driven. It comes back to some of the issues we were talking about: the pool of people and who wants to do secondary teaching, particularly of maths and science. It is quite a complex equation and we will continue to have that dialogue with them. Picking up on something Andrew said in his opening remarks: following our minister's approach to the Commonwealth last year, MCEETYA has in fact agreed to look at a bilateral approach to consultation about university places. That could be a way for us to have some more formalisation in terms of the skewing of our needs with regard to types of teachers and what we see continuing to happen with the growth of primary teacher numbers.

While there is some growth in secondary, it is certainly not growing to degree that the number of primary teachers has grown. Put that together with the fact that on our employment waiting list we have over 10,000 of those 17,000 people being primary teachers, it definitely projects an oversupply. There are benefits I think for a more focused, formalised approach for the graduates. It would be fair to say that probably one of the complaints from people who do primary education is, 'I haven't got a job. When am I going to get a job?' It is in all of our interests, including those people whom we collectively are spending resources on to do teacher education, that we actually get that balance a bit better.

Ms BIRD—Andrew, you made the point that education at university is in fact a VET course, which is an interesting perspective in that I do not think, if we were to ask universities, they

would reflect that back to us at all. We have had evidence that many people who go through education are going off into a whole variety of other careers and not going into teaching. It seems to me that what universities are struggling with, and what we are seeing flower around the place, are much more VET focused courses, so it is a Bachelor of Teaching rather than a Bachelor of Education.

There is a debate going on about the value of the Dip Ed model, some universities are horrified by it and others are so-so about it. Being a BA Dip Ed myself, I have never understood the problem with it. The dilemma around the point that you made about it being a VET course seems to drive a lot of these issues, particularly between employing bodies and universities. I have heard about all the programs that you are doing in New South Wales. We have to go back and recommend to the federal government a certain range of things. Part of what we can recommend is what happens from a university perspective. We have now come to the crunch point where we do not have teachers colleges, we do not have nursing schools; we have put them all into universities. Now I think what we are saying is, 'That was great, but there are some problems.' Is there something in the university structure beyond the funding thing that you might have considered which would be a way to address that?

Mr Cappie-Wood—I think there is, touching on some of the things that have been mentioned already. I would just go back to the vocational education comment. People see it is perhaps as a demeaning comment. It is far from it. It is really saying, 'Vocational education is the preparation of individuals for a specific form of employment.' That is what it is. Your terms of reference are to look at how well the universities prepare teachers to be able to teach in vocational education courses, effectively manage in classrooms, and deal with bullying and disruptive students. If that is not a vocational education focus, I do not know what is. It is more vocationally focused than other degrees.

Dr Brock—You could argue that for medicine and engineering. They are courses to help people to do things. In the 1840s, before the University of Sydney was established, there was a huge controversy in Sydney when people fiercely opposed the establishment of medicine and engineering faculties because the classicists said, 'They're vocational things. You don't have faculties of medicine and engineering at university.' That is the point that you are making, isn't it, Andrew: it is not capital V-E-T; it is like engineering and medicine.

Ms BIRD—It also reflects the view of probably 90 per cent of those who enrol and what they expect.

Mr Cappie-Wood—I do acknowledge absolutely that teachers go to many areas. I would like to say we want to encourage them. The old idea was that you go into it as a lifelong career; this is it, you are into teaching. We have been changing our own act to allow teachers to go in and out of the teaching profession. The gen Xs and gen Ys coming forward do not want to say, 'This is it; I'm in this classroom until the day I retire.' What they want is the capacity to go in and out of experiences. We want to be able to facilitate that being brought back.

As Paul said, there are certain overseas universities that do not take you as trainee teacher unless you have at least a year's gap between ending school and starting the course. Making sure that there is broader life experience brought into the education field is important. That goes to part of how you energise people. It is about bringing life experiences to bear as well and that is

quite a critical part. That is why some of the retraining for specialist teaching is sometimes some of the most successful because they are bringing a wealth of practical demonstration of their art and science into the classroom. With respect to what we can do in the relationships with universities, we have mentioned partnerships. They have to continue at the practicum level, but we have to try to say, 'Let's see it collectively.' It is rightly put; it is a collective responsibility about making sure that we can turn this around, particularly in the maths, science and related areas where there are looming shortages. There are looming shortages not only because we are training too few to come through to meet needs.

We are in a global labour market. I was in New York recently speaking to just one of many firms. They employ 400 Australian teachers in New York schools alone and there are a number of similar ones there. They love New South Wales teachers because they are better trained than their locals. So we are fighting a global education market not just a local one. The bilateral planning process is to make sure we get a better match of supply and demand. Having people out there saying, 'I've trained as a teacher and I can't get a job' is the worst possible message for people generically to hear, irrespective of what speciality they might be going into, because they say, 'You can't get a job; why would I bother doing this? I'll go to something else.'

Ms BIRD—It is almost as bad as saying, 'This is a terrible life; don't go into teaching,' which is what puts the vast bulk of them off.

Dr Brock—A lot of teachers don't—

Ms BIRD—I know, but we have heard that.

Mr Cappie-Wood—Thankfully, 16,000 have not taken that and they are still in there battling to get into our schools, which is a very encouraging process. But we cannot see that and just rest on the fact that there is a current perceived oversupply.

Ms BIRD—I want to get down to specifics. You are talking about partnerships; you are talking about all these things that go on on an ad hoc basis and we have heard of all the different states. Is there a structural thing beyond the NIQTSL that we should look at as a Commonwealth to enable all the different pieces of stories we hear that are really driven by personalities and commitments, not by the system—a practical measure that would assist? Is there any reason that does not happen? What is the barrier? That is what I am trying to find.

Mr Cappie-Wood—If DEST were to say tomorrow, 'We want an annual bilateral and multilateral workforce planning process which would happen at specific times of the year because of the recruitment and planning cycle, not only for our system but also for the universities,' it would be a fantastic thing to be able to say and do. That is bilateral and multilateral. On the issue around partnerships, as a system we have to literally have a single point of contact in the universities and in the system to be able to drive that more systemically, and it is an issue. We do try to get as many resources to the schools as possible, because that is an important factor—you do not want bloated bureaucracies—and it is nice to see that New South Wales has lower out-of-school costs than any other system. But we also have to make sure that we can support that systemically.

Ms BIRD—Yes, in funding positions and people who get that—

Mr Cappie-Wood—In other words, have a dedicated officer role systemically and have a counterpart in the universities to literally broker it, rather than leaving it solely to—and it becomes a partnership internally within the system as well as with the universities. You do not want to take initiatives away from the schools—in fact, you want to encourage that—but, again, there are systemic opportunities which we do not want to miss. Those are two examples—systemic and, if you like, local—that we would like to see almost immediately.

Ms BIRD—There are two good things there; that is great.

Mr FAWCETT—I want to look at the shortage of maths and science teachers and at the gender balance and raise the concept of unintended consequences. An example I will give comes from speaking to the AMA last week. They are deeply concerned about the admission processes, particularly for South Australian universities, where there has been a lot of emphasis on an interview process to make sure that new doctors have good interpersonal skills. It is a fantastic concept but the problem is that they are now not getting people who have the hard edge to go into research and some of the other areas where they also need medical graduates.

With that kind of model in mind, what work have you done, if any, to go back and look at one of the sacred cows of education in the last 20 years, which is, at the primary level, the early learning level, the removal of things like streaming in classes and the effect of that environment on young people who have a hard edge and the real desire to learn and push ahead—which, generally speaking, describes those who go into engineering and the sciences and mathematics, in terms of pure maths and research, rather than the softer side of science? Has any serious longitudinal type of work been done to look at the drop-off in the interest of men in coming back into the teaching environment, particularly at the primary level, or the interest of students to go on with those kinds of harder edged subjects? Is there any correlation between this push to even things out and have everything soft and fluffy at the primary level, which has resulted—

Dr Brock—Down, Kerry, down!

Mr FAWCETT—I use that language very provocatively, because I have had a number of teachers who teach science at the high-school level talk about how dreadful it is to try to sharpen up the kids and get them focused on and interested in harder edged science. There is a lot of rote learning in chemistry, and it is just plain hard work to really get to grips with it and have a comprehension of and understanding of the subject. In many cases, the kids are just not up to it.

I think the growth of middle schools and trying to get kids to make that transition is one response that has come. But it is a matter of stepping back at a very holistic level and looking at the lack of male teachers in junior primary and the lack of kids who are interested to go through and see whether you done any work, whether you would do any work and whether it is part of the problem.

Mr Cappie-Wood—I will ask Paul if there has been any research done that he is aware of. But the issue of making sure that sciences are treated fairly, if you like, in the whole process of the junior years of schooling is an important one. Are we crowding it out with literacy and numeracy demands? As you well know, the national benchmarks, which we all have to meet, are 100 per cent, which is physically impossible, otherwise we lose our federal funding. What you measure is what you do. The federal government has said that, under the funding arrangements,

everyone has to meet 100 per cent—physically impossible—of the literacy and numeracy benchmarks. What happens? We focus on literacy and numeracy, funnily enough, because we cannot afford to lose $600 million to $700 million of federal funding in our public schooling system. So that is an issue in its own right. Again, in the review of reading, which is about to be released, all is again focused on literacy and numeracy. Literacy and numeracy are fundamental, otherwise you do not get into the other areas, but I think there is an open question nationally: is this now crowding out opportunities for other things, including creative arts et cetera?

Mr FAWCETT—Crowding is one issue. The other issue I am touching on is the whole concept of streaming and whether the kids who have a hunger to achieve and push and drive limits are being held back. I have to say that is my experience. I speak to a number of parents, children and teachers. Is that stifling the cohort who, in the past, have gone on to do those harder edged things?

Mr Cappie-Wood—Kerry might like to talk about that and where the opportunity—

Ms BIRD—How long has there been streaming in primary school? I was not streamed in primary school.

Ms Knox—There are still some places that have a different system. I would just take up Mr Fawcett's comment about the soft and fluffy approach.

Mr SAWFORD—I thought it described it very adequately!

Ms Knox—I tend to disagree.

Ms BIRD—Having two children, I will stick up for you.

Ms Knox—Thank you. I think you are mixing up soft and fluffy with nurturing and fostering inquiry, curiosity and questioning. You cannot have a situation where, in the early learning years, as soon as children walk into school, you hit them with some rigorous education so that you know they are going to do really well in the future. You have to nurture a love of learning. You may call that soft and fluffy, but I certainly disagree. If you do not have that initial love of learning in the early years then you are never going to build on that love of learning to get those achievers.

Our role in the early years is as much about academic achievement and excellence in achievement as it is about nurturing all of those things that we want kids to have. I think there have been some wonderful programs happening to develop kids in maths and science. I have seen schools with innovations in gifted and talented areas. They are doing wonderful things to identify children early and make sure they keep that hard edge going. The new gifted and talented policy in the department actually allows for those kinds of initiatives to happen. I think we will see more of that coming up. There is an absolute wealth of programs out there that schools can actually tap into. Maybe we do not do as well in making sure that every school does certain things. Maybe it needs to be a bit mandatory. That is just a personal opinion. But I certainly feel that there are enough initiatives happening for these things to occur.

I would just go back to a point that was made earlier about how we turn kids on to maths and science. It has to start from the day they set foot in the school. Therefore, the 'soft and fluffy' thing has to occur in order to get them to where you want them to be in high school. You have to have good teachers who can teach kids mathematics or numeracy and science and turn children on to that. So you have to look back to the universities and at how we teach. We need to teach teachers how to teach those subjects, motivate kids, inspire them and keep them achieving self-learning.

Ms BIRD—Chair, we are wandering way beyond our terms of reference.

Mr FAWCETT—I disagree because one of the things that has consistently come up is the shortage of maths and science teachers. You said before that it is a chain and that there are lots of links; it is a system. I think this is a really important part of that system. I agree that there are some kids who need that nurturing, but there are some kids who do not.

Ms Knox—Every child needs that nurturing.

Mr FAWCETT—Some kids are held back by that approach. My own daughter was one. Her enthusiasm and learning dropped off markedly because of being put into a class where everything was soft, and she is just not that kind of kid. She thrives on challenge, and I know there are other kids like that. Some of the best outcomes of primary education I have seen are in a Catholic school in my electorate. What they have done with their available resources is to take the kids who are outstanding and the kids who are really struggling and put them together in one group, and they had a far larger class of kids. The groups and the parents are happier, all the kids are happier and they are getting far better outcomes.

That is a very different model of streaming and grouping, but they have really taken a proactive approach to it. I know there are other schools that put kids who are better achieving in a group and they grade different things, but it gives the ability for those kids with that personality—children are all different. I know, having worked in the aerospace sector for many years, that the majority of aerodynamicists and structural engineers are not necessarily the kids who would have been in that soft and fluffy group at the start. If you inculcate and develop those attributes you also develop a cohort who have the interest in those subjects.

Ms Knox—You will be very pleased with the way that we are heading in the future, then. You will see in the release of that document that it was a 'one size doesn't fit all' approach. And that is precisely what you are talking about.

Mr HENRY—I want to make a brief comment and perhaps refer to a question. I find it very refreshing to hear your views, attitudes and approach to teacher training, particularly with respect to teaching being a vocation. I think that is very important, but it is somewhat at odds with what we have heard from some universities that want to focus on the academic aspects rather than on the practical requirements of teachers.

I discerned a level of frustration in your submission about the lack of responsiveness as a major employer in the process. If I were in your shoes I would be using my purchasing power to get the sorts of outcomes that I want. I hope this will flow through to the TAFE organisation in

New South Wales and to other industry groups that may have frustrations in the delivery of vocational training.

Ms BIRD—Don't get me started on that! It's the world's best TAFE system.

Mr HENRY—It is good to see that the top management team here from the department recognises some of those frustrations. In your submission you also mention a concern about universities diverting some of the resources allocated to practicum to other uses. Do you have any evidence for that, and what are you doing about it?

Mr Cappie-Wood—We have anecdotal evidence. It is very difficult. Quite frankly you would literally need to be in the accounting departments of the universities to do that, so it is anecdotal. All I can say is that it would be useful to apply exactly some of the techniques applied to our own funding that comes from the federal government whereby it is literally quarantined for specific purposes. It should be audited. I have to sign off many audited statements each year for the federal government about specific program applications and the outcomes associated with them. In other words, money for practicum does not suddenly go into the larger pool and is dissipated within that. There is literally a single, quarantined stream that is audited and accounted for at the school level, if you like.

Mr HENRY—I think it is an important issue to follow up because, as you say, practicum is an integral part of the training and education of a teacher, and it is certainly something that universities tend to suggest is not quite as valid as we might think it is. So if they are diverting resources from it we should be addressing that.

Mr Cappie-Wood—Again, I can only say that it is anecdotal. We hear that it is, and it is fairly easy to fix.

Dr Brock—I would like to make a general comment. I urge you to value the importance of balance. I am not aware of people screaming their heads off at a great cohort of beginning teachers coming into our schools who are badly trained and badly prepared. We have set up a very intensive teacher mentor program in this department to help people make that transition.

Quality of teaching concerns are also sometimes applicable to 20-years-out teachers who are stale and tired and who perhaps need a break. Not all things should be loaded on the shoulders of beginning teachers. Similarly, it is not either academic or vocational; it is both. We do not want people coming in as English teachers with a fantastic bedside manner but who think that Andrew Marvell was a front-row forward for South Sydney. Some of the most dangerous teachers are often the ones who are most charming but who do not know their stuff. It is so important that we have people who are thoroughly across their subject matter, such as science, English or history, who have a knowledge, a passion and a commitment, and not just people who are cleverly trained to survive 40 minutes in a classroom. It is both sides of the equation. Sometimes inquiries set up like this can end up thinking that everything is a problem with pre-service teacher ed.

Mr SAWFORD—I will tell you one thing about this committee—it is interesting that this is the first House of Reps committee that has had an inquiry into teacher education—

Dr Brock—I am sorry, Mr Bartlett. I called you a senator. I apologise for that.

Mr SAWFORD—One of the things this committee can be proud of is that it does exactly that. In all its recommendations, ever since its inception, there has never been a dissenting report, except on one minor issue. That balance is the thing that is driven. It is nurture and it is nature. It is collaboration and it is competition. It is explicit and it is implicit. It is neither one nor the other. Much of the evidence that we get put to us that comes from education departments, teacher unions or whatever is 'either/or'.

Dr Brock—Exactly.

Mr SAWFORD—I do not accept that. This committee will not accept that. This committee will respond to that response in terms of trying to put a balance across. That is not always received well, as when we did the boys' education inquiry. But what drove us was balance, and I think that is what will drive us in this inquiry. We have had some very useful information from your submission, which I am sure when we get together to debrief you will see reflected in those final recommendations. But balance will be the thing that will drive us.

CHAIR—Thank you for appearing before the committee today. We will certainly be seeking further information from you. As Rod said, it is a very informative submission.

Ms Kelly—We also table some of our teach.NSW promotional materials and our professional learning policy, which gives $36 million to schools annually.

CHAIR—Thank you. Is it the wish of the committee that the documents be accepted as evidence? There being no objection it is so ordered.

Proceedings suspended from 10.33 am to 10.43 am

ARMSTRONG, Professor Derrick Jennison, Dean, Faculty of Education and Social Work, University of Sydney

BRUNKER, Ms Nicole Colleen, Associate Lecturer and PhD Student, Faculty of Education and Social Work, University of Sydney

EWING, Associate Professor Robyn Ann, Associate Dean, Academic Programs, Faculty of Education and Social Work, University of Sydney

HUGHES, Dr John, Pro-Dean, Faculty of Education and Social Work, University of Sydney

CONNELL, Ms Andrea, Principal, Leichhardt Campus, Sydney Secondary College

MARTIN, Ms Valerie, Principal, Crown Street Public School

McARTHUR, Mr Clive, Teacher, Greenwich Public School

CHAIR—Welcome. I remind you that public hearings are recorded by Hansard and that a record is made available to the public through the parliament's website. Although the committee does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and, as such, warrant the same respect as proceedings of the House itself. The giving of false of misleading evidence is a serious matter and may be regarded as a contempt of the parliament. I invite you to make some introductory remarks.

Prof. Armstrong—I would like to thank the committee for the opportunity to make this oral submission and to answer your questions. I think this is a very important inquiry. I have been Dean of the Faculty of Education and Social Work at the University of Sydney for 12 months, having come from the UK, where I was Professor of Education at Sheffield University. I have had some 20 years experience of teacher education reform in the UK, both good and bad, successful and unsuccessful, so I suppose there is some good experience there. But I think this is a very important inquiry and a great opportunity. I am sure the inquiry will strengthen and enhance the system of education in Australia. Sydney university would very much like to contribute and give our fullest cooperation to the committee.

I have brought with me today a selection of people who work with the University of Sydney, including two of my colleagues from the faculty who work very closely in the area of teacher education. I have also brought with me two school principals, Valerie and Andrea. The particular reason for that is to help to address some of the issues to do with partnerships in teacher education between universities and schools, which is very much a feature of the work we do at Sydney uni and something which we believe very strongly is a central element to good quality, best practice teacher education. It is an area which we would particularly like to strengthen further in our work and would like to see strengthen generally in the area of teacher education. I am sure my colleagues will be able to say more about that if called upon to do so.

We have also brought with us two students of ours, Nicole and Clive. Nicole has been a practising teacher for a number of years, having graduated from Sydney uni, and she is now doing a part-time PhD in teacher education. Clive is on the university's M.Teach program—Master of Teaching—which is a graduate entry program. He is currently on school placement on an internship at a kindergarten in Sydney. We want to bring a breadth of knowledge and experience and different insights into the teacher education system.

I do not want to speak in detail. We have outlined four areas which we would particularly like to focus on, but obviously that is up to the committee. Those areas are: the impact of teacher education on early professional experience, university-school partnerships, the role of research in professional education and the critical area of continuing professional education, which we hold great store by.

We do believe that there is some variability in teacher education in Australia. Some differences are a good thing. Too much variability impacts negatively upon the system, and I think there is an issue about the variability across the area of teacher education in Australia. However, we strongly believe that improvements in the system should focus upon existing good practice, and there is a lot of good practice going on in this country—for instance, in the strong partnerships between universities and schools, in initial and continuing professional education, and in the central role of research and evidence based practice in teacher education.

Another area we think is of particular importance and does require serious attention is the area of practicum training. I think most universities would say that there is crisis in practicum training, and that is an area of initial training that does need to be seriously looked at to see how that problem can be addressed more effectively. We are very supportive of the ongoing programs around tighter monitoring of and the development of competency standards for teacher education, and some of that is taking place at the state level. I am sure my colleagues from the DET talked about those in their submission. We are very supportive of the development of these issues for teachers in New South Wales and the graduate attributes for beginning teachers. I am very committed to developing and enhancing those programs.

In summary, we feel that we have a tremendous amount of experience in the field of teacher education, and hopefully we will be able to contribute through our submission some of our thinking about that. We recognise there is some need to develop and improve the quality of teacher education. I am open to new ideas, and we feel that the University of Sydney is very much at the forefront of that. We recognise there are some particular issues which need to be addressed, and we can talk about that further as we go along. I welcome your questions.

CHAIR—You have raised the issue of a crisis in practicum training, and certainly there are some real issues there. We get some variability from universities which have very strong partnerships with their schools and some other universities that struggle a little bit more. I would be interested if you could expand on the crisis in practicum training.

Prof. Armstrong—I certainly could, and some of my colleagues may also want to add something, particularly from the school perspective. The problem is that there seem to be simply not enough places. That is the fundamental problem, certainly in New South Wales: there are not enough places to go around, and that is a serious problem. Every year we have great difficulty finding appropriate placements for our students. We are duty bound to provide such placements,

so that creates a serious issue for us. There is a tremendous amount of competition amongst universities for those places, and different universities have different approaches to the way in which they negotiate those places with schools.

Part of the problem is that the prac placements are not negotiated on the whole with individual schools but with individual teachers, under the agreement with the unions here. Teachers are paid a small amount for participation, so it often does not even involve decision making and cooperation from the schools. Then in New South Wales you also get out-of-state providers encouraging their students to apply for places in New South Wales. It is a very difficult planning process for universities, and I am sure we would appreciate some greater regulation, if you like, of that system and greater support for that system.

But also, crucially important in relation to this idea of school-university partnerships in teacher education, we would really like to see a closer working relationship with the schools as schools in this way rather than trying to negotiate with individual teachers. We feel as though it is a two-way relationship between the university and the school. There is a need to enhance that relationship in a broader context than simply in the training of teachers. Long-term relationships with schools provide the school-university nexus as a partnership for learning and professional development on an ongoing basis, and I think something which would strengthen and encourage that model and encourage schools to participate in teacher education, not just at the initial level but at the continuing level, would greatly benefit the education system in this country.

CHAIR—We asked the question to other witnesses: would you support some form of conscription to encourage schools to get involved? Fairly universally, the answer came back, 'We want to focus on a quality experience.'

Prof. Armstrong—Absolutely.

Prof. Ewing—That is right.

CHAIR—They said that forcing people to participate would not produce the sorts of outcomes that they wanted. I am interested in your thoughts as to the ways in which we can encourage schools and, in particular, teachers to get involved. One of the things that has been proffered by other witnesses is the idea of professional development opportunities, for example, as a way in which the university can pay back for a mentoring teacher's involvement.

Prof. Armstrong—That is very true.

Ms Connell—I agree totally with the proposition put forward, that the quality relationship is the key thing. I think what schools want is the support for ongoing professional development of the teachers in their schools. We have had that, and the quality support has come through things from the University of Sydney in the area of literacy, the University of Newcastle through boys education, the quality teaching framework and productive pedagogies. To have this support through universities in those big areas, where we need support in implementing and in-servicing our staff, is invaluable. When you feel that you have an academic mentor or a relationship with a university that is going to support the implementation of government policies and desired pedagogies and initiatives, people are very welcoming of the reciprocal relationship of having teacher trainees in schools.

We are lucky because we are here in central Sydney and I have a geographical relationship as well as an ongoing historical relationship with a university, but I have worked outside of Sydney where that is not so easy. I have worked in rural areas, in Maitland and parts of the Hunter Valley—in fact, with Paul Brock, when he was at UNE. But there is a geographical relationship that has some impact on how the quality relationships are forged. When there is that sense of getting academic mentors, the research base and the professional development for teachers in situ, it is a very positive thing.

Ms Martin—Perhaps I could add that, even though we recognise the geographical limitations for some schools, by researching within the schools and providing support to particular schools that are perhaps closer to the universities, those ideas can then be disseminated more widely to other schools—and I suppose we will be influencing the practice within the schools and perhaps within the universities as well. So I acknowledge that, but I feel that idea that can be taken further with professional development.

Prof. Ewing—Certainly, in terms of our internship program, we offer professional learning conferences and opportunities for our mentor teachers. That has been very successful in the 10 years that we have offered the Master of Teaching and those internship opportunities. We certainly do not have any difficulty actually finding mentor teachers for our interns; it is earlier in the development of a teacher that we find it difficult to find mentor teachers. Part of that, we think, is because there is no recognition for a teacher who has those mentoring skills. For example, in New Zealand, there is no time afforded to either early career teachers or student teachers. Mentor teachers are given some time recognition to do that really important job. Added to that, of course, is that intensification of teachers' work: taking on a very young pre-service teacher in their early years is a significant additional load. Even though lots of teachers see that as part of nurturing the future profession, they are finding it more difficult to do.

Mr SAWFORD—Following on from the issue you raised, Professor Ewing, I think we all agree recognition and time are a problem in the practicum. But what about remuneration? We all seem to be a bit shy about this, but surely that has to be part of the trinity as well.

Prof. Ewing—Yes. Teachers are, as Derrick was referring to, paid individually for having a prac student, and that is part of the industrial relations agreement from 1976. In reality, a lot of teachers do not see the remuneration as that important because after tax it works out to be something like $10 a day. We have welcomed the opportunity, for example, with the internship, to negotiate different things like the professional learning conferences that we offer or paying a school funds towards their professional learning program rather than needing to pay the individual teacher. So we think there are probably other more creative ways that remuneration could go into schools for resourcing the schools' professional learning.

CHAIR—Do you want to provide a couple of examples of those creative ways?

Prof. Ewing—For example, the way that the mentor programs work is that the teachers are not paid for every day that an intern is in the school. Once an intern has finished, they are able to be in the class without the in-class supervision of the mentor teacher. So the intern works half to two-thirds of a full teaching load. The mentor teacher may sit in sometimes but has that release time to work on other projects within the school and to further their professional learning through attending the professional learning conferences that the university provides or indeed

other opportunities that other providers may be offering. The mentor teacher receives only a $62 payment for the work report that they write at the end of the internship. As I said, we do not have any trouble getting mentors for our interns because teachers see that investment in their professional learning and the opportunity for time as very valuable, as opposed to a small payment which they get for a prac student.

Mr SAWFORD—And a bit of assistance in the classroom.

Prof. Ewing—They also often see that it is a two-way symbiotic process. They have a young teacher who is very au fait with what is happening in curriculum and syllabus et cetera so that they are getting ideas that way. They are also giving their expertise and their knowledge about management and programming et cetera to that early career teacher.

Mr SAWFORD—Just following up on that, we have been talking about recognition time and remuneration. In the old way, the demonstration schoolteacher was often a career step. Is a career step important?

Prof. Ewing—In terms of remuneration?

Mr SAWFORD—No, in terms of encouraging perhaps more people to take on the responsibilities of supervising teaching. If it was seen as a career step, this sort of adds a little more meat to the recognition part rather than just being recognised.

Prof. Ewing—Certainly in the new accomplishment and leadership standards in the Institute of Teaching accreditation, mentoring an early career teacher is seen as a leadership skill. It is not as explicitly referred to in terms of the supervision of student-teachers. For example, in relation to the mentor program that Paul Brock referred to earlier, mentor teachers are recognised as mentors and they are paid as equivalent to a faculty head teacher. So, yes, that is a recognition but, sadly, there are only 52 of those across the state, and they are working with young teachers who have actually graduated, not with preservice teachers.

Mr SAWFORD—When the chair said that he wants creative suggestions on what we do with teacher education, he is deadly serious because this committee is under the pump in many ways. We are conscious of the fact that over the last 25 years, since 1980, there have been numerous reviews by state. There has been a Senate inquiry, but the reviews have been largely state ones. We are also aware that many of these reports have been acknowledged as good reports, with good recommendations. There is also general agreement that they have largely sat on the shelf and have not been acted upon to the degree in which they could. This is the first time that the House of Reps have taken on teacher education. We are very conscious of the fact that we do not want our report to be another one on the shelf. The pressure is on us not to consolidate the recommendations of what previous reports have done; we are going to have to do it in a different way, and what that different way is we are not so sure yet.

On the impetus of new ideas—and my question is to you, Derrick—in the sixties in South Australia we had an invasion of people from the redbrick universities of the United Kingdom. They came from Bristol, Sheffield and all over the place. They made a significant contribution to teacher education because they formed the foundation of the necessary change mechanism,

providing the impetus of new ideas, an assessment of the status quo and so on. How long have you been here?

Prof. Armstrong—Just 12 months.

Mr SAWFORD—Are more of your colleagues coming or are they coming from other countries? It seems to me that a lot of good work has gone on in these reviews over the last 25 years. What concerns me is that they do not seem to have gone anywhere. There is something drastically wrong here somewhere. I think we have some parts of the answer; the education department gave us a couple this morning. My colleague next to me could solve the practicum problem quite easily, but it would need the state governments giving up payroll tax, but that is all right. There is a whole range of things we could suggest. When you do look at the reports and the consolidation of them, or even if you are trying to extrapolate sections of them, it comes across to me that there does not seem to be an identifiable plan in teacher education in this country that people can grasp. Is that real? Do you feel that? That is my impression. Am I wrong?

Ms Connell—From talking to some of my colleague principals over the last few days, knowing that I was coming here, I think school principals want a coherent approach to teacher education that we all understand, rather than a scattergun approach. You get the odd phone call from the UNE, which is hundreds of miles away, and somebody who happens to be connected to the inner city says, 'Can I come to your school?' We want to be supportive. We are all altruists. Most people who go into teaching these days have to be. But it is not coherent and it is not good. You have to hang on to that sense that we have a responsibility for teacher education. You have to hang on to that philosophy deeply, so you say, 'Okay, come on in.' But sometimes it is disruptive, the times of practicums vary and the responsibility for supervision or the writing of reports varies. We would like more cohesion.

Mr SAWFORD—How would you get a coherent plan? How would you do it?

Ms Connell—I am very practical, but I would like to think there are geographical sectors in the state—I am talking about New South Wales—where you knew that those universities were linked to that region. It is an old approach, but it seemed to work in the past. I do think it works to have, in the main, skills in those universities linked to the cultural, socioeconomic and geographical milieu. I think there needs to be a quota. Some schools end up with lots of prac students and preservice people coming through their doors and others close their doors—and they are allowed to close their doors. They have bad experiences and they say, 'No, we are not taking prac students.' I do not think that is right. I do think there needs to be a sense of obligation for all schools to be a part of this.

CHAIR—How do we engender that? That goes back to the conscription issue we spoke about earlier.

Ms Connell—I would not like to use the word 'conscription', but I am certainly heading in that direction.

Prof. Armstrong—There does need to be greater management of that system. Whether that is state or national I am not saying, but there needs to be more centralised management of the system.

CHAIR—Through the employer bodies?

Prof. Armstrong—Yes, through employer bodies. To be frank about this, I think the employers need to recognise fully their responsibilities in relation to the training of teachers in this respect. The universities can do so much; the schools, indeed, can do so much. But these young teachers, whether they are working in the state system, the public system, the independent system or whatever, are working within the education system, and I think employer bodies have to recognise that what is being provided for them is a service and that that creates some responsibility for them both in terms of cooperative management of that system—

Mr SAWFORD—Talking about New South Wales, is there a bit of an impasse between universities and the state education department?

Prof. Armstrong—I do not think so.

Dr Hughes—Not at the top level.

Prof. Ewing—I think there is a lot of cooperation—and not just with the New South Wales DET. We have excellent relationships with the CEO, with the different dioceses, and we have very good relationships with the independent system as well. That is at the top level, in one sense. With regard to the practicalities of working it through, what has happened over the last few years is that it is much more up to the principal of the school whether the school is going to be involved or not, even though, at the top level, I think principals are certainly encouraged to be part of things. It does depend very much on how successful the partnership is and how well the university works at that partnership with those schools.

Going back to that creative thing and to doing something about that impasse, that is the kind of thing we have been working on—finding more alternative ways of doing things alongside traditional practicum. You do have to have traditional practicum—the internship provides a bridge between that and full time—but there are other things that students have to do in schools to become really familiar with how schools work, and that is what we have been working on with our partnership schools. We locate some of our coursework in schools. Students go to do things one to one with students or help schools in different ways. But working one to one with different schools takes an enormous amount of work, so it takes time to build up those partnerships.

Mr SAWFORD—Valerie, do you have anything to add to Andrea's comments about the lack of an identifiable plan and the need for a coherent plan?

Ms Martin—I think that there is a difference between the different universities. It sometimes comes as a surprise to teachers when they take a teacher from a university, preservice, and one from another, and they have very different expectations of what is going to be done. We tend to go just with Sydney, because that is where our partnership is now. As to your other question of what we should do and whether or not we should conscript, I actually think it should maybe go

right back to when teachers are training, so that part of that training is an expectation that you will train others when you get out into the profession—because it is like all other apprenticeships. It seems there is a shortage of apprenticeships in many areas nowadays and the expectation is that we will bring people in from overseas to fill the gaps rather than train them ourselves. I think we should build into our system—and it should come through the employer groups as well and be supported in writing or legislation—that what a teacher will do as part of their teaching will be to train apprentices, the novices coming up through the system. I am in the group of those that are about to retire. Apparently, we make up a huge percentage of the current population, so we are going to be looking for a lot more teachers and we need to have them supported through these preservice programs. So I think all schools should be involved.

Mr HENRY—I must say that I was very pleased, Valerie, to hear you say that we should be requiring of teachers a commitment to agree to teach apprentices. It seems to me that part of the problem in this whole program concerns who is going to take responsibility to ensure that teachers actually have the knowledge and the commitment to teach. Where does it start? It seems to me that we are getting a lot of evidence from different people—from universities, education departments and teachers themselves—but no-one is actually taking responsibility to pick up on the practicum.

As for the actual practical aspect of knowledge that actually delivers the results and the outcomes in the classrooms, generally speaking, the universities want to address the academic requirements but, in my view, no-one is picking up on or taking responsibility for the practical teaching skills that you need. Looking at your submission, it is interesting to see that you talk about vocational training not being delivered 'at this faculty'. I have read that as being vocational training in terms of teaching as well, including the whole range of challenges that are practical aspects of teaching: addressing bullying and those sorts of things. I would be interested in any comments that you might have on that. My next question is on a point that you have picked up on. Why aren't you inculcating in students of teaching the need to ensure that they take a mentoring role when they qualify?

Dr Hughes—I do not want to get defensive about this, but the vocational training in our submission refers particularly to material like TAFE vocational training.

Mr HENRY—I appreciate that.

Dr Hughes—We are very strongly committed to the vocational training of students. In fact, in the last three years we have introduced a mentor program within our own faculty which seems to be extraordinarily successful and actually offers a course in how to be a mentor.

The other thing that I want to point out—and this is also referred to in our submission—is that it is not all doom and gloom. In the submission that we gave you I have referred to some research that Jackie Manuel—who happens to be Paul Brock's wife—and I have been conducting on secondary teaching students at Sydney university. They are an incredible, top group of students. Ninety per cent have got UAIs over 90, 60 per cent chose teaching as their first profession and 65 per cent of them see themselves in teaching for the next 10 years. They are committed to the wellbeing of others and they have a passion for their subject. But the crucial thing about these students—they are really the top; their UAIs have to be higher than those of Arts and Science entries to get into that five-year program and it is the same with

primary—is that they had a significant teacher at school and that has motivated them not to choose money-making businesses but to come into a five-year double degree. If we can capture those students and mentor them in the system we will have an extraordinarily good bunch coming up ahead, a group that I would be pleased to have teaching my children.

Mr HENRY—In your submission you talk about attrition rates and the demands of teaching in three areas that commonly need addressing: teaching programming, classroom management and outcomes based aspects. I would think these would be critical aspects for any person graduating as a teacher to be able to address in the classroom. When we talk about partnerships with schools, I think the whole process should be an integrated relationship between the department, teaching facilitators like you and the schools, but that does not seem to be the way. We talk about partnerships where a principal agrees, but it is the teacher who is going to do it. How do we manage that?

Prof. Armstrong—I think there is an organisational problem. I cannot speak for the departments, and I will not, but it is not a problem which can be easily addressed by universities or schools. It is a question of how schools are encouraged and incentivised to be involved in teacher education, how continuing professional development is organised and, I suppose, understood within the profession by the employers and how they incorporate that into their continuing activities. We are not in a position to do a lot about that. But in the areas where we are in a position to do something about I think there is a tremendous amount of good practice going on. We have very strong school partnerships at Sydney, and I am sure other universities have some very strong partnerships too. I am saying that there are some really good examples of best practice here, but what is perhaps needed is some organisational management process by which the best practice which already exists can be spread out and moved across the whole sector. I think at that level there is a need for more coherence and more coordination. Although we can encourage and advocate that, and we would, it is not something that as a university we can make happen.

Ms BIRD—Would you see the NIQTSL having a role in that?

Prof. Armstrong—I think NIQTSL is a very important initiative and I have been following NIQTSL with quite a lot of interest. I think there is a strong case for national accreditation, for instance. How it would articulate with what is going on in the states is another issue. Often the two are mutually exclusive, but think there is a need for close articulation. The development of the Institute of Teachers here in New South Wales is having a major and very positive impact in terms of accreditation and quality control. How that would articulate with NIQTSL I am not sure.

Ms BIRD—I suppose what I am talking about is an expansion of their role beyond accreditation to being a central repository for fostering good practice and outstanding examples. I am looking both at the state-level institutes and the national institute. Perhaps a recommendation we could put forward is that they expand their role beyond straight accreditation to some sort of fostering role.

Prof. Armstrong—I think there is a case for that. There are a number of issues to do with teacher education in Australia. As I see it from my limited experience across the country, one is the movement of teachers from one state to another. Most new teachers in New South Wales will

teach in New South Wales, but nonetheless a significant number will move outside of New South Wales, and there are different standards and different—

Ms BIRD—Indeed, overseas.

Prof. Armstrong—I was going to say overseas. We also have international students coming into our programs, particularly into our M.Teach program. Those teachers are going to go back to the countries they have come from. They are coming here because they perceive that they will receive a very high quality teacher education in the university sector in this country. But they are in some ways constrained by the particular requirements of the state system here which do not necessarily address some of the issues which will be apparent in their own country. There are some concerns.

Ms BIRD—I think you are missing the point that I am trying to talk about. Several of the universities have told us that if they want to have a look—and perhaps it is a research question—at good practices across Australia they do not know where to go. Each university holds its own not corporate knowledge of the things that it is doing, but there is no national capacity so that people can ask, 'What are other universities and schools doing in partnerships?' I am trying to find a mechanism that we might progress as a committee for doing that. Perhaps it is like with us—we have great research sitting on shelves. I may be looking at the wrong place to place it. You might want to recommend a more appropriate way to place it. Clearly there is not a lot of capacity to share or have a look at what—

Ms Martin—We engage because of the national quality teaching model. I do not know whether that in part answers it. There are certain requirements within that, and it is across other states and territories as well. Is that the sort of thing that you are looking at?

Ms BIRD—I am not looking at meeting standards or compliance; I am looking at a bank of experiences that you can access—like a national library of good practice in teacher training—and what the mechanism might be for that. We have gone around and heard all these tremendous things and quite clearly that information is not out there or easily accessible.

Prof. Ewing—It is probably accessed at teacher education conferences and through things like the New South Wales TEC. There are some sharing opportunities in that way.

Ms BIRD—Is that what people would rely on?

Prof. Ewing—I am not sure that there are a lot of other opportunities to examine what other institutions are doing, except where you have those contacts yourself and you arrange for those things to happen.

Ms BIRD—It would be valuable to have that research on pedagogy and partnerships with schools available.

Mr FAWCETT—I have three quick questions. We have had a number of discussions about maths and science teachers. I noticed on pages 2 and 3 of your submission the UAIs for maths and science teachers, which are pleasingly high. Firstly, what percentage is coming into those

streams? Do you have vacancies in those streams because you are not getting enough people coming in? Secondly, in the paragraph accompanying the table, you state:

Many Master of Teaching students are deliberately changing from higher profile careers in, for example, Engineering, Law and Medicine.

Are we talking ones and twos or dozens?

Dr Hughes—At the undergraduate level, I think it is still a problem. Currently the UAIs are higher than they are for science, and the science faculty is one of the highest in Sydney. We thought we might be able to get some more in this year but the numbers are remaining firm at about 30 in maths-maths and 30 in maths-science. They travel through reasonably, but in the combined degrees for secondary in maths and science it is still a major dilemma with the demands in the science faculties of workload, lab commitments and that sort of business, along with having to be out there in practical schools.

The M.Teach arrangement has been very strong. The undergraduate degrees at Sydney university tend to attract recent school leavers. That is the bulk of the cohort. The master's degree does get a lot of career-change people. For the last couple of years it has been strong in maths—in the 30 to 40 mark. I think I am right on that. Science is less strong but still reasonable and holding. But that is part of a whole change that needs to happen with the excitement of maths and science. Maths and science—and I think HSC syllabuses also have this to a degree—is still a process of: here is the problem, here are the steps you take and here are the results. You do that lock-step process. We know that maths and science do not need to be like that. That is one area that I think needs great attention or support.

CHAIR—Do you know why those people are making the change to the University of Sydney? Are you one of the few people who offer that?

Prof. Ewing—From other careers?

CHAIR—Yes.

Prof. Ewing—Clive, you should answer that. You made a change.

Mr McArthur—I recently made the change myself. I was in human resources for 16 years and I made the change to Sydney university because of the amount of practicum time that was offered in the Master of Teaching course. I saw the internship. I spent a week studying various institutions in Sydney where I could retrain and I specifically chose Sydney university for that reason. I got about 16 weeks in schools in the two years of doing the Master of Teaching. Then back in the university we reflected on that time. The various tute groups we had all talked about the practical application that we just had, how we could do it differently and how it would stand us in good stead once we got out there at the coalface.

Mr FAWCETT—How many of those masters students would, for example, be qualified engineers, be they chemical, structural or civil engineers?

Prof. Ewing—I can't give you an exact number, but at least half of our masters students would come from different—

Dr Hughes—We could forward those figures if you are interested in them.

Prof. Ewing—We can certainly do that.

Mr FAWCETT—Given the shortage of recent school graduates moving into those areas, if we have people with life experience in and real applications of chemistry, physics, maths et cetera, then it is an ideal cohort. The question is: how can we replicate that or encourage replication of that at other places? On page 9 of your submission you state:

> There has been long term recognition that the transition between primary and secondary Education may prove difficult for some young people.

I do not know about the rest of the committee, but I do not recall having any difficulty transferring. We were just like sheep getting out of a race. We could not wait to get to high school. There were more options and opportunities et cetera. Yet now it is common that people are finding it hard to transition. We had an animated discussion with the last group of witnesses about the difference in primary school teaching and high school teaching. From your perspective, as the people who train teachers—I notice you still see a difference between primary education and all the secondary subjects—how much work have you done in studying the effectiveness of the current model of primary teaching?

Prof. Ewing—There are a number of different questions there. First of all, there is a lot of research that demonstrates that children plateau in the latter years of primary and they do not pick up until about years 9 or 10—the middle years, in a sense. There has been a whole lot of work around middle schooling and the importance of engagement and relevance et cetera. That is related of course to the quality teaching frameworks that have been developed. A number of schools have looked particularly at those middle years and some schools are now moving to different models, with middle schools. They recognise that often children who are leaders in a primary school go into year 7 and go to the bottom of the pile, and that can do all sorts of things to self-esteem et cetera. That is one part of your question. Andrea, you are probably able to address this much better than me. Did you want to add to that?

Ms Connell—I think it would be wonderful if teacher training had aspects of middle schooling. Structurally in New South Wales at the moment—in public education at least—we very much have the notion of a K-6 school and either a 7-10 school or a 7-12 school. Because I am in a 7-10 school, one of the points of my charter is to try to manage primary-secondary transitions better and to adopt a middle school approach. But that is new. My college has only been in existence for three years.

Mr FAWCETT—Part of the context of my question was that, 30 years ago, either we were blissfully ignorant of the fact that children plateaued and then did not pick up again, or it was not really an issue. Whereas now we are saying that there is an issue. I am asking if there have been any longitudinal studies done to say that the change in teaching style at primary school has been a causative effect of this difficulty, or was it just something that was always there and we never picked up on it?

Prof. Ewing—We are talking stage 2, stage 3 and stage 4. I think there have been issues around that for a long time. I think that it is also related to things like boys education and how we motivate boys and lots of girls, for that matter, after they acquire the initial skills, in a sense. I think our clientele, our school populations, have changed considerably from what they were 30 years ago. I think primary schools and secondary schools are changing accordingly—not perhaps as quickly as they need to—to meet the needs of the changing student population.

Primary schools are certainly very different to the primary schools I graduated into 30 years ago. There is a lot of study of and attention being given to secondary schools working in partnership with their feeder schools to make that transition much more seamless. For example, at one school I was involved with in Holsworthy, they were working with four schools to address a whole lot of those issues. The secondary and primary teachers were planning units of work together and of course that led to a lot of collaboration. Similarly, in our pre-service, with the intention of the way we do education for the undergraduates, they are in K-12 groups—study one groups—so that they look at themselves as teachers and the issues around what it means to be a teacher, not a primary, secondary or subject area teacher first and foremost. We think those things are really important. In time I think it will be very important to look at preparing teachers—particularly, for example, the year 7 to 10, the senior secondary school teachers or whatever.

Mr FAWCETT—My last question relates to that. You talked about the national framework for quality teaching and et cetera, and if we are going to move towards some kind of national accreditation, then obviously it is going to be important that the views of state departments, universities et cetera are all taken into account. I am just wondering who you consider to be some of your key stakeholders in terms of outcomes. We have had varying answers from universities. Some say, 'Well, it is our students,' and others say, 'No, it is the education department,' or 'the independent school sector,' et cetera. Others say, 'No, it is the parents or the employers.' I guess I am interested in your answer to that because, as we move towards national accreditation, it is important that the people who are the stakeholders have an opportunity to have input. I looked at a submission—it is not your submission, but I think it really draws the point out well. The expectation of employers and parents, when it comes to reading, is that kids understand grammar and can actually string a sentence together correctly when they write a report for work. One of the universities has said, in terms of their outcomes for reading, that it is:

> ... learning to decipher print (decoding, analogy, prediction and automaticity) with recognition of the importance of the explicit and systematic teaching of phonological and phonemic awareness as well as phonics.

This is opposed to grammar as an outcome that most employers would expect. So I am interested to see who you view the stakeholders to be.

Prof. Ewing—I think our stakeholders are all of the people that you mentioned. Yes, our students are very important stakeholders and they do not just go to the independent, the department or the Catholic system. Quite a large proportion now, as you mentioned before, initially go overseas to teach. We have a lot of international students—more so in the Master of Teaching. Our students are important stakeholders but so are all our employers, and on our advisory boards we make sure that we have representatives from the employers. I certainly think that the parents and the children in schools are stakeholders as well. I would not leave any of those people out.

Mr FAWCETT—You have mentioned employers, by whom I assume you mean the education department type employers and employers of teachers. If they are all stakeholders, how do you provide opportunity to the other people—schoolchildren, parents of schoolchildren or 'real world' employers—to have input into your syllabus and the outcomes?

Prof. Armstrong—We have advisory committees within the faculties. All our programs have their own advisory committee, which is made up of a variety of people, including schoolteachers, parents and others. We do not have it at the moment, but we made a decision very recently to set up a faculty-wide advisory committee of key stakeholders to give a stronger overview—a stronger support, if you like—in terms of the development of our work at a faculty level. We are taking very seriously that point about engagement with our stakeholders, taking on the advice and working with our stakeholders in that more formal way. We value that input very much.

We also have an existing advisory committee for our division of professional learning. It is chaired by the chair of the board of studies for New South Wales and there are members on that board from the whole range of stakeholders, including the independent public sectors, employers, the business world, parents and unions and so forth, who are advising us. That is a very active and valuable body. We do take that whole area very seriously and we see that as a way of actually improving our practice. We are listening, which is very important.

Mr BARTLETT—Derrick, you have been here one year from Sheffield university.

Prof. Armstrong—That is right, yes.

Mr BARTLETT—Do you think that Sheffield does better than Sydney university in terms of preparing teachers for the classroom?

Ms BIRD—Better even than the United Kingdom!

Mr BARTLETT—Yes—the United Kingdom versus Australia! Is there some clear message that you can give us?

Prof. Armstrong—That is an interesting question. I think generally there has been a lot of experience in the United Kingdom about developing school partnerships. The lessons from that would be well taken on board here, as well as some of the mistakes that have been made in relation to teacher education and its relationship with schools. I am very much in favour of having a strong practicum element in schools and a strong craft knowledge element in schools. On the theoretical side, I am very much in favour of that being integrated at the craft level rather than simply lectured in psychology, history and so on. That is not the model of teacher education that I would want and it is not what they have in the United Kingdom. I am concerned that, in the anxiety to have a stronger relationship with schools, craft based knowledge is going down the line of having predominantly school based teacher education. I think that is so variable upon the quality of the school, and the problem there is a lack of support that the schools so often have in teacher education where it is devolved from the universities.

Having a stronger practicum element and a stronger school based element within the context of a strong partnership, I think, is something to be desired. For a time, the United Kingdom went

down the road of having four-fifths of teacher education taking place in the schools. The funding for teacher education was moved into schools. That failed because the school system could not cope with that. That has now reverted back and it is a fairly even split between schools and universities. The universities are back having a very significant role in partnership with the schools.

The crucial message coming out of the United Kingdom for me in terms of my experience in Sheffield was building that strong partnership around craft knowledge in particular. A strong reflective partnership is something to be desired and is of great benefit to the system and to the individual teachers. To separate the university sector from the school sector in teacher education, I think, is a road to ruin. That is the message. It has been a painful lesson in the United Kingdom—going one way and then pulling back from that.

Mr BARTLETT—You say it is about 50-50 at the moment.

Prof. Armstrong—There is some variety. The situation in the United Kingdom is different in the way in which teachers are trained. The predominant course is a one-year postgraduate certificate in education. It is a very intensive year, but it is a one-year course. I think it is too short. If I was looking at this from scratch, I would much prefer an M Teach model, a two-year model, where there is more time for reflection and more time to consider what has actually gone on in the classroom. I think too much goes into that one-year post-graduate course. It is like a one-year diploma, basically—a Dip Ed. I do not think that is a model I would advocate by preference. But in that model, because of the need to get more experience in schools, the two years of practicum were crammed into the one year. They are trying to get too much into the year. To my mind that is a problem. But, yes, I think it is about 50 per cent each way now in terms of actual time in school and time out of school over one year.

Mr SAWFORD—To follow on from what Kerry was saying, earlier on when we were talking about practicum you made mention of 'organisational problems' and then you mentioned management process. John or Andrea then said that teachers often report that they were exposed to a significant teacher or to a significant principal. That is the feedback that we get too. It can happen in the context of your own education—through a teacher, a principal or even a teacher educator—and hopefully there will be a few more of those experiences.

We did have a system of demonstration schools where the very best of principals in teacher education and teachers who had skills in supervising young trainee teachers were put together. In some ways, I think they were highly successful. Maybe the reason for their lack of success overall resulted from these false arguments about egalitarianism or whatever. The arguments about egalitarianism were fine, but I think they were applied in the wrong way. Is there a need in terms of the comments that you were making not to go back to 1960s style demonstration schools—I do not mean that—but to consolidate in lighthouse schools around the place principals who are committed to teacher education and to allow those principals to have teachers on their staff who are equally committed to teacher education? In that sort of context, you will get young trainee educators exposed to the significance that you need. Many of them have not had that previously. Is that an area that we should pursue, or are we going down the wrong track?

Prof. Armstrong—I think we should definitely pursue it. It is an area that we are very much involved in. We work with a number of demonstration schools in the Sydney region already. I

would like to see that developed and expanded. I think that sort of arrangement is a great model of good practice. I think it is something to be highly recommended.

Mr SAWFORD—Are there any dangers in it?

Prof. Armstrong—Not from my point of view. I have been here for only 12 months so I have not had a massive amount of experience with the dem schools here, but from what I have seen—and I have visited some—it does seem to be a very effective way of managing the whole system.

There is another issue which I think ties into this, and that is the issue to do with the difficulty of recruitment into teacher education in the universities. We continually have a problem with finding and recruiting high grade, high level quality teacher educators. By that, I mean people with strong classroom experience, disciplined knowledge, excellent craft knowledge, research skills, evidence of reflective practice and all of that stuff. Also, because of the RQF, the research quality framework, we have to be increasingly concerned with our PhDs. And how do we pay them? We are paying them at the rates of pay that a junior teacher would get in a school. That is an ongoing problem.

Yes, we do get people who make choices to come into teacher education because they want to contribute. I am not going to sit here and advocate more pay for teacher educators—I think you can make an educated judgment about that for yourselves—but I do think that this relationship with dem schools and partnership schools in general and that movement of staff across are incredibly valuable in bringing together highly experienced teachers like Andrea and Val and other teachers from their schools and from other schools around the region. It gives them the opportunity to do some work with our university students, for our staff to be more involved in working in partnership with the schools, for our students to be exposed to these different experiences and also for the teachers in the schools to be involved not just in receiving professional development but in the continuing process of their own professional development through engagement with beginner teachers and teacher educators.

That is a sort of model that has a tremendous amount going for it, which addresses some of the problems in the system and some of the difficulties in getting that high quality teacher education. Sydney university, I have to say, is an attractive place to work. If we are having difficulties recruiting staff, I can only imagine what some institutions are experiencing. That must have a knock-on effect in terms of—

Mr SAWFORD—Should every university have an education faculty?

Prof. Armstrong—In my view—and I do not know what the views of my colleagues are—I do not think so, but it is a very controversial issue, of course. Many of my university colleagues outside would not thank me for saying this, but I do not think so. I believe there is variable quality, and there are all sorts of reasons for that. There is also varying capacity. There needs to be regulation for that, but I do not think we should throw out the baby with the bathwater. Some excellent practice goes on. There are some high quality institutions around the country in teacher education doing a very good job indeed.

Mr SAWFORD—Does anyone else want to comment on that?

Prof. Ewing—We have one demonstration school, the North Sydney demonstration school, which we have an excellent partnership with. We have a number of other informal partnerships. That is what we have been working on. I do not know if 'lighthouse school' is the right term.

Mr SAWFORD—No, it is a terrible term.

Prof. Ewing—But if we develop partnerships with schools and the teachers are committed to teacher education, that will be good. That is what is happening for us at a number of our informal demonstration or lighthouse schools. The pre-service teachers are welcome there. They are able to see excellent practice. The teachers are welcome and are involved in some teaching. We have at least 30 quality teachers working with us part-time in our courses. There is that continuum from early career—right from pre-service—all the way through in terms of ongoing professional learning. That exchange is what is really important, so that the profession is being renewed. That is what our division of professional learning is trying to do: develop that continuum, so there is not just a cut-off and you do not think when you get your degree that you know everything you need to know to teach. It is only the very beginning of a long journey. We need funding to do that. Those teachers would need recognition and some kind of opportunity to continue to keep their own professional learning developed et cetera. That is certainly very important.

Mr SAWFORD—I have a last question on the diversity part, which is on page 3 of your submission. It seems from the evidence that has been put before us from a range of universities across Australia that there are some very deliberate attempts to cater for diversity and disadvantaged groups. But there seem to be a couple of groups that miss out. There does not seem to be a deliberate attempt to involve young people from regional and provincial areas or young people from severely disadvantaged socioeconomic areas in teacher training. On that latter one, I noticed that you do have reference to seriously disadvantaged people. It does not say how they are seriously disadvantaged. Would you like to comment on that?

Interestingly enough, there seems to be some sort of feedback that there is a significant change happening to the intake. It is increasingly more mature age, increasingly more metropolitan, increasingly more middle class and increasingly more female. There is nothing intrinsically wrong with any of those characteristics, but diversity means diversity; it does not mean sameness. There seems to be a lot of evidence coming to us that in the main we are getting sameness and not diversity, and there is just a token response to diversity in terms of some of the numbers that are actually used. When you ask people questions like, 'How many are there from that area?' the answer is, 'One, two or three.' This morning, we talked about scholarships. When you look at the numbers, there are three scholarships, one scholarship, five scholarships—it is just tokenism. Would you like to respond to that?

Dr Hughes—I agree with you about the scholarship point. There are three or four or five—I am looking at the scholarships now—that are available, and it is simply not enough. There are more scholarships available through DET, not directly from the university, in the areas of English, maths, science and a couple of others. The university does offer the Broadway Scheme, which allows a student from a disadvantaged area, identified by postcode, five marks below entry, and then support from the student service is part of that—we do have a lot of kids from the west, for example. Our own first-year program does offer a mentoring service and support groups if they need support in that area, but I think is a need to do a lot more.

Mr SAWFORD—What about regional and provincial students in New South Wales?

Dr Hughes—Regional and provincial students are the same: they are eligible under the Broadway Scheme. Rural pharmacy does the same thing at Sydney university. We are doing it, but I think there is the need to do a lot more.

Ms BIRD—It would be interesting to see how many of your mature age students have a UAI that got them into the courses that they eventually end up doing, because a lot of the UAI also reflects the quality of the learning experience at high school. As a result of that, often people will undertake other careers and then come back to teaching never having had a UAI that would have gained them entry in the first place. Perhaps the longer life experience is not a bad thing anyway.

Mr SAWFORD—Maybe what people refer to as the 'golden years' of education in Australia came with the confluence of a number of factors. One was a deliberate attempt to get young people from regional, provincial, disadvantaged and ethnic areas into teachers college and also to import the necessary impetus of ideas through people from overseas—from Canada and other places—who just had a fresh look at the system and gave it the necessary energy required for any changed paradigm. I wish you well, Derrick; I hope you bring some of your colleagues.

CHAIR—Ms Bird?

Ms BIRD—I have a couple of questions. You talked about the crisis in practicum training. Something we are hearing quite a lot about that runs counter to our push for an increased amount of practicum is that students—it used to be just mature age students, but I suspect it is now all students—have to make a living while they study.

Ms Connell—That is right.

Ms BIRD—Are you finding that that impacts massively on your capacity to do practicum training?

Prof. Ewing—Yes.

Ms BIRD—Have you developed any models or looked at ways in which you might be able to respond to that? I do not think it is going to go away.

Prof. Ewing—We are very worried about the decreasing number that are able to do the internship. There has been a noticeable increase in those who exit, for example, without the internship because they simply cannot afford to work unpaid for the nine or 10 weeks of the full-time internship in a school. We would really like to see some thought given to some sort of training wage or honorarium—something. Some independent schools have the wherewithal, but, of course, we have to be equitable and we cannot allow some to have that and others not. But, certainly, it is impacting not just on the practicum but also on their ability to give full-time attention to their studies, to be in the school and to take advantage of the richness of the school, because they have to dash off to work or whatever. Related to that and to your question about the diversity is simply the wherewithal of a lot of our students to pay to study. It is such a privilege to be able to afford that. They have to work for something like 30 hours a week on average. I did not have to do that; I had a scholarship and I did not end up with a huge bill at the end that I had

to pay off. In the time that I have been in teacher education, those things have been definitely impacting on the number of people who can afford to study at uni. And it would not just be in teacher education; it would be in a lot of other areas.

Mr SAWFORD—During the time that I trained, it was interesting that kids who came from provincial and regional areas and disadvantaged areas all had to work then too, otherwise they could not survive.

Prof. Ewing—I had to work too, but not to the extent that students have to now.

Mr SAWFORD—Yes, it has changed.

Ms BIRD—My other question concerns something we have heard a lot about. Many faculties are driven by the demand to run courses, whether or not there is a potential job opportunity at the end. What we are basically hearing is that there is an awful lot of primary school training going on. The department has told us that 10,000 of the 16,000 on their waiting list are primary school trained. But the universities are responding to us by saying, 'Well, the way the funding works is that we get the funding to run the courses that we can fill,' and that seems to be a real point of crisis between the two. I would be interested in your reflections on that.

Prof. Ewing—The department argues that they have that huge list. Can I say that in the first week back of school this year John and I got a call from one regional director in the department saying, 'Could you please tell us who hasn't been employed because we haven't got enough primary teachers.' Sadly, a lot of them are being employed casually or in a temporary capacity.

Ms BIRD—I assume they are saying they are on waiting lists for permanent employment, which I have been on since 1983.

Prof. Ewing—I have been on the list too. I have been on the list for 10 years, in a sense. Part of it is because the people on the list are only prepared to go to a very small number of schools because of travelling or because they have other demands, such as that they cannot move out of a particular area. I would suggest that there is a crisis coming in primary education as well as in secondary.

Ms BIRD—But the problem will still be the same. If people are going in to train with the view that they want to work in a certain range of schools—and I am guilty; I would not take work outside the Illawarra—that is the reality but that is not going to change. In fact, with young people becoming choosier and more flexible about their work, they are even less likely to say, 'Well, this is my career and I am going to go to Dubbo.' That is not going to change. I am sorry; I meant this to be a short question. I am conscious of the medical school opening at Wollongong university, which is directly targeting its recruitment in such a way that a requirement to get in is that you have a connection to a regional area. They are doing that in the hope that that will feed through. I suppose that takes up Rod's point a little bit. I am wondering what capacity you have to determine what courses you will run on workforce demand issues—whether they are right or wrong, as the department is saying—as opposed to funding.

Ms Brunker—I was going to comment that I really do think it comes back to the department. I have been on the list since 1993. I was called at one stage and they had no idea that I was

actually a principal of an independent school at that stage. Because I asked where the school would be—and I said I would go anywhere in the state—they put me to the bottom of the list again. I really do think it comes back to that. I do not think it is a matter of attracting students from regional areas. There are plenty of students willing to go anywhere in the state. I think it comes back to a departmental issue.

Ms BIRD—I would say there are not a whole lot of people I know in the Illawarra who will not go out of it. I do know lots of people who graduate and who want to work in their home areas and will not move out. I think you are right. I have the same thing about how long you are on the list and how that list is managed and handled.

Ms Connell—There are concerns about that.

Ms BIRD—But there is still going to be an issue, particularly around people who are mature aged and already have kids and families established in areas. All I am saying is that that whole trend is only going to exacerbate this problem and I am wondering whether there are ways in which you can address that problem. I was not really looking for your ideas or your resolution to it. I was wondering how much control the university has over what courses it runs in responding to workforce demand as opposed to responding to course demand by students wanting to enrol. That is what I am interested in. I am interested in the level of control you have over that and, indeed, the quality of the information that you can base those decisions on.

Prof. Armstrong—I would say that we have some limited control over that. There are other pressures on us, particularly filling our quotas. Demand is a big driver of the system. The worst-case scenario for us is to drastically under recruit. Where we have heavy demand for primary, which we do, the pressure is on to fill those places. Otherwise, we are penalised. I do not think it is the best planning environment. It does not give us that flexibility and it does not allow cooperation with employers in planning in any serious way.

Ms Martin—Perhaps you would ask how much liaison there is between the department of education and the universities. A shortage is going to come about very soon because of the big age group retiring. Also, we have the change now in the New South Wales Department of Education and Training to the smaller class sizes in kindergarten to year 2. We have gone through two classes in the system. We are about to go to a third class, having to become much smaller. We are all setting up extra classes at the moment, so a number of extra teachers are going to be needed. In 2008, that is when many will retire, on the latest pay increase.

Ms BIRD—Anticipating?

Ms Martin—That feeds right through the system. January 2008 is when the latest pay rise will come in, and many teachers are in that group of 50-year-olds. Then, in kindergarten to year 2, you have the smaller class sizes and that is also having a huge impact on demand for teaching staff.

CHAIR—In your opening address, you mentioned four themes. Before we wrap up, I wonder whether there any comments that you might like to make along the lines of the four themes or whether our questions have sufficiently flushed that out.

Prof. Armstrong—One area we perhaps have not talked about—and I will briefly say something about it—is the relationship between research and professional education. We believe we are in a research intensive institution, as part of the culture at Sydney uni of research, but we also believe very strongly in the importance of research to teacher education. It operates in a number of different ways. Firstly, it operates in the sense that it tries to ensure that our practice as teacher educators is informed by research, research knowledge and research findings so that we are basing our practice upon the best state of knowledge in the field that we can. Secondly, it is important in that sense that we are also engaged in doing research. There are pressures upon us to engage in doing research from the RQF and other things, but I think for teacher educators to be at the forefront of undertaking research and pushing the boundaries in that area is of great value.

The third area of research I want to emphasise is the value of that for our students. It is not just that they receive courses which we are informed by up-to-date research knowledge, which is important, but we are actually creating a culture where teachers themselves are reflective practitioners of an understanding of the uses of research. They can read research, can use research in their classrooms and, most importantly of all, can undertake research in their work. Sometimes our universities are criticised in that a lot of the research is not written for teachers and it is not actually for teachers, and I think that is true. I do not think there is a direct relationship. But when teachers are undertaking an evaluation of their own practice in the classroom at the school level, I think they actually have a good understanding of the rigour of research approaches, research methodologies and research perspectives and about undertaking them. It is a way of enhancing and improving that perspective. I want to emphasise that that is very important part of the way in which we see teacher education and I think it is of particular value. There is always a danger of seeing teacher education as being too much of a competency based model and separating out wider perspectives and the wider professional knowledge, which is such a key to good professional practice. That is one point I would like to make. Other than that, I think we have covered the main areas that we would like to cover.

CHAIR—Just to conclude with one quick question which may engender a long answer, and that is the issue of output of Indigenous teachers. One of the things we found is that the output of Indigenous teachers is very low, and we have a big disconnect in many cases with the Aboriginal students not attending school as they should and that there could be great benefits from having Aboriginal teachers. How do we solve that problem? How do we bridge that gap?

Dr Hughes—I attended a conference recently of deans of education regarding the new Indigenous material that DEST has brought out, and I think that is extraordinarily valuable. I do not know whether the committee has seen that. It is called the What Works project from DEST. It contains extraordinarily good material for looking at the teaching of Indigenous students. That is a sort of national sharing thing that you were talking about. It is happening in Aboriginal education there in DEST but is it getting out to the wider community? It will certainly get out to our university and we want to have a conference up here for all those involved. We do have a Bachelor of Education in secondary education. That has about 18 students per year and it is on block release. That is the sort of thing that can get more students from Indigenous areas. They do not follow the traditional pattern of having to be here every day, so they do not need to leave their families. I think we need to see more of those programs in operation.

The sort of program that we have in the Cadigal Program brings one or two students into our faculty each year, with fully supported backups for those students. It works well when the backup and the tutors are very good. That works across other faculties as well. I think that sort of approach is probably the way to go. At the University of Sydney, we were the first—but we might still be the only ones—to have a compulsory unit in teaching Aboriginal students, and it pervades through other areas. I think these sorts of steps can help: alternative mode delivery, specified courses, good resource materials for teachers, and support for those students as they come into the system.

CHAIR—Thank you for appearing before the committee today. You have provided a very good presentation, and no doubt we will be contacting you for further information. The secretariat will provide you with a proof copy of your evidence as soon as it is available, and a transcript of your evidence will be placed on the parliamentary website.

Proceedings suspended from 12.06 pm to 12.58 pm

BOWES, Professor Jennifer, Head, Institute of Early Childhood, Macquarie University

COONEY, Professor George Henry, Professor of Education, School of Education, Macquarie University

COUTTS, Associate Professor Pamela Margaret, Director, Teacher Education Program, School of Education, Macquarie University

GIBSON, Professor Ian, Vincent Fairfax Family Foundation Chair of Education, Teachers for the Future, Australian Centre for Educational Studies, Macquarie University

RICE, Professor Alan William, Interim Dean, Australian Centre for Educational Studies, Macquarie University

CHAIR—Welcome. I remind you that public hearings are recorded by Hansard and that a record is made available to the public through the parliament's website. Although the committee does not require you to give evidence under oath, I should advise you that the hearings of this committee are proceedings of the parliament and warrant the same respect as proceedings of the House itself. I invite you to make some introductory remarks. I note there are some themes that people have indicated as their area of interest. I leave it to you how to make an opening presentation, either one person or a range of speakers.

Prof. Rice—Thank you. I have prepared some introductory comments. We have left the issues there that could be addressed in discussion, but I think there are some lead points that our key people could make to facilitate the discussion. Macquarie has quite a unique history in its education faculty. In 1969 the School of Education was one of the original schools at Macquarie University. At that stage it represented a third of the campus. The current position of that school, or across ACES, is 7.5 per cent, as the university has grown. But in that beginning it was noted in 1969 for the collaboration and cooperation that occurred between education and the various other elements of the faculty.

Another important development occurred in the late 1980s, when the Institute of Early Childhood, at Waverley, was amalgamated with Macquarie University. It came in the early 1990s to Macquarie, bringing with it a unique emphasis on early childhood education. Its roots go right back to 1896 and include Montessori; it has a different philosophical base. I mention that to you because the Australian Centre for Educational Studies as a division was founded in 1999, and includes both the School of Education and the Institute of Early Childhood as providers of initial teacher education. ACES also includes special education, higher education and continuing education, and so there is a whole range of services that makes Macquarie unique in education.

I mentioned the disparity in history in that there are some answers that may not seem to be consistent, because there are some variations in the approach we have adopted which goes back to the history of the establishment. There is no difference when you look at the evaluation of our courses. We adopt similar procedures. We review. We invite our agencies and our students to have a close look at our courses, and we go through a very similar process in ensuring quality in the programs we offer. But there are some differences in the route followed, just as there would

be differences in any university that has two- or one- or four-year programs, which would affect the nature of the training program. There are some differences in the way that the practicum is organised, just as there would be differences in those other programs. I wanted to put that into context for you.

I would like to introduce the Macquarie team. My background for many years was as a senior manager in the New South Wales Department of Education and Training. My most recent appointment was in 2001 as executive director of early childhood and primary education. I came to Macquarie to work on the educational leadership program in the postgraduate area.

Associate Professor Pamela Coutts is the Director of the Macquarie teacher education program. She has just completed two terms as head of department in the School of Education. She has a background in secondary mathematics and in psychology. She has played a very prominent part in the development of the School of Education program over many years.

Professor George Cooney has been an influential contributor to the development of the Macquarie program over some years and has held key positions in the School of Education. He is recognised as one of the nation's experts on assessment and played a key role in New South Wales in establishing the UAI system. He also developed the concept of partnerships that enables Macquarie to have strong links with schools.

Professor Jennifer Bowes is head of the Institute of Early Childhood and is a prominent researcher into the experiences of children prior to school, so she has a strong focus on parenting, on transition to school and on early child development. That institute covers the growth of children from birth to eight years, hence there is overlap in the training of youngsters in K to 2 who teach in the New South Wales system and who could teach in other systems because of the early childhood training they have had.

Professor Ian Gibson began his teaching career in New South Wales and has worked in teacher education in both New South Wales and Queensland. Ian came to Macquarie in September 2005 from the University of Kansas, Wichita. He is an adviser in Washington on the applications of technology in teaching and learning, and has played an important role in assisting school leaders in improving student learning outcomes.

I would like to make a few points about Macquarie University. This information is up to date because our enrolments have just returned. In 2006 Macquarie has experienced strong demand for education and has attracted high-quality students. Most students admitted on the UAI had a score significantly higher than the required UAI of 82. Our overall enrolment in the division comprises 2,296 students, of which 149 are postgraduate. We have experienced this year an increase in numbers in the secondary teaching program and we have had 45 offers made to domestic fee-paying students, which is the third largest category within Macquarie University. Despite the many faculties, education is proving of interest.

Our student body now comprises a larger number of mature age graduate students who are making a career change into teaching. Of total applications for 2006, Macquarie accepted approximately 50 per cent of applicants, based on our enrolment profile and student UAI scores. We have a high-calibre student population at our university.

We also have a very close relationship with the New South Wales Department of Education and Training. The ICT Innovations Centre was developed in partnership with the New South Wales government and it is supported by business and industry partners. Its aim is to promote innovation and learning through the use of new technologies in classrooms. That centre has recently had the appointment of a new professor, who is enabling it to provide better research advice and better teacher continuing professional education. It also plays a part in our teacher education program, and it is being actively used to facilitate the development of teachers and school leavers in the applications of technology within the school. We have quite an emphasis on technology and also in looking to the future. Professor Ian Gibson has a particular emphasis in looking at technology and its applications to the future teaching environment of schools.

I would like to make an important point, and that is that our programs are developed on the basis of research evidence, so our teaching has a strong base to it. Our academic staff are actively engaged in research and they draw upon the findings of research to provide an intellectually challenging program. Areas for which we are noted at Macquarie are: communications technologies and education, mathematics, science education, curriculum and assessment, educational policy and teacher education. At Macquarie, evidence based research drives our teaching program.

We are not limited solely to the needs of those students who are on our campus. We believe in a continuum of development commencing from the period of education prior to service and progressing through an educator's career. We believe that, in particular, we can make a contribution to the graduate teachers newly taking up positions in New South Wales schools and that we can assist them very strongly during the first five years of their service. We believe also that we can work with school leaders and those who are mentoring these new teachers.

Our strategy for this is developed during the practicum. The Macquarie practicum is quite unique, as you have probably read in the document. There will be opportunity I am sure for us to talk to that. The relationship is over an extended period of time. The student is paired with a teacher, termed a 'master teacher'. Many years ago I joined up with a Macquarie group under that particular category and I know something of the rigour of the training that was given to people who come as master teachers. They develop a special relationship with the student and a special relationship with the supervisor or the co-teacher from the university in assessing the performance of the student. Our practicum is a very important component of the training and it is coordinated with the actual development of the theory so that students progress through the skills that are required as part of their training.

I would like to make a comment about our staff. Our staff play an important role on the university campus in promoting quality teaching and learning across the university. They contribute to and benefit from research and the knowledge that can then underpin their teaching and learning. The role of staff in a university is complex. It involves them in teaching students from diverse backgrounds and requires them to be active researchers and have a commitment to community service both within the university—to its structures and committees—but also to the systems and schools. The job is very diverse and places very great demands on them. Primarily, we are there to serve our students and ensure that when they go from our programs into the schools they are able to take up and perform capably on their very first day.

Other responsibilities are also very rigorous. We also give emphasis in our preparation and planning to ensure that we engage staff who come with recent experience and have demonstrated outstanding performance. This ensures that the instructional sessions at the university are based upon recent quality classroom experiences. The sessions at university, linked with the practicum, enable students to connect theory and practice and gain an appreciation of the teaching programs that are required. They also gain an appreciation of the continuity of student learning and their capacity to link in with that. A further aspect of this contact with outstanding practitioners is to assist our intending teachers gain an appreciation of the culture within schools and also of the professional ethos of a professional teacher.

Finally, I would like to highlight the importance of research led teaching. This is important if we are to ensure that our intending teachers are able to address the important substantive areas listed in the report. I thank you for the opportunity to speak about our programs.

CHAIR—I would like to concentrate for a moment on the issue of the practicum, which is an important issue coming through in the inquiry. You say that the length of the practicum required at Macquarie for accreditation is 50 days of school experience. There are 10 days incorporated in the third year and 40 days in the final year. Earlier in the submission you mention that recommendations to increase the length of the practicum have appeared in several reports on teacher education. You say that a figure of 100 days, which includes 80 days of supervised classroom teaching, has been presented as the preferred option although the Victorian report has recommended 130 days. I am interested in your thoughts on the quantum shift from a 50-day practicum regime to an 80- to 100-day practicum regime, and even to 130 days.

Prof. Rice—I think 130 really needs some further justification from research. I think that figure is possibly an unrealistic figure in terms of what you have to undertake to complete during a program. The figure I hear more is 70 or 80. Of course, our early childhood program involves 70 days and it is organised in a slightly different way. In terms of our program, I think it is the relationship that I have stressed that is important. It is the outcomes that we seek to achieve that are important and they are built very carefully into the program so that they can be monitored for progress. It is a consistent program over the year, so that their 40 days represents attendance during one day each week for 40 weeks. It is not bulked in a way that is lacking in meaning for the particular student. My colleagues may wish to take up that issue of looking at the outcomes.

Prof. Coutts—I take an even more definite view than Alan. I think that if you are going to take standards seriously, and the New South Wales Institute of Teachers takes a standards approach, our responsibility is to ensure that our beginning graduates are competent and meet those standards regardless of the number of days. Experience in our program has shown that 50 days is sufficient for most students. Any students at risk—and this is not in the documentation—often do extra days. We have found that in the majority of cases 50 is enough. We do not sign off on students after 50 days if they are not satisfactory and have not met those criteria. There are real advantages, we argue, to the day a week practice. Although there are some blocks of teaching as well, the day a week does give continuity and it does give a real understanding of what life as a teacher is like. The students are then part of the teaching fraternity and part of that school and are encouraged to take a place in that.

From a practical point of view, any moves to increase the number of days, as I am sure you have heard from almost everybody in front of this committee, have real consequences, both

financial and particularly for any end-on programs. It would be impossible for a year program to have more than 50 days. As it is, our students start on 30 January and finish at the end of the year to do 50 days in that time. Every institution has an end-on program. Most students entering into secondary education now are career change and do that pattern. It is not our preferred pattern, but that is their choice. To suddenly have to fit 80 days in a year could not be done; it would change the whole nature of teacher preparation.

CHAIR—There are probably two conflicting strands of thought we have had on practicum. One is that more is not necessarily better, as you point out. A relevant practicum not necessarily voluminous in number of days that is tied to the theories of pedagogy and practised by a practitioner strong in subject knowledge will produce an excellent result. We have another group of witnesses who say that basically more practical experience is the way to go. They tend to come from people in current teaching positions and principal organisations who tend to favour a high degree of practicum as opposed to the research based findings and the academic people who are tending to concur with the views you have just expressed.

Mr SAWFORD—Alan, you mentioned mature age students as being an increasing trend. That seems to have been given to us by all the universities coming before these public hearings. There are some other attributes among those mature age students that may be a bit worrying—the fact that they are metropolitan, middle class and female; that the propensity for universities to take people from provincial and regional Australia seems to be diminished; and that incoming undergraduates from disadvantaged backgrounds tend to be diminished. What happens at Macquarie and can you give us some actual figures? You gave us the cohort. How many of that cohort would come from regional and provincial Australia and how many would come from disadvantaged backgrounds?

Prof. Rice—I do not think we could provide that today. We could provide it for you in the future. We do not look at where mature age students come from. That makes no difference. Most career change people come from the urban area, because that is where the university is situated. Most are female, but we do our best to encourage males coming in and we do have some males in the secondary program. It is difficult to get the career change people from non-urban areas, because they have families there—there would be one partner working and the other one wanting to come here. It is not that we do not want non-urban people; it is the reality—that is where we are situated.

Prof. Coutts—In terms of disadvantage, one program Macquarie has is the direct entry and the mature-age entry scheme, and I am on the selection panel for that. They tend to be people who left school early, largely for economic reasons, and are mature age. Last year, in terms of that, we made about 50 offers into the BA Dip. Ed. It depends on your measure of disadvantage, but they are certainly not the middle-class Anglo school leavers.

Prof. Cooney—Macquarie, like other universities, participates in the educational axis scheme, which is for students who have been disadvantaged and do not come into the normal range of illness-misadventure. It also has a program with the schools in the far west for Indigenous students, and a number of those come into the early childhood programs.

CHAIR—You raised the issue of Indigenous students there. One of the issues that is before the committee is the small number of Indigenous teachers that we are producing and the positive

effect that Indigenous classroom teachers can have in the areas where there is a large proportion of Indigenous students. I would be interested in your thoughts on the ways in which we can increase participation of the Indigenous population in the teaching program and produce more Indigenous teachers.

Prof. Cooney—We have been trialling a model at another level, through the early childhood program, to provide Indigenous teachers. We have just completed an evaluation of that, which gives us something to build on.

Prof. Bowes—We introduced about seven years ago a program for Indigenous students only, to train them as early childhood teachers. The idea was to get people who had worked as assistants in early childhood centres and preschools up to that degree level where they could be qualified early childhood teachers. It has been a really successful program and it has an unusual set-up, but it has worked. What we have done is taken a three-year degree and extended it to five years. We get the students coming in for blocks of teaching four times a year, about 10 days at a time, and the rest of the time they are distance students, supported by tutors in their own communities. So they are sending in assignments and so on when they are away from us, and the 10 days that they come in for lectures and tutorials are very intensive.

We had 20 graduates from our first intake who graduated two years ago. We have actually done a research project to follow up those graduates in their first year of teaching, looking at the issues they have come up against. That is a very interesting report, which was done for DEST, actually. We have a second group who are graduating in April this year, and there will be 18 students coming through there. Once they start in our program, there tends not to be that much drop-off; if there is drop-off it is early on. But they are sticking in there for the five years, and I think the secret is that it is an Indigenous program and they support each other. They have that social support and they help each other with assignments and mentor each other and so on. The people we have had so far tend to be mature age women who have not had a chance of education early on in their lives, who have had children and have worked in child care, and then this is their chance to do a degree in an area that they are very familiar with.

So I think that has been a very successful model of a program. I think Deakin University has a similar one at primary level where they do that block-teaching model. But we are very pleased with how well that has worked out. I think we quadrupled the number of early childhood teachers in New South Wales in one graduation.

CHAIR—Do you see the university extending that model further, to primary and secondary teachers? What are your plans in that regard?

Prof. Rice—The new vice-chancellor spoke about an equity program and I said that we would have a look at that. He said, 'Do so, and come back to me.' We have the evaluation and I think we have information now that can assist us. It is delivered in cooperation with Warawara, which is the Indigenous unit at the university. So we certainly will be looking at the potential of that program.

CHAIR—Do you see difficulties in relation to your candidates successfully completing an early childhood academic study then moving on to more specialist secondary studies, or do you not see that as a potential problem?

Prof. Bowes—I do not know. I think there is an obvious carryover into primary, probably, and you could probably get similar sorts of students who had been AEAs within the schools coming in and building on their experience. Secondary, I guess, is another matter, but we have a lot of Indigenous graduates at Macquarie University in all sorts of areas, so it makes sense.

Mr SAWFORD—With maths and science teachers—or, more appropriately, the lack of them—there is a national shortage. Twenty-five years ago we had 100,000 people doing pure mathematics at Australian universities; two years ago it was just under 16,000. I do not know what it is this year; last year it was under 14,000. If that cohort keeps diminishing, there is no way that there will be enough people from which to get maths and science people to teach in the classroom. What is Macquarie doing about the maths and science faculty in terms of expanding opportunities so that hopefully some of those people will come into teaching?

Prof. Cooney—Macquarie, like all other universities, is having great difficulty in this regard. Tracking students who do high-level mathematics, particularly at the Higher School Certificate, you find that the vast majority of those are going into economic and financial studies because—as I think Pamela commented as we were driving in—they want to earn a million dollars, and teaching obviously does not give that. So it is not necessarily that they are moving into medicine and those types of courses; it is that they are moving into finance where they can use their mathematics.

Mr SAWFORD—Is it fair to say that universities have dropped the ball in maths and science in the last 25 years?

Prof. Cooney—No, I do not think so. I think that the social pressures have changed the direction of student choice. In my other roles, I do a lot of talking to school groups and to careers advisers. When I ask about maths and science, particularly about teaching, the answer is that the parents say to their children, if they do well enough: why go into teaching; why not go into the finance area where in their first year they could be earning as much as their university lecturer? That is the reality. You asked what Macquarie is doing. Macquarie offers scholarships for the BSc Dip. Ed., and—

Prof. Coutts—It does not really matter, because they were not taken up. There were so few reasonably high-calibre candidates that, of four or six scholarships, I think, that were available last year, they only offered two. This year is a bit better in terms of the numbers coming into the BSc Dip. Ed. We actively work very hard, both with some of the science faculties and in schools. Both George and I have reasonably high profiles in the school community. We go around and we talk to schools. We talk about coming into teaching. I have done my own personal bit—I have two science teachers in my family! But it does not seem to have spread around any more than that.

School leavers are reluctant to go into secondary teaching in general. The numbers hold up in a couple of areas, in our experience, in particular in English and history, because people who are interested in those areas cannot see lots of other jobs, so they go into it. If they are interested in economics and business, they want to earn money. If they are interested in maths and science, they want a more science or maths based degree. Our numbers are strong in the graduate Dip. Ed., but they are career change people. They are typically anything from early 30s to middle 40s—lots of males; lots coming in from engineering. But the school leavers—we tear our hair

out. If this committee can find some solid recommendations, we would be delighted, because it is not through want of trying.

Mr FAWCETT—I would like to follow up on that. With the engineering, what brand of engineering is it—civil engineering, electronics, structural engineering, mechanical engineering?

Prof. Cooney—It varies. It is across the board.

Mr FAWCETT—Can you identify any factor? I know that, from an industry perspective, at the moment they are desperate for engineers, so I am interested to know what factor is drawing people to leave somewhere that they can make very good money and where there are lots of jobs to go into education.

Prof. Coutts—People career change for a variety of reasons. One is that they go into an occupation that might be financially rewarding but is not very people oriented. A number of our career change people come in when they are sufficiently financially secure to do what they may have always wanted to do. My feeling about engineering is that there would be a number of chemical engineers, because we have to trawl through their transcripts to see how much maths and science they have done to be a basis for teaching. Certainly the people in the more high-tech type engineering are not making the shift, but we do get some from many of the more traditional forms of engineering.

Prof. Cooney—For some people it really is wanting to become more people oriented. A case comes to mind: three years ago, someone with a PhD in physics who worked in CSIRO for 20 years applied for the graduate diploma. I asked why, and he said: 'I now move into a management position. I am interested in people.'

Mr SAWFORD—One last question: should all universities have an education faculty, and should some universities be forced to be a little bit more proactive in pursuing maths and science?

Prof. Coutts—That is two questions.

Mr SAWFORD—Yes. Your maths are good.

Prof. Cooney—I will let Pamela address the first question. The second question is the difficulty. I do not think it is not a problem with universities. I started teaching in the mid-1960s. There was a shortage of maths teachers then. You had English teachers teaching mathematics and two-year-trained people teaching junior mathematics. My father said, 'Why go into teaching?' He was a teacher and he loved it. He said, 'Go into computers.' IBM was paying huge salaries for mathematicians to move into computing.

Things have changed now. There are career opportunities for people who are good at mathematics. It is not so much in computing, but it really is in the finance sector, if you are going into actuarial, financial forecasting and so on. The parents are, perhaps not unnaturally, saying: 'Why do you want to a teacher? This is the way to go.' It is a far more difficult problem than just telling the universities to do something about it. It means changing the values in society.

Mr SAWFORD—China last year graduated 1,100,000 engineers and 10,000 lawyers. I actually think they got the ratio right.

Prof. Cooney—I would not disagree with that.

Mr SAWFORD—They have done that as a process of national leadership. We need national leadership, because if 25 years ago the pool was 100,000, and now it is 14,000 and diminishing, that is a problem of national significance, and that has to be addressed.

Prof. Coutts—It is very scary, but at the moment the demand from the students is not there, and Macquarie draws the line. It will not offer places with UAI cut-offs below a certain level because history has shown that they will struggle doing a maths and science degree. So rather than lower it to a level considerably below that and have people failing, they let people in with a reasonable chance of success. But the lowest cut-offs at Macquarie are in the IT and the maths and science areas. They are not in humanities and they are not in education.

I do not think any university should be forced to do something it does not want to, because it would be reflected in the quality of the product. If you believe strongly in university based teacher education, as I do, universities need to have the academic studies in the areas that you are also going to prepare your teachers in; and that would have some limitation. The question then is: should all universities have medical faculties? They do not, and yet there are shortages of doctors as well.

Prof. Gibson—The market economy that drives people to take different positions in society is something that universities cannot control. And of course there is that big question too. It is one thing to ask, 'Should universities be forced to do this?' Unless the market economy is supportive, and unless the community perception of teaching as a profession is supportive of salaries and conditions that attract people to it, we can force universities to do whatever, and we can blame them for not doing the right thing, but the fact is that there are other issues that are socially derived that are out of the control of universities.

Mr SAWFORD—Blame is not going to change the situation.

Prof. Gibson—No, exactly right. But the other issue with regard to your comment about whether all universities should have an education school is an interesting one. I wonder whether that definition of education is just for the production of teachers or is about an understanding of the learning and teaching process. All universities are teaching institutions. They are fundamentally integrated with the concept of teaching and learning. I do not think not paying attention to that process is an option on the part of universities generally. On some level there probably needs to be a focus, not just in a research sense but also in a practical sense, of the demands of understanding the process of teaching and learning regardless of whether people are attached to a university education school or not. I do not think you can run a university without being aware of and expert at the teaching and learning process.

Prof. Coutts—Can I add a couple of pragmatic points about the shortage of maths and science teachers—it will have been said before. The differential HECS does not help. It is more expensive to do a science degree than an arts degree. The other thing is about differential pay. I

know that it is not under the control of this committee, but differential pay for maths and science teachers, while it would be very unpopular with the teaching unions, might go some way.

Mr BARTLETT—That is a brave call.

Prof. Coutts—It is a brave call.

Mr BARTLETT—But it is one that I think needs to be pursued. The reality is that we are battling market forces. Either we use market forces to get the outcome we want or we have to rely on other factors such as mid-life career changes, because of the sorts of reasons you enunciated earlier. It seems to me that that second group is not making up for the lack of numbers coming in from schools. What does the research show on that? You are getting more coming in through career changes—

Prof. Coutts—Yes.

Mr BARTLETT—but they are presumably not making up for the lower numbers at the school entry level.

Prof. Rice—We did a survey at Macquarie yesterday that highlighted the fact that the medical and health sciences are attracting students, but they are not being attracted to those that are linked with the kind of education services that are being provided. It seems to me that we need to provide some incentives and some national action that will break the cycle that exists, I suppose, right down to kindergarten.

Mr BARTLETT—If there is a large surplus of primary teachers and a shortage of some secondary teachers, it would seem a logical conclusion to consider pay differentials. But I suspect that the New South Wales Teachers Federation might stand in the way of that, as might—

Ms BIRD—As an English teacher, I would be able to say that.

Prof. Rice—you and all of the others like you.

Mr SAWFORD— Sensible politicians as well.

Ms BIRD—Just following that point about career changes, do you get many young people who go into primary teaching and then discover the barriers to getting employment? Are there pathways for them to convert what they have done into a secondary teaching option at all?

Prof. Cooney—Yes, there are pathways. It depends on their academic background as distinct from their professional background. To be a secondary teacher you need at least two years of academic training in your discipline. If the students have that then, yes, it is relatively easy to convert by doing the methodology units within a university. It is more difficult if they have been in a preservice program that is simply about education and does not have the discipline base. That means going back and doing at least two years of mathematics or science.

Ms BIRD—I am just thinking of kids. I will walk you through it. Kids come out of school, they do not want to be secondary teachers because they have just been in a high school and they do not think much of it but they tend to think, 'Primary was okay; I'll go and become a primary school teacher.' Then after four years when they have finished their degree I would imagine there would be a reasonable number of them who would be thinking, 'I'd actually like to reconsider.' I am wondering how easy it is, either at the third-year along the way or coming out. I am not thinking so much of people who are older, who did their training a long time ago.

Prof. Coutts—That is one of the strengths of the BA Dip Ed model that we have at Macquarie. I have a number of students each year who come with that story. It is fairly easy to make a change after two years to head from primary into secondary without any additional time—with careful academic advising—because it is a very flexible program. It is also possible in the BA Dip Ed to double qualify in five years for a major in a teaching secondary subject as well as the primary qualification. We have had only a very small number of students do that, but it is possible. It depends very much, as George said, on their academic discipline. We think that a strong academic discipline is the basis for successful teaching. Unfortunately, it does not solve our earlier problem because primary teachers very rarely have much maths and science in their degree.

Prof. Cooney—Or in their school background, which makes it difficult for them to go into maths and science. We insist that they do at least one unit of mathematics outside of the School of Education, but that is all.

Mr BARTLETT—That has been the source of some disagreement. There is some variation between universities. I think that impacts very directly on the ability of primary teachers to teach maths effectively and to inculcate a love of maths, which I think then flows through and exacerbates the other problem that we have been discussing. I would like to change direction for a bit. This morning the New South Wales department of education expressed their concerns about the lack of responsiveness of deans of education to the needs of employers, particularly in terms of pedagogy and those basic teaching skills.

Ms HALL—They did say because of the constraints that you operate under.

Mr BARTLETT—I am sure they were not considering Macquarie University, of course. Do you think that is a reasonable complaint about universities, with the exception of Macquarie?

Prof. Rice—It depends what side of the fence I am sitting on. Now, of course, it is quite clear where I am sitting in relation to our responsiveness at Macquarie. At some points, I probably did advocate that when I was working in the department and looking at primary and early childhood education. I suppose it is a question of how the change will occur and how it will be made, when you want something that has been identified as an immediate issue. Universities do have processes through which things occur. But I make the point that our programs are based on research and do draw very heavily on what the employers are discussing. As we move each year into the program, we have consultation and we determine the focus. We have a look and put it into the necessary research focus for delivery and a course. So I would not really see us at odds. They picked up the issue of behaviour and a new course in behaviour. We included behaviour in our programs, but it took some time to come to some agreement over the actual content of the

way that program was to be delivered. Now I think we have an outstanding program because we have been able to bring staffing in associated with a new course.

Senator BARTLETT—Do you think there is a capacity to improve on that? Do you think there is the potential for more regular interaction or a more formalised process so that the various employers, departments of education, CEO, independent schools et cetera can be in much more regular and productive dialogue with universities about the skills that are required in the classroom, what they expect their graduating teachers to be able to deliver?

Prof. Rice—I think we are going through a very heavy review of this at the moment with the Institute of Teachers. I am certainly for that level of close communication, which we do get through the Teachers Education Council. Perhaps, Pamela, you might mention some of the issues that we are dealing with through the Institute of Teachers.

Prof. Coutts—I was going to step back a bit and say that one of the difficulties is working with a big bureaucracy like DET. DET thinks it is the only employer of our graduates, and it is not. Increasingly teachers go to the private sector. I think DET would like us to act as their agent, and we are not. I was interested that in the question you mentioned pedagogy. I can think of nowhere in the past where there have been any suggestions about things we should incorporate into pedagogy, which have arisen from DET, that we either did not take up or we were not already doing. One of the difficulties they have dealing with the School of Education is that the BA Dip Ed program is not a BEd model. They have to come to terms with the fact our students are doing history units offered by a department of history and mathematics units offered by the mathematics department. They sometimes find that difficult to deal with.

Ms BIRD—When I did my BEd in English literature the department argued about whether that would qualify me to be an English teacher for exactly that model reason. I appreciate what you are saying, but—

Prof. Coutts—In terms of accreditation, the institute is now the body, and the institute is now going to be looking very carefully at programs, working with DET. I would imagine that the way forward will be that DET will be working with the institute and the institute will be working with the universities.

Prof. Gibson—It is a little simplistic, I think, to view universities with a responsibility that says, 'You prepare the teachers and then have DET and others like it around the countryside; we're the employers only.' It is not so simple. The idea of partnerships and client relationships is one where people talk to and collaborate with each other and share views, visions, goals and data. If what we are talking about is two separate institutions that have no means of interacting, then we stick with the simplistic view, but it is never that black and white.

Mr SAWFORD—The department, in their submission this morning in their introduction, complained about their lack of input into the relationship, so even they recognised that. It was the first thing they recognised.

Ms BIRD—It is a two-way problem, to be fair.

Prof. Gibson—For example, we started a discussion about the practicum. The idea of having some blurring of the lines between post- and pre-degree practicum experiences might be a way out of some of those situations. There are a lot of places globally that deal with a post-degree practicum arrangement, where the universities provide the degree support and then the supervisory work related to post-degree internships and experience is based on collaboration between the employer and the university. We are not coming up with the right answers, because we are practising the same sorts of definitions of what our roles are over and over again. Einstein was the one who said, 'The definition of insanity is doing the same things over and over again and expecting different results.' Let us try not to be too much like that and start to think a little differently about the way we interact and the roles we each play in that interaction. We are not a silo any longer and we cannot afford to continue to do that. Things are changing in the way partnerships and collaborations are developing in all parts of industry and business, and those sorts of changes of definitions of our roles probably need to be applied thoroughly in the way we interpret what education, learning and teaching is about.

Mr SAWFORD—How do you deal with the balance, though? My own view is that mathematics and science has suffered tremendously in the last 25 years because we have moved from a very explicit curriculum to a much more implicit curriculum. We have gone from a very active curriculum to a much more passive, much more verbal one. In terms of analysis and synthesis, the curriculum of, say, 30 years ago was far more analytical than it is now, which is far more synthesised.

Prof. Coutts—Maths has not changed.

Mr SAWFORD—It is far more verbal than it is, say, spatial or visual. Some of those attributes have impacts on mathematics and science. A lot of teachers will tell you that the active analytical, explicit approach is often discouraged in schools. Is that part of the reason why maths and science does not take off?

Prof. Cooney—No; I am sorry. My background is mathematics.

Mr SAWFORD—So is mine.

Prof. Cooney—I taught in a mathematical statistics department of Sydney for 13 years. The basic New South Wales maths syllabus has not changed in 50 years.

Mr SAWFORD—A lot of the other stuff has—and the teaching.

Prof. Coutts—Primary has.

Prof. Cooney—Primary has changed, the K to 6 has changed. That has changed, but I would argue that it is more analytic. There is more problem solving, which is encouraging students to use mathematics. It is not just the rote learning, the number facts that I would have had when I was a small boy; they are being taught to use their mathematics. I would argue that it is more active, more empirical and more analytical.

Ms BIRD—This is the primary syllabus?

Prof. Cooney—This is the primary syllabus.

Mr SAWFORD—In the context, though, the teachers do not specialise in maths and science. We have acknowledged this before. You cannot have it both ways. Many of our primary teachers do not have access in their training or in their education program to a lot of maths and science.

Prof. Cooney—They do have—

Mr SAWFORD—You cannot have it both ways; you cannot say that we are doing better when in actual fact I think we are doing considerably worse.

Prof. Cooney—I am talking about the mathematics syllabus in New South Wales. In distinction to the syllabus structure and the curriculum structure in other states, New South Wales still has a very detailed curriculum. In all areas, it is a very detailed syllabus structure. We have more than learning outcomes; we have content specified at both primary and secondary. In relation to the teacher ed program at Macquarie, we require our students to do two units of science outside of education. Most of them will do biology and perhaps environmental education. They do one unit of mathematics. It is not calculus based mathematics, but you would not want that for primary teachers. It is about using mathematics. I am not saying that all of our primary teachers have the same love for mathematics that I have. It would be nice, but they have not. That is being realistic. They get their skills in English, again, from outside of the School of Education, so they are doing academic programs in those areas and getting the discipline base that is required within education.

Mr SAWFORD—Don't those signals of 100,000 to less than 14,000 ring alarm bells for you?

Prof. Coutts—Absolutely.

Mr SAWFORD—They certainly do with the maths and science teachers around Australia.

Prof. Cooney—I come back to the point that I made early on—that is, it is not necessarily a result of the syllabus or the way mathematics is taught in high school; it is the career options that students are taking once they leave school. My background is applied mathematics, not pure mathematics, although I did both. They are taking their mathematics into areas of finance, where they are doing financial mathematics. It is applied mathematics. It is probability and statistics. They are not necessarily going into pure mathematics.

Mr SAWFORD—I understand what you are saying. I do not disagree with that at all, but the quantum—the cohort—has dramatically fallen away. You seem to be saying to me that that is not a problem. I think it is a problem.

Prof. Coutts—No. That is not what was being said at all. You are quoting figures at the tertiary level and you asked a question about the school sector.

Mr SAWFORD—I was asking whether the teaching strategies for maths and science in primary and middle schooling have changed.

Prof. Coutts—With respect, you did not ask that in your first question. The maths syllabus at the secondary level has not changed. The maths numbers doing HSC in New South Wales have not substantially changed. The problem is what they choose to do with the maths once they leave school. You asked about whether it has got more verbal and less active. Certainly, in the past 20 years, the K to 6 maths syllabus has got more verbal. There is no question about it. I would say that it has got more active, not less. There is far more hands-on work in terms of working mathematically and so on. There is an issue with that, but I am not sure that you can draw any inference from the way the K to 6 maths syllabus has changed to the number of people doing mathematics and then going into maths and science teaching 15 years later.

Prof. Gibson—Let me approach this from another perspective, now that you have got us all excited.

Mr SAWFORD—There are plenty of other perspectives.

Prof. Gibson—There are one or two. To assume that teacher education facilities, universities or institutions have any control over the number of people who apply to teach in science and mathematics is probably a little simplistic. We talked about that before, so I will leave that one aside and go to another level. In the last year or two, this university has recognised the need to focus on the impact that technology has on the learning process through the appointment of two professors in the Australian Centre for Educational Studies whose general areas of responsibility are based on the innovative side of teaching and learning through technology and also a futures orientation to the way that we define how we go about our business. I think that in itself has recognised that Macquarie is trying to maintain its focus on innovation, which is part of its subtitle as a university. From that perspective, analysing the way that things have changed and the impact that that change has technologically on the model of learning—how we learn and how we go about organising for it—is part of that game. We are too early in the tenure of both of those professors—and I am one of them—to even consider what sort of impact that might have, but it does infer an analysis of teaching and learning approaches and the way that we go about leaving people who come out of our programs as graduate teachers with an idea of what their role is in the teaching process.

Ms BIRD—Could you please clarify that? This is something I have asked of many of the universities around. It has just been a gut reaction of mine that the new world in which young people grow up has changed the way they learn and that technology is a significant factor in that. Are you not just looking at using technology to teach but also at how technology has changed the way we learn?

Prof. Gibson—There is no doubt that things have changed, including the way that kids learn.

Ms BIRD—I look at my son, who goes to school with a bag full of textbooks, and it is the only time in his life that he thinks all knowledge is held in a book. He is going to open the book and answer. I think that is so irrelevant to the way young people live their lives. It is turning them off maths and science in particular.

Prof. Gibson—Certainly. I am not sure that it would point specifically to maths and science—

Ms BIRD—I would say history as well, as a history teacher.

Prof. Gibson—There is quite a lot of research activity out there that would indicate that there is a reasonable gap between the sort of learning and what is being learnt in schools and what kids learn outside of school and how they go about doing it. Part of our role, as teacher educators, is to incorporate a recognition of that gap and do what we can with our teachers to narrow the gap. There is a big difference here with the focus on the future and the impact of technology. We are not talking about technology being the cause of it; we are talking about analysing the environment that technology creates that allows us to learn, analyse and teach differently. The anywhere-anytime learning approach, for example—the impact of globalisation in business and industry on the way that we incorporate a concept of teaching—is part of what this university has indicated as an important part of its role, given the investment it has made into reasonably paid senior academics in the process.

Ms BIRD—It would be very interesting to observe.

Prof. Gibson—The whole idea of looking at the way things change and how that impacts what we do is part of what this university is trying to incorporate by the appointment of senior people in those areas. Your points, though, about the way teaching is happening and the way learning occurs are things I think we have recognised, and we will be doing something about it. That is not to say, though, that we are throwing the old out and replacing it with new. We might be changing mental models about the roles that teachers and students play in the learning process, but we are definitely going to be building upon—

Mr SAWFORD—The purpose of the question was balance. Basically, I think a good education program is both implicit and explicit, both active and passive and both analytical and simplifies information. In explaining some of the things that have happened over the last 25 years, it seems to be far more one way than the other, including in universities. That was the point.

Prof. Gibson—That is a fair comment. We have interpreted our role as supporting teachers as preservice people but also as in-service people and those involved in career-long learning, including the preparation of those who organise schools—leaders and other educational professionals. If we are looking at Macquarie's role in terms of supporting and mentoring, we are not talking just about the input at the front end of the game.

Prof. Coutts—At Macquarie, we are actually training more graduates in maths and science now than we were 25 years ago. We had a class of close to 60 in science last year. It varies according to various economic factors but, even so, we have 40-something this year.

Mr SAWFORD—What do you put that down to?

Prof. Coutts—A number of things. One is that the program has a good reputation as an end-on program, and it is. We market it and we have done a lot of work in schools, but a lot of them are people wanting a career change. Students shop around now and there are a number of things that they look for, and for whatever reason they pick our program. The number in maths is not quite as high but, even so, it is more than it was 10 years ago.

Prof. Cooney—One of the things we do try to do with student teachers in our program is encourage them to be active learners themselves and encourage active learning in their schools.

One of the difficulties with mathematics is that they are going into a process of socialisation in the schools—

Ms BIRD—And resource availability. You can teach them all the exciting technology and pedagogy with it, but if it is not available in a school then—

Prof. Cooney—But the culture in schools is sometimes hard to breach. As Ian said, we see it as one of our responsibilities, but it is difficult to achieve success in the professional development of teachers so that they change their pedagogy so they move with—

Ms BIRD—New ones coming in.

Prof. Cooney—technology and different theories that are coming.

Prof. Gibson—Part of that approach is to have in the minds of the people who leave us as teachers an idea that their responsibility is to prepare the kids that they work with for their future, not for our past. As far as that goes, that is where we are focusing our attention. If we have teachers who are forward looking and future aware then that is going to be a whole lot better product than if we have people who are always remembering what they were like or how they were taught when they were kids and relying on those sorts of responsibilities. So the focus on our teachers as scholars and researchers, which was the very beginning philosophy of our program, way back when the university began, has permeated all the way through and is still at the base of the way that we are trying to incorporate a futures orientation in the way that we do our work.

Ms BIRD—So you would be concerned that some of the universities we have visited—and I will not name them—are going to vary non-scholarship based teacher training. You would feel that that would not be a good way to go.

Prof. Cooney—As Ian said, Macquarie was unique when it started, with its teacher education program. It was the first university whose preservice primary program was university based. Prior to that it was the teachers colleges or the CAEs. As we have put in submissions to previous reviews, we would not countenance a non-university based teacher education program.

Prof. Coutts—The problem with the technical approach is that there is no doubt that you get people who are fast beginners, then they stop. What we need to do in all of our teacher preparation is exactly the sorts of things that Ian was talking about: prepare beginning teachers so that they are able to incorporate change, to innovate and all those other things, and have a technical approach in the middle of that.

Ms BIRD—See themself as a professional.

Prof. Coutts—Yes, exactly.

Mr HENRY—I would like to take us back to the issue of the practicum. In your submission you talk about master teachers. Perhaps you could elaborate on that a little to tell us how they are selected, how that all works and whether that is a recognised terminology, because I have not seen it before.

Prof. Rice—It is certainly recognised Macquarie terminology. It goes back to the 1960s, when key people were identified. The relationship is with the teacher and not with the school, although quite obviously you negotiate with the school and set it up through the school. But the relationship is with the teacher. We seek nominations of teachers to apply.

Mr HENRY—So that is a relationship they develop with Macquarie.

Prof. Rice—Yes. On the basis of their teaching performance, the knowledge of their subject and the representation they make, they are selected as a master teacher.

Mr HENRY—Do you assess their ability to meet that qualification?

Prof. Rice—Yes.

Prof. Coutts—They have to be recommended by their head teacher or their practicum coordinator and the school principal. We do not do any direct going out and assessing the teacher.

Mr HENRY—So this would be a school that you have a relationship with in terms of practicum, and you are working with the principal and the subject head at that school and then they select the teacher.

Prof. Coutts—No, they do not.

Mr HENRY—They ask for an application.

Prof. Coutts—The teacher requests it. The relationship is with the teacher. The teacher must then, however, be recommended by their supervisors. We also take into account the experience that the student has with them, because someone can be a very good classroom teacher but not be a particularly good mentor. So we have a database that has little notes to that effect. If a student has, from our perspective, received very little support we will try not to use that person again. But in times of shortages I must say we probably do not have the ability to select quite as much as we would like. That is one of the disadvantages of increasing numbers—and with decreasing numbers of teachers in schools prepared to supervise students.

Mr HENRY—So you have adequate master teachers to meet your students' needs in the practicum but, from time to time, you do have difficulties. Do you do anything in your programs with student teachers to encourage them to move towards that sort of status?

Prof. Coutts—Yes, we do.

Mr HENRY—Do they take it up?

Prof. Coutts—I am not sure of the statistics. In terms of whether people can become master teachers, this will change with the institute because they will have to have professional competence level. But, at the moment, we will not put anyone in with a teacher who has not taught for a certain number of years. So that is a limitation. We are tracking people at least four or five years back. Some of our most successful master teachers are people we have highlighted

as outstanding graduates and as outstanding beginning teachers, and we then keep a note on where they are and follow them up after the appropriate time.

Mr HENRY—Pamela, earlier in the session you made reference to research led teaching. What did you mean by that?

Prof. Coutts—I meant that our notion of a scholar-teacher applies to us as academics as well as to our students. That means that we as academics need to have researched in our own area. For example, we have an English methodology person on staff whose PhD is on why and how teachers in schools select certain English texts and how that impacts on the teaching. So there is that sort of thing. We require scholarly and research based outputs. For instance, in the teaching of literacy—the subject of yet another inquiry—we expect that the people in those areas know what the current evidence based research is, have that in their practice and also teach. We also expect that in terms of technology and pedagogy. So it is the lot.

Mr HENRY—I just wonder if a research led teaching arrangement does not actually lead to more inquiries because you are actually at the cutting edge, are you not, in a range of areas.

Prof. Coutts—I would hope so.

Mr HENRY—And challenging the status quo. And is that necessarily a good thing?

Prof. Coutts—It makes us very busy!

Prof. Gibson—We want our teachers to have those sorts of qualities as well. We want these teachers to be on the bleeding edge of change. I use that term with a point behind it: it is not easy to keep doing that. But if we have people who are scholars and who have a view of their learning as a lifelong and career-long event then we are way in advance of having people come out of university thinking, 'Thank God that's the last time I have to read a book!'

Mr HENRY—I guess that is the point of lifelong learning. If our teacher cohort actually adopts that approach then there might be some opportunity to transmit that to the students in the classroom. I note that here you address Teachers for the Future. What sorts of things can you bring to this in the forward-looking context?

Prof. Gibson—Do you want that in a short paragraph?

Mr HENRY—Yes, in a couple of sentences!

Prof. Gibson—I think that is an attitudinal thing. One of the things that we need to do in the profession generally is to be aware of the changes that have impacted the people we are working with. It is not the same sort of law that we grew up with, and we need to be aware of those sorts of things. So, in a sense, what we have to start to look at is the expectations of the people who employ our students. We focus a lot on basic skills, and they are clearly core competencies, but they are not the only things that are necessary to incorporate in teachers' views of the world. There are a lot of things that business and industry are doing today that we need to be aware of and incorporate into how we frame our approach to the world. A lot of that is focused on partnership, technological proficiency, verbal fluency and the idea of global awareness. Unless

we incorporate that into the background understanding of the world that our student teachers or our teachers who go into the profession have then we are behind the eight ball.

I guess in that sense part of the approach that I take is to do a frequent environmental scan of the context that our graduates go into and their charges actually go into. These are kids who are going to be living their entire lives in the 21st century. None of us can say that, and I think that is a different conception of the way that we approach this. The 21st century way of learning is changing. The way that we manipulate information is changing dramatically too. You know the song *Mama Don't Let Your Babies Grow Up To Be Cowboys*—well, in this case it is *Mama Don't Let Your Babies Grow Up To Be Accountants*'. You were quoting to me the number of engineers that China and India are producing. India is producing 70,000 graduates in accounting each year, and they are all working for something like $100 a month. What does that do to the way that we conceptualise our view of the world? It means that, when you work with an accountant today, you are likely to talk to them from Bangalore in India, even though they have an Australian accent, because they have learnt to talk with an Australian accent in order to accommodate the business. You have all read, no doubt, Tom Friedman's new book, *The World is Flat*.

Mr HENRY—But isn't that in a way a demonstration of what you are saying? They are actually responding to broader global need and working in a global marketplace.

Prof. Gibson—That is exactly right. Our need is to incorporate teachers with that view of the world so that what they are doing in the classroom and beyond the classroom is relevant to the life that kids are going to lead. I know that sounds very academic and like highfalutin rubbish.

Ms BIRD—It is a breath of fresh air.

Prof. Gibson—The fact is that we have an environment that is changed. If we do not incorporate a clear understanding of what that environment is in the minds of our teachers and teacher educators then we are behind the eight ball to start with.

Mr HENRY—I think you are right. I think at the outset, Alan, you talked about research and development and your university having that capability. But do you use that capability to engage industry? That comes back to the point that Ian is making about an integrated educational approach. I hear people talking about these needs of engagement but I do not necessarily see people taking that leadership role. Pamela talked about the bureaucracy of the department of employment and training. Undoubtedly they are, but they are also an employer who have a need. It is about integrating all of those things and creating the right sort of communication model to make sure that we are responsive and we are providing the best possible outcome for our future generations of students.

Prof. Gibson—That leads me to suggest that perhaps the next inquiry ought to be not just on teacher education, if we are looking at institutional teacher education; it ought to be looking at the way that the society conceptualises the roles of all of the players involved in learning. I am talking about employers, universities and other agencies that make their money out of employment. There is a corporate responsibility that we are ignoring in the way that we are defining these inquiries and looking at the process. We need to be a little broader in that conception and a little more inclusive in terms of the responsibility that we share as a community and a society that is concerned about the loss of teachers in mathematics and science. We are

focusing too narrowly on what the cause of that is rather than looking at the collaborative responsibility we have with business, industry and educational facilities.

Prof. Coutts—Our graduates, of course, do not only go into teaching. A BA and Dip Ed is a good base degree with lots of employability skills.

Mr SAWFORD—I was in New York and heard Tom Friedman's exposition of his book in November 2004 before it was published. You are quite right in terms of alluding to what he was on about. But one of the great things at the UN in that period of time I spent there was that, with people like him, when it was advertised that they were speaking, you had to get a seat almost an hour beforehand. For Professor Geoffrey Sachs it was similar. For other people—I will not embarrass them by naming them—people just walked out. So there is a big difference between the Friedmans and the Sachses of this world, who actually show outstanding leadership and inspire people, and the others. Debate is healthy—there is nothing wrong with a debate. One of the great problems with political parties at the moment on both sides—I am on the Labor side and the chair is a National—is that, in many ways, we actually suffocate debate. We do not want debate. It is painful. You can get into all sorts of trouble when you have debate. The same I think applies to universities. When you do not the debate, you become less for it.

Prof. Gibson—I referred to a series of educational imperatives that looked at the idea of defining basic skills more than just the three Rs. There are personal imperatives too that I think we each need to incorporate. Again, this sounds a little academic, but the point is that you can focus on personal mastery of things and that is one level of activity—you can focus on the idea of partnering and collaborating together to get to that level of personal mastery—but, unless we start to develop conceptions that are alternative mental models of how we go about our business, share those across the education community and then look at the entire idea of change in a systemic way rather than as a very singular focus way, we are just going to be tinkering around the edges of reform. We can put dollars and dollars into the reform thing but these are bandaid solutions for an issue that is far larger. If you can bottle the solution to systemic reform in the educational business that incorporates a conceptual view of the future as a basis for how we define what we do today then I will buy one of your bottles.

Ms BIRD—Well, we have to tear down and rebuild schools which are built on the industrial model anyway, particularly secondary schools. They are factories.

Prof. Gibson—There are motivations to change those, but we have to deal with what we have.

Ms BIRD—I have some pragmatic questions. The department said to us that it felt there has been a decline in the number of permanent appointments that are being made in universities, particularly curriculum lecturers. Is there a particular change in the make-up of your permanent staff? Are there issues around that for you?

Prof. Rice—I think that the number of staff we have now compared to the number of staff we had seven or eight years ago is much smaller, but the ratio between the two groups is comparable.

Ms BIRD—Okay, but your numbers have not been going backwards.

Prof. Coutts—No. We are all working harder.

Prof. Bowes—I think it is also that universities have changed now. They have a core of permanent staff and a lot of sessional staff.

Ms BIRD—Part of the reflection with the practicum that comes back to us is that the actual coordination and support provided to schools and students during practicums is problematic for universities because of the small base of permanent staff. To be honest with you, all the universities tell us a wonderful story. Quite often, the students' experience is a little bit different to the intention of the system. That is what we hear when we talk to student groups. I am wondering if that is a reflection of the capacity, whether we should consider the way we fund the practicums to universities to better support them.

Prof. Coutts—There are number of aspects in answer to your question. The first thing is that probably 10 to 15 years ago universities—Macquarie in particular—downsized enormously. The School of Education staff were halved in that time. We have bottomed and we are now increasing again. Staff-student ratios have increased and there is no doubt that the staff members at the university are dealing with more students than they did in the middle eighties, for instance. So that obviously has some impact. Macquarie is a little bit different to some of the other places but we still have quite a high number of full-time staff in the teacher ed program. We have a number of people on two-year contracts, as does the Institute of Early Childhood, who have come in from schools for recency of experience. But you cannot have it both ways. You cannot have recency of experience and have everyone being continuing staff. We have about 25 per cent of staff on two-year contracts.

Ms BIRD—I suppose the experience is not so much the shorter term contracts; it is the casual contracts. You would not allocate casual people to coordinate placements?

Prof. Coutts—We have absolutely no casual people in the School of Education doing that.

Ms BIRD—Because that is the feedback that we are getting. That is where the model quite often falls down.

Prof. Coutts—You mentioned payment. I think the payment issue is a big one.

Ms BIRD—Do you mean the funding of practicum?

Prof. Coutts—Yes. At the moment, the School of Education is under one award and IEC is under another. We pay our supervising teachers the massive sum of $20 a day per student. That is another issue in terms of number of days. If the number of days increases and the payment per day increases, it will double the current budget of $400,000 plus, I think it is nearly $500,000, for the school of ed.

Mr BARTLETT—The payment is not under Macquarie's control. That is an industrial award.

Ms BIRD—I appreciate that. I am wondering whether we can look at the funding of the practicum from the federal government's perspective to identify some of the funding perhaps to pay an established practicum coordinator and encourage state departments and state employers

to fund their own practicum coordinators that talk to each other to create a bit more coordination in the system. I understand, from what you are saying, with the pressure it is under, that the capacity of the faculty to establish such positions and so forth is not a reality.

Prof. Coutts—I think such funding targeted towards that would be very valuable.

Ms BIRD—Okay.

Prof. Rice—Our master teachers situation does change. They vary them a little a bit. We work closely with the department at a formal level to get the placements, but we are always at the ground level battling to get—

Ms BIRD—Yes, and in the sorts of circumstances where students turn up at a school and they put them with the wrong teacher—I have heard of one kid who turned up to do science and they had him in the maths department; he had no-one he could ring or contact straightaway—I think properly funded, established positions would make it a lot easier for all.

Prof. Coutts—You have just given a very good illustration of what could not possibly happen under the Macquarie system. They are targeted to a teacher.

Ms BIRD—With all due respect, I have heard that from every university, and things go wrong.

Prof. Coutts—Systems do go wrong.

CHAIR—Thank you for appearing before the committee today. We really appreciated your presentation. If we have further questions, we will certainly put those to you in writing. The secretariat will provide you with a proof copy of your evidence and a copy of the transcript will be placed upon the parliamentary website. Thank you very much.

Proceedings suspended from 2.21 pm to 2.33 pm

BOND, Mr James Justice, Private capacity

CHAIR—Thank you for appearing before the committee. I remind you that public hearings are recorded by Hansard and that a record of the proceedings is made available through the parliament's website. Although the committee does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and as such warrant the same respect as proceedings of the House itself. The giving or false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. I invite you to make some introductory remarks.

Mr Bond—Firstly, would you be able to introduce yourselves?

CHAIR—Certainly. I am Luke Hartsuyker, chair of the committee. I am the member for Cowper on the north coast of New South Wales, based around Coffs Harbour.

Mr SAWFORD—I am Rod Sawford. I am the federal Labor member for Port Adelaide in South Australia. In a former life I was a school principal and education consultant.

Mr BARTLETT—I am Kerry Bartlett, member for Macquarie, which covers the Blue Mountains and Hawkesbury areas. I was also a teacher in my past life.

Mr HENRY—I am Stuart Henry, Liberal member for Hasluck, which covers an outer metropolitan area in Western Australia. I was involved in vocational training in my former life, among other things.

Mr Bond—The reason I asked you to introduce yourselves is that I am unable to read your names because I am dyslexic, and this is what I am doing here today. I have been lobbying both state and federal governments since 1988 over the issue of dyslexia. I find that the Department of Education and Training here in New South Wales is quite inadequate in responding to the needs of people with dyslexia and people with learning disabilities and difficulties. Stats from the federal Department of Education, Science and Training show that one in seven children have dyslexia and one in five have a learning difficulty, so we are talking about quite a few children.

The Department of Education and Training has known about technology to assist people like me since 1996-97. That is 10 years and not much has happened, except they would like to put their technology trials together. They did put one in place. More technology has come along. Now the Department of Education and Training is advising me that there is a lot of technology out there and a lot to choose from. Dyslexic people are being stonewalled again. The Kurzweil 3000 reading technology is able to assist people like me. I suppose you could call this an off-the-cuff opening speech. I have been dealing with a state MP, Grant McBride, member for The Entrance. When I went down there for help, for assistance in employment, for him to make representations on my behalf—

CHAIR—He is your local member?

Mr Bond—Yes, he is. When I asked him to make representations on my behalf to the department of education and various other levels about this issue, he advised me that one man's disability is another man's gain. He said: 'James, you have a back condition and you are dyslexic. Who will ever employ you?' That is the type of attitude I am getting from two different levels: from the department and from my local MP. As far as I am concerned, that is hypocrisy from a Labor member. By the way, I am an Independent. Do not take me wrong: I am not having a go at Liberal or Labor; I am just telling you the way it is and what has happened to me.

I used to deal with my federal member, Michael Lee, when he was shadow minister for education. Mr Lee said to me at one stage, 'Some people can be helped and some people can't' and walked away from me. So I went to David Kemp. I rang his office, spoke to his senior adviser, who, back in 1996, was Jim Barron. This was when the Liberal government came into power. Dr Kemp invited me to Canberra to sit down and speak to him and to Jim about these issues. It was good. What came out of that was *Mapping the Territory*. That was a book containing information about dyslexia that went out to all universities for their learning difficulty programs and so on.

Since then I have been dealing with the federal government and Dr Brendan Nelson about these issues. It has been quite good. This government has been listening, taking note and doing something about it. I have also dealt with the Labor Party. They eventually closed the doors to me. That was very unfortunate. I have dealt with a lot of upper house members of New South Wales—Dr Gordon Moyes, Reverend Nile, David Clarke—and also the Democrats, the Greens and anybody that would sit down and listen to me on this issue.

The technology has been tested by the Department of Education and Training, and they do not seem to be doing anything about it. I advised them back in 1998 that they should talk to universities about training teachers in this type of technology. At this meeting Brian Smyth King advised me, 'We don't talk to universities about what we feel we should be doing.' I contacted the University of Newcastle about this issue in 2000—I had a few other things going on. I ended up seeking some help. I sat down with Pro Vice Chancellor Terry Lovat and spoke to him about the problems. I was doing an enabling course at Newcastle university. They have done a lot of good work up there. They implemented this and other types of technologies. They did technology trials, the results of which came back quite positive.

CHAIR—From the point of view of training teachers or from the point of view of helping young people with problems?

Mr Bond—Training teachers and helping people in any way we possibly could. I contacted every state minister of education and premier right around Australia. The only premier that responded to me was John Olsen from South Australia. It was quite a good response, and apparently they have done a lot of work down there on technology. I have been advised that Queensland has as well.

That is what brings me here today, I suppose. I am still dealing with the Department of Education and Training. They seem to be stonewalling everything I do on this issue. I must admit there has been some input. They did start off with two technology people here in the New South Wales DET. I have been advised it is quite large and they have been looking at it. But only

a couple of weeks ago I spoke to a person in special needs and they advised me there is a lot of technology out there.

I keep on saying, 'What about the Kurzweil 3000?' I have nothing to do with the company that sells this product or the people in the States that develop it. Back in, I think, 1998 I showed my children the State Library and this type of technology was there. We have taken it from there. I used to be a council member on the board at Mater Dei College at Tuggerah. We were the first school in Australia to introduce this technology. It has helped children to achieve output. Students at Newcastle university are using this type of technology.

I do not know if it is a political issue or just the education department being such a dinosaur. My concerns are that they have known about this for 10 years and we have missed another generation of dyslexics and students with learning difficulties. It is time for leadership. These inquiries can go on for another 20 years, but we need leadership. As far as I am concerned, we need a chancellor that can go to universities and make recommendations. We need action and we need to help people.

CHAIR—Our terms of reference being in relation to teacher training, how do you see this issue and the use of this technology relating to the issue of teacher training?

Mr Bond—The best way to deal with this is for universities to have a unit of technology to train their teachers so that they can go into the workplace and back to the schools and know how to use the technology. They need to learn all about the technology for starters. They say that one size does not fit all but in this case we need to put the technology in there to at least start the teachers from somewhere. Most of the time they go out into the workforce not knowing anything about the technology, therefore they have to have in-house training.

CHAIR—How difficult is it to operate the technology? What do you do? Do you roll the cursor over the page of a book?

Mr Bond—No, it is a disk. You put it into your computer and you scan a book, if you so desire, and it will read it back to you. It spells out words. It shows you the vowels, the sounds and everything you need to know about reading and writing. Over in the States they use this type of technology to teach their children how to read and write across-the-board, not just special needs students. They were using it for 10 years prior to it even being introduced here in Australia. As I say, I have contacted other universities. They speak to you and you do not hear back from them.

CHAIR—What was their response basically? You raised it with Newcastle university. How did they actually take that forward and use the technology?

Mr Bond—They ended up going out and purchasing the technology and doing their own private trial. They thought it was quite good. They put it into a college up there and they had from year 6 students to year 12 students using it. There were different people and people with special needs and it was quite positive—

Mr BARTLETT—Does it help you overcome dyslexia, to be able to read or are you always dependent on that?

Mr Bond—In my particular case I am severely dyslexic, unfortunately, so I need the technology to read—

Mr BARTLETT—For other people, does it get them to the point where they do not need it?

Mr Bond—The younger you are, the easier it is to pick it up, there is no doubt about it. That is why I asked you for your names today. Yes, it does help. It reads out aloud to you. You can zoom the page up to any size or it even reads one word at a time to you or you can turn it into a speed reader. Let us say that you have something in Italian or German—I think there are five different languages—it will transcribe that back into English to you and read it back to you.

Mr SAWFORD—What does it cost?

Mr Bond—At the moment, I do not know the exact amount. In your booklets there is mention of the company that sells this—and they are doing quite well apparently in Queensland. I think that it is up to $2,000 but it is as little as $500 for a black-and-white version. That is virtually the situation. I think that it has been a political problem since the beginning. You could say that I had a bit of a falling-out with the Labor Party, unfortunately, and the Liberals seemed to pick this up and develop policies. The Labor Party has developed some policies out of this too. That is when you have to become an Independent to do something about it for the good of the children.

CHAIR—Just on the use of technology, you can scan a page in and it will read that back and then perhaps the technology can assist a child to overcome difficulty. How does that transformation occur? Does the child associate the printed word with what the book is reading out to them? How does it work?

Mr Bond—You scan this page, for instance, onto the technology in front of you there. It will show you the sentence or the whole page and as it is read out aloud to you it will come up in a different colour. Each word as it is read to you will be highlighted in a different colour. If you are unable to understand or comprehend that word you can put a stop button on it. Push 'comprehension' and it will go back through the word and give to you exactly the meaning of that word, how to sound it out and anything to do with that particular word that you may desire to know about it.

Mr SAWFORD—How widespread is its use in the United States?

Mr Bond—Quite widespread as far as I know. It is all there in the report. Also in the package I have here is a report from the International Dyslexia Association that I presented to Dr Alan Lachlan, the previous director of New South Wales DET. That report explains a lot about the program: how widely it is used and the countries it is used in, including the UK and Canada. Its use is pretty widespread.

Mr HENRY—James, congratulations on making the efforts that you have. I think the program is fantastic. Well done. How many people access or have accessed the program since its installation at the Wyong Shire Council Library?

Mr Bond—I have no idea. That was not a positive change. When I say 'not positive', as you are aware, I had to go to the Human Rights Commission to do something about this. The change

of council has not been a positive one. There is an upgrade of this technology every six months. It costs between $152 and $200 to buy the upgrade. Therefore, if the local libraries do not have somebody involved in the technology, they let it go. I know that the University of Newcastle updates it. Central Coast Grammar, King's School and various other private schools use it. But, to answer your question, because it was not a positive change—you know how politics can work—the program was not kept going.

Mr HENRY—How many students at St Peter's Catholic College need access to the program to assist them with their education?

Mr Bond—I am no longer on the council at St Peter's, so I am unable to answer your question as it relates to this point in time, but when I was there there were quite a few dozen at that particular time.

Mr HENRY—Would that be fairly consistent across many of the other schools that have introduced it?

Mr Bond—Yes. People are using it to do their university degrees. You can put it on your laptop, walk in and out of classes and function. To keep up with your peers is very important. You can sit there with your earphones on and use this type of technology to keep up with your peers at school, instead of sitting at the back of the classroom or down at a special needs room. Sure, you are helped a lot there, but it is not enough to keep up with your peers.

Mr HENRY—If you do not get the updates, the program does not become redundant, does it?

Mr Bond—No.

Mr HENRY—It is still of value?

Mr Bond—Absolutely. The value is there from the Kurzweil No. 1 version; it is now up to No. 8. It has taken something like 10 years to get the full version. When it was first introduced to schools in Australia, it had the American voice on it. We had that changed, which was a good thing. When I was a member of the Labor Party I took it to the 1996 state conference, and people there were quite impressed with it. I met with the education committee people, but once things started to fall to pieces with Michael Lee and Grant McBride in Dobell, up at The Entrance, they closed their doors to me, and that was the end of it. That was unfortunate. The program should not belong to one party; it should belong to all. We are all here representing all the people. I do not care whether you are from the Left or the Right, Liberal or Labor or whatever, we need to do something.

CHAIR—What do the different upgrades do? Is it just an enhancement of the technology or are new words added to the dictionary?

Mr Bond—Yes, all those types of things. There was a problem in the beginning about the spelling because the Americans spell differently. So they had to change things, all these little details, yes. I also feel that there should be a national education approach; there is no doubt about it. This thing with each state running its own education department: it is hypocrisy, as far as I am concerned. We need to do something about it. I will give you an example. I have been

advised that at Newcastle university, our social workers get 20 per cent more funding than our teachers—20 per cent more funding. Full credit to our social workers, there is no doubt about that, but, if we started at the ground level, maybe we would not need so many social workers. Eighty per cent—these are the latest stats of which I have been advised, anyway—of our prison population are illiterate. What can we do? I am here today to try to get everybody who has a learning disability or a learning difficulty, or any other person who may have a reading problem, to reach their full potential. That is what this is about. That is why we are here today, to hopefully to make a change in this world, make it a better place.

CHAIR—Thanks, Jim, for appearing before the committee today. We will certainly contact you if we need further information. Could one of the committee members move that we receive this information as an exhibit?

Mr SAWFORD—I so move.

Mr HENRY—Seconded.

CHAIR—Thank you very much.

Mr Bond—Thank you very much for inviting me here today.

Proceedings suspended from 2.56 pm to 3.15 pm

MULLINS, Mr Andrew, Headmaster, Redfield College

CHAIR—Welcome, Mr Mullins. Thank you for appearing before the committee this afternoon. I remind you that public hearings are recorded by Hansard and a record is made available to the public through the parliament's website. Do you have any comments to make on the capacity in which you appear?

Mr Mullins—I have recently written a book entitled *Parenting for Character*, published by Finch, which is pertinent to the discussion today.

CHAIR—Although the committee does not require you to give evidence under oath, I should advise you that the hearings are legal proceedings of the parliament and as such warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. I invite you to make some introductory remarks.

Mr Mullins—All right; excellent. I have prepared a statement that is five or six minutes long. It will more or less summarise my suggestions. My focus will be on what I perceive to be the need for teacher training institutions to do much more to prepare new teachers to work with parents. We see around us in our society a number of quite concerning issues, including serious evidence of children damaged from family discord, the disengagement of boys from schooling, the increasing susceptibility of young people to depression, alcohol abuse and eating disorders, and the rise of sexually transmitted diseases. The Cronulla affair has remind us of the need to inculcate more strongly the values of respect and responsibility in young people. All these issues are of vital importance to the future wellbeing of our nation, but I do not see any meaningful partnership between school and home in addressing these issues.

My experience at Redfield College on the north side of Sydney and my experience of overseas initiatives and research convince me of the importance of home and school working closely together. Here in Australia we speak of the partnership with parents, but this is largely lip-service limited to yearly parent-teacher nights and some glossy brochures. My work with other principals and my observations about curriculum content and teacher education institutions all convince me that much more needs to be done and can be done at the tertiary training level to prepare schools to work more effectively with parents.

My school was commenced by a foundation by the name of Parents for Education. Right from the start my school has had as its focus to work closely with parents, so we have quite a deal of expertise in this area now. Our aim really is to create a school where communication between parents and school is second to none. Not only do we ask parents to support our work in the classroom but, more importantly, we see our work as a support for parents. I think that is a fairly important distinction: too often in schools these days we ask parents to help us but we do not see our role fundamentally as a support for parents. I suggest that a fundamental change of not just strategy but outlook is required.

We see our role as a vital reinforcement for values and character building in the home. We strive to talk the same language of character development as parents, and my book *Parenting for*

Character really is a summary of the input that we have been providing for parents. We run frequent evenings for parents, induction programs for parents, ongoing case study programs to help young parents and so on. In reality, I suggest that schools are ideally placed to deliver effective parenting support if they are resourced to do this and if teachers are trained to do this. In my submission I referred to a paper—and when I sent my submission to you I included the paper—that I gave at an education conference at the University of New England in 2002.

That paper really highlights the underpreparedness of young teachers to work with parents. I surveyed independent school principals around Australia. From the 35 respondents it was quite apparent that, in the opinion of these principals, young teachers often react negatively to parental contact. A good percentage of new teachers minimised parental contact. A great majority needed to be encouraged to work more closely with parents. They lacked the skills to alleviate parental anxieties. Many seemed not to know where to start when it came to cooperating with parents in areas of either academic or character development. In the third part of that paper I do suggest a number of strategies that teacher education institutions could look at.

At that conference I also noted a very similar pattern to one that I witnessed two years earlier at another conference at the University of Technology, Sydney. It appeared to me that around Australia there was nobody teaching or researching at the tertiary level in this area of parent-school partnership, with the possible exception of an academic in Melbourne that I came across. For example, of the 50-something papers presented at the UTS conference, only mine talked about parents. Yet this was meant to be a broad cross-section of future developments in teacher education.

This situation is in contrast to a number of high-profile character education institutions linked to major universities in the US. I would like to put before the committee the work of Thomas Lickona, who has established the Centre for the 4th and 5th Rs at the State University of New York—the fourth and fifth Rs are 'respect' and 'responsibility'; coincidentally, they were picked up by our state government recently—and the work of Kevin Ryan and Karen Bohlin, who run the Centre for the Advancement of Ethics and Character at Boston University. Ryan and Bohlin list the first pitfall to avoid in character education: 'Do not keep parents in the dark. They are your No. 1 allies.'

In summary, I suggest that we need to be educating preservice teachers to see that partnerships with parents must be understood as interpersonal if they are to be effective. A partnership is meaningless unless it is between two people, I would suggest. Yet we do not see that, in fact, in evidence currently. Teachers have a duty to uphold the prestige of parents in the eyes of their own children, and I think we are not talking that language very much. I will give you a little example from my school. Years ago the year 9 teachers got together and decided that the boys needed to be worked a little bit harder on the basis of feedback and so on. One boy wailed at the next knock-off time, seeing the list of all of the homework assignments that had been put up on the board since the decision was made. The teacher's response was: 'Well, don't blame me. A parent complained.' If there is one thing you do not do it is to just pass the buck to parents. You have to accept responsibility for what you are doing. Anything that diminishes the respect that children have for their parents is something that teachers must avoid, because their role is subservient to the parents'.

Communication needs to be proactive, not just responsive. Yet except for the one set play of the year, the parent-teacher night, and except for two school reports a year, all the interaction is, practically speaking, responsive, reactive. There are skills we must learn: to channel, and constructively deal with, legitimate parental concerns that arise.

We need to educate preservice teachers to explore ways to help parents assist more effectively in the academic progress of their children. Similarly, we must actively teach preservice teachers ways that they can reinforce character development of the students in their care. That summarises my position, and I have got a couple of things I would like to show you, if that is possible.

This is a book by Thomas Lickona entitled *Educating for Character: How Our Schools Can Teach Respect and Responsibility*. It is published by Bantam Books, which is an imprint of Simon and Schuster, so it is a major publication in the States. It won a major award in the States in the early 1990s. It would be impossible to get a book like this published in Australia; it would not happen. Similarly, *Building Character in Schools: Practical Ways to Bring Moral Instruction to Life*, a more recent publication from Boston University, is pitched at teachers. It is a very practical, useful book. It addresses pitfalls to avoid in character education, 100 ways to bring character education to life in the school and so on. I would recommend those two books.

CHAIR—Thanks, Andrew. I will start off with an observation. We have seen that the universities which have very successful teaching faculties seem to have developed strong partnerships with the schools with whom they operate in their region. While I am one of the non-teachers on this committee, in my area I see that the good schools are those that have strong leadership from a good principal, have a devoted and dedicated staff and have the support of the school community—they have that strong partnership. What we are struggling with in this inquiry is not what to put into the teacher training curriculum but what to leave out. It really poses a problem. If we were to introduce a subject or a theme such as educating our beginning teachers about the teacher-parent relationship, what do you see as being the things we could possibly leave out of a crowded curriculum?

Mr Mullins—I do not know if you recall what I wrote on the first page of my submission, but I was struck, to be honest, by the language that was being used by many of the research papers in these teacher education conferences that I attended. It was language that was detached from the classroom and from the coalface. While I respect the need for strong research, in the end we might be getting lost. For example, I referred to one presenter who was talking about post-structuralist approaches to early childhood education. I suggest that in the end there is an ivory tower attitude there if that person is entrenching their academic career in areas that are so detached from practical and effective approaches. Another one was emersed in metalanguage and knowledge integration. I am an English teacher and I respect structuralist approaches to interpreting texts but, to be honest, I found a lot of the material that was being presented in these research areas in teacher education institutions to be more than one step removed from its practical worth in the classroom, and that bothered me—particularly when the most obvious needs were being neglected. I cannot say much more about that; I am sorry.

CHAIR—Do you think there is scope for some restructure there?

Mr Mullins—There is scope for some deep soul searching about what we are doing to practically prepare for what they will do in schools.

CHAIR—Is it something that perhaps could be handled well through a strong mentoring arrangement when a beginning teacher arrived at a school?

Mr Mullins—In my own case—and I went through 25 years ago—there is no question that most of my learning took place in the schools that I was posted to and in my practicum experience. The stronger the mentoring, the more effective that learning will be. Thinking back to my own Diploma of Education experience, I did a history method and an English method. The history method was very effective, because it was very practical and looked at how to structure your lessons and what to do in your classroom. The English method was a waste of time, because the person teaching it preferred to talk about their own theories, to be honest. In my subsequent experience, it had no relevance to what I was doing.

Similarly, the people who were talking about the philosophy of education failed, in my opinion, to make the link between what they were talking about and effective teaching in the classroom. Once it became detached theory, it was very marginal to what we were doing later.

CHAIR—If you were to lay down some guidelines as to the content of a subject in a teaching degree that would prepare a student for dealing with parents once they were out in the workforce, what would be some of the key elements of that course?

Mr Mullins—I would like to think more about this and present something to you, if you are interested. I would look first of all at the philosophical underpinnings, but briefly, so it was very clear that schools were seen as a service to parents. In our society we have somewhat lost that idea. I think it is very important for teachers to enter the profession understanding that they are performing a service to parents and therefore they need to stay in contact with parents, that they are not freelance operators. Some study of where Australian schooling has come from would be useful, because there is no great tradition in Australia of working closely with parents. In fact, if there were I think we would see much more filtering through at the teacher education level.

By and large, the content would be extremely practical. It might involve case studies of working with parents, skill building in terms of defusing anxieties and proactively offering constructive solutions. It would look at the academics and how we can coach parents to be supportive in the academics and to create a climate which is conducive to and lays the foundation for a student to excel academically. It would also look at the subservient role the school plays in supporting parents in the character education of their children. We really have not discovered character education in schools in Australia yet. There is much evidence that it is happening overseas, at least in select centres—both in Europe and in the US. If you are interested, I would be very happy to put some more thought into a structure.

CHAIR—We would be delighted to hear your thoughts on that.

Mr SAWFORD—Andrew, was it a disparate group of parents who set up Parents for Education? What do they have in common?

Mr Mullins—The inspiration behind it is the founder of Opus Dei, St Josemaria Escriva. Many schools now around the world have been set up with the ethos of giving as much support as possible to parents. There are some large foundations in Europe in various countries—in Spain and Italy—which have a number of schools that they operate. There are schools in South America in probably a dozen countries. In North America there are several schools which are independent to any foundation. Also in England and in Ireland there are other schools which are inspired by this vision that schools need to do what they can to support parents.

St Josemaria, for example, in the 1950s insisted that it was very important to work with parents one to one and not to just work with parents en masse. He insisted that you cannot educate people en masse; you must educate individuals in the classroom. So he talked about the importance of mentoring at that stage. We have been running our mentoring program since 1986. We adapted programs that we had seen operating in schools in Spain. We sent some of our staff over to Spain to see it in action. By our mentoring program every student has a teacher who is his mentor and who has time to do the job—it is part of his weekly duties. So, typically, if a teacher has 30 students whom he is mentoring, he will have a third of his load, more or less, which is dedicated to mentoring and meeting with the parents. So it is quite a commitment in terms of funding from the foundation.

Mr SAWFORD—You made a point about the philosophical underpinnings of teacher education. I find this quite true: for many of the people who present before this committee, it is very hard to identify their philosophical underpinnings. But I have to say it is very difficult to do the same with yours.

Mr Mullins—I am very happy to talk about this.

Mr SAWFORD—Okay. Can you give us a brief overview of the educational framework for building partnerships between home-school and what is the basis of your educational framework?

Mr Mullins—The principle of subsidiarity. It is what is seen as foundational Catholic social teaching but, because this is social teaching, I would say that it is a rational position; it is not a faith position. One of the key principles of Catholic social teaching is the principle of subsidiarity, and it says that a higher body, such as the government, needs to serve, or is subsidiary to, the needs of the more fundamental bodies within the community, such as the family. So we would see that schools and government support and government legislation and so on really should be emphasising that our schooling system is at the service of parents and should support parents, and therefore everything we do in schools—

Mr SAWFORD—It is very clear that in terms of quality of relationships there is a very clear philosophy underlying what is here. What is not clear to me is the intellectual educational philosophy. You talk about mentoring. That is not a new thing. Socrates and Aristotle—

Mr Mullins—Absolutely. I am glad you are saying that.

Mr SAWFORD—It is not new at all.

Mr Mullins—But unfortunately it has been rediscovered in recent decades.

Mr SAWFORD—That may also be true. What is the intellectual driver of the philosophy that you encourage in your school?

Mr Mullins—The intellectual basis for working closely with parents?

Mr SAWFORD—Yes.

Mr Mullins—I would say it is the rational position that I do not have a right to set an agenda for a child that conflicts with the parents' agenda. It is a position I would defend rationally, not theologically.

Mr SAWFORD—With regard to the quality of the educational program that you encourage in your school, what sort of philosophical underpinning is there?

Mr Mullins—Certainly we have had great success. We are non-selective, but this year, for example, we were the 51st school in the state on the *Sydney Morning Herald* listing, if that is worth much. Most of the first 50 schools have some degree of selectivity or they have scholarship programs, but we have neither. So I would say working with parents is a very effective way of creating a climate where students perform very well academically as well. For example, we had a year 11 parents function recently where we talked a lot about internalised motivation in children and what parents can do to enhance that and what we are doing at school. We are trying to work in step, so we talked very bluntly about the importance of that. There is so much parental input in the school, but we talked very bluntly about, for example, what parents can do to foster in their children a strong work ethic. Obviously that pays off in terms of application to studies, although our aim here is not just to get kids to perform well academically; our aim really is a holistic aim in terms of character and readiness for life.

Mr SAWFORD—So how do you measure your success? You can measure in a narrow form the success of your school in terms of a league table, but—

Mr Mullins—I understand the problems with that.

Mr SAWFORD—Let us push that aside. In terms of making an assessment, an evaluation of the quality of the relationships between home and school, how do you measure that? How do you measure whether you have been successful or not?

Mr Mullins—It is qualitative, to a large extent. We have very strong old boys networks. I am in contact with the old boys and I know how many of them are travelling. I probably know how the majority of them are travelling.

Mr SAWFORD—Doesn't it need to be quantitative as well?

Mr Mullins—It would be great to have quantitative measures. If you are aware of how we can do that, I would be very grateful to know.

Mr SAWFORD—Well, you made a little attempt.

Mr Mullins—I know. I did try to do that.

Mr SAWFORD—In a qualitative way.

Mr Mullins—Yes. I agree with you, and one thing that has crossed my mind is that I would love to be able to demonstrate more clearly the importance of home and school working together, because to me it is a commonsense position but it is not a position which is very well supported in our community. I would love to see how we can get the message across more clearly.

Mr SAWFORD—In a recommendation form, what would you be suggesting to this committee? How would we put up in a very explicit way, in a recommendation form, something that would meet the philosophy of enhancing relationships between home and school? What would you say and where would you put the emphasis?

Mr Mullins—I would be picking up things like Brendan Nelson's values education initiative, but taking it three steps further. We responded to the first draft of that. We pointed out the lack of reference to parents and so on in the program. I am not saying that was a reason, but in the subsequent publication of the program there was more reference to parents and more reference not only to values but also to inculcating behaviours in young people. It is not good enough just to teach values. We also need to somehow raise children so that they have a facility to act in a positive way for their own good and for the good of the society around them.

Mr SAWFORD—Values can also get you in all sorts of trouble, because what are values to you are anathema to other people. I have always felt that education ought to get away from the subjective and be a little bit neutral but all inclusive.

Mr Mullins—I realise the name 'ethics' is not very popular, but I would like to go back to Aristotle's talk of ethics and, in particular, virtues. He understood virtues as good habits. If we raise young people with the good habits of resilience, optimism in the face of difficulty, hard work, sound judgment, good self-control and so on—

Mr SAWFORD—Balanced attributes.

Mr Mullins—Yes, but attributes of character, not just attributes of mind—because we all have good intentions at times, and I am afraid that the values initiative can end up as just good intentions.

Mr SAWFORD—But don't we need the intellectual and the emotional?

Mr Mullins—Absolutely. They feed each other.

Mr SAWFORD—So it is not a matter of 'either/or'?

Mr Mullins—No. Absolutely. But Aristotle did emphasise that we must talk about habitual behaviours, not just good intentions.

Mr SAWFORD—I will comment on the first question again. Your submission highlights, I think very well, the relationship between home and school, yet I still do not know what the educational philosophy underpinning it is.

Mr Mullins—We have seen government documents using the term 'parents are the primary educators', and we have seen that term in Catholic papal documents as well. Every time we use that phrase, we are attesting to the philosophical underpinnings of this, which is that, if we truly acknowledge that parents are the first educators, what we do must enhance their work and support them.

Mr SAWFORD—Maybe I am not asking the question very well—and this may not be an improvement. I think the philosophical underpinnings ought to answer some basic questions: why do you educate; what do you educate about; how do you educate; and how do you measure it? People can answer those questions in a whole range of ways. That is what I am really asking. What is the rationale?

Mr Mullins—Clearly, we are not just educating in schools for academic success. That would be a failure in the end, because we have seen many people who are brilliant but have made a mess of their lives. So the question 'Why educate?' comes down to educating for happiness and for service to society—happiness in the broader sense—because there is a dimension of happiness that is only fulfilled by service to others and so on. What were the other questions?

Mr SAWFORD—How and what, and how do you measure it?

Mr Mullins—How? The more consistent we are with our inputs to young people, the more effective our education will be. Therefore, mum and dad need to be consistent, and school and home need to be consistent. Otherwise, kids get mixed messages and end up quite confused, or the messages are not reinforced. How do you measure it? You measure it afterwards by the effects in our society and the way people are living their lives. I referred earlier to some of the warning signs we are seeing around us which certainly tell us that what we are doing at the moment, not just in schools but in the way we raise children in our society, has some serious flaws that we need to try and address. It is interesting that Lickona, in his first paragraph, goes through '10 troubling youth trends' in the States.

Mr SAWFORD—So did Aristotle.

Mr Mullins—Yes. It is interesting, isn't it? While we are never going to get it perfect, we should be looking around and seeing what is coming out in people in their 20s and 30s.

Mr HENRY—Andrew, I think it is a very interesting proposal that you have put forward. I do not disagree with you on the need for teachers to communicate effectively with parents. I think a lot of teachers see parents as the enemy, and I think that is sad. It is about communication skills and it is about ensuring that we have teacher training delivered in a way that provides training that allows those communication skills to be developed, so that they are able to communicate not just with parents but also in the classroom both with a group of children and with individuals. We seem to have a lot of teacher training providers who are resistant to delivering on that, let alone who want to address parental needs. Again, there is a range of parental approaches to teachers that create some difficulties in the communication process. You might like to comment on that.

Mr Mullins—There is an issue. We have seen a huge emphasis in schools in the last 10 years particularly on curriculum, on national curriculum, on outcomes, on how we measure the final

product, on review of the HSC and on all of this sort of thing. The focus has been very squarely on the academics. I am not saying that there is not room for a very square focus on the academics and on pedagogy even. But if anything we need to make sure that our vision of schooling is not narrowed to the academic and that we effectively support things like the values education initiative so that it is not just lip-service. There is a real danger this values education, particularly now that Brendan Nelson has disappeared from the education scene, is going to simply become a poster on a staffroom wall and that is it. Sure, we will see a number of schools around the country that are nominated as lighthouse schools, but in the end it is all detached from most schools.

We cannot let our vision of education narrow, and I think there is a danger that our vision of education has narrowed as there has been more and more pressure for kids to perform and get their university places and so on. Yet, we know that it does not deliver happiness, it does not deliver stable marriages and relationships and it does not even deliver resilience. There is something there that we are not addressing and that we need to keep looking for.

Mr HENRY—Just picking up on your comment then, Andrew, I am not sure about the values issues and Brendan Nelson moving on. From my observations within schools in my electorate, those values initiatives have been embraced very broadly and are being driven by the school student councils.

Mr Mullins—Good.

Mr HENRY—That is at primary level as well as at high school level. I must say that I am quite encouraged by that.

Mr Mullins—Good.

Mr HENRY—But I think it is important that we do maintain that.

Mr Mullins—Are you familiar with this? Recently Morris Iemma—and I am not criticising Morris Iemma—announced there would be a respect and responsibility showcase in the state. My problem with that is that the assumption behind a showcase is that really we are doing it all and now we want to show it off. I think what has happened shows that we are not doing it at all. I do not think we should be blaming the schools, either. This is a far more fundamental initiative than just looking at what is happening in schools in terms of respect and responsibility. There is a complacency there, I sense. I am the same, in a sense. We are all saying what we are doing well in our schools, but there is a problem, isn't there, if we are not turning out into our society young people who have the wherewithal?

Mr HENRY—In your opening remarks you spoke about resourcing teachers to be teachers, in effect. In one sense we are wanting them to have the skills to be able to counsel, if you like, parents. Yet we do not put any great resources into teaching parents to be parents. Is that responsibility a little onerous for teachers, when you look at it in that context?

Mr Mullins—I agree. There is much more that can be done there. Putting inserts into Sunday papers, which was the initiative a few years ago, is clearly very limited in its effectiveness. I

would suggest that schools can be the vehicle to deliver parenting skills very effectively if we resource them to do that.

Mr HENRY—I do not disagree. It is a leap forward, if you like, an educational step.

Mr Mullins—Big time.

Mr SAWFORD—On page 6 of the submission you gave to us, I refer to figure 2.2, S6: 'Beginning teachers try to build a relationship with the individual parents of their students'. The reality is that couples have great difficulty in building, maintaining and enhancing relationships. We are talking, in the main, about a relationship that lasts for nine months from the beginning of a school year to the end. Sometimes that can continue on in other forms—sport, dance, drama or whatever—but, in the main, that is what it is: nine months. You can put hell of a lot of energy into a relationship, and you can delude yourself that it is significant when in fact it is cursory and superficial.

Mr Mullins—It is ironic, isn't it, because the influence of a teacher on the child of that couple could be profound—

Mr SAWFORD—Yes.

Mr Mullins—particularly in primary. It is probably in the interests of the parent—maybe the parent should be driving this too. Really, I should be getting to know anyone who is a decisive influence on my child quite well, lest they depart from what I am happy with them talking about. It is an interesting problem.

Mr HENRY—But it comes back to that issue of teaching parents to parent, taking that responsibility even in the school environment, because so many do not. They think that their kids have gone to school and that means that they are off their hands, rather than being engaged with the school and the process.

Mr Mullins—There is certainly a change of vision needed here.

CHAIR—We will have to wrap it up, because we have run over time. Andrew, thank you for appearing before the committee today. We have requested some further information, and I would be pleased if you would get it to us as quickly as possible. The secretariat will provide you with a proof copy of your evidence, and a copy of that transcript will be posted on the parliamentary website. Thank you very much.

Mr Mullins—Thank you very much for your attentive listening and contributions.

[3.56 pm]

BRITT, Ms Clare Alison, Sessional Staff, Institute of Early Childhood, Macquarie University

HATTER, Miss Michelle, Student, Institute of Early Childhood, Macquarie University

PALKHIWALA, Miss Sanobia, Student, Institute of Early Childhood, Macquarie University

PHIPPS, Miss Elizabeth Anne, Student, School of Education, Macquarie University

WATSON, Mrs Sarah Heather, Student, Institute of Early Childhood, Macquarie University

WONG, Ms Sandra Mary, Postgraduate Student, Casual Lecturer and Research Assistant, Institute of Early Childhood, Macquarie University

CHAIR—Good afternoon. Thank you for joining us at the teacher training forum. We appreciate the time you have taken from your busy schedule to come and talk to the committee. One of the really valuable forums we have had as we have gone around the country are those when we meet people who are training to be teachers. One of the common points throughout all those meetings is the enthusiasm that has been shown by our trainee teachers—and that enthusiasm is certainly an indication that our students of the future will be a good hands.

I will just advise you that today's proceedings are being recorded in the *Hansard*, so your lecturers will know what you say! Just bear in mind before you make any comments that they will form part of the record of *Hansard* and will be there for everyone to see. I would like you to tell us what you like about teacher training, what you do not like so much and maybe what things are being done well and what things could be done better.

Miss Palkhiwala—I am in my fourth year at Macquarie University, doing early childhood education. The things that I like: gosh, where do I start!

CHAIR—Or the things that are done well.

Miss Palkhiwala—I think the things that are done well are that it is very hands-on in our course and it is very focused on the students. I hear from friends in other faculties that they feel they are just a number sometimes, whereas I feel in my course that everybody knows you by your name because we are such a tight community.

CHAIR—How many in your course?

Miss Palkhiwala—In my course, I would not know personally, but in my tutorials and lectures there might be a large number but we have travelled from first year to fourth year together so we feel like a community of early childhood teachers. That is probably one of the

most important things, that you do feel supported, whatever the ups and downs might be. Off the top of my head I cannot think of anything particularly negative. Were there any other questions?

CHAIR—That is a good start. Would anyone else like to make a contribution?

Mrs Watson—I am doing the two-year postgraduate primary teaching course.

CHAIR—What did you do prior to that?

Mrs Watson—Prior to that I was at the University of Canberra, where I studied for the Bachelor of Communications in public relations. I worked for a few years in PR and then decided to return to university and study to become a primary school teacher. I totally agree that the support we are shown by our supervisors and lecturers makes us absolutely feel like we are part of a community. If there is ever a concern or a problem when I am out on prac or with one of the students in my class I have always felt able to turn to my mentors at the university for support. Compared to when I was doing my first degree, when I did feel a bit as though I was a number, this is a very different experience at university.

CHAIR—How do you make contact—by phone or personal visit?

Mrs Watson—Last year, when I was doing my practicals, we had one day a week when we would meet in a small group with a supervisor, who would also come and watch you teaching your lessons. It was just an open forum, really, a discussion of things that you thought were great or concerns that you had. Also I could call up, email or visit. So there are quite a few different avenues for communication.

CHAIR—Anyone else?

Ms Wong—I came to do the undergraduate degree, the Bachelor of Education early childhood, after doing nursing, so it was a change of career for me, and I am a mature age student. For me, one of the important aspects of Macquarie University was that the mature age students could actually support one another. The other important thing for me in doing the Bachelor of Education—you probably do not want to hear this!—was that you do not only go into direct face-to-face teaching; you have opportunities to work in other fields. I have gone on to do postgraduate work and become a lecturer. So doing a Bachelor of Education, as well as leading onto working in the field, opens up other avenues.

CHAIR—There are three of you who have not said anything so far. Could you tell us what year you are in when you speak.

Ms Britt—I graduated from the Institute of Early Childhood after doing a Bachelor of Education four years ago, and that was my second degree. I did an arts degree at Sydney uni, had some time off and worked, and then went to Macquarie—and I would absolutely agree with what the other students said about feeling like you are a name rather than a number, particularly after coming from somewhere as huge as Sydney uni. With my early childhood degree I have been teaching in a primary school for the last three years and then this year I started teaching back at Macquarie. So I have the undergraduate view and then the practical view, and this year I have just started teaching two of the prac subjects at Macquarie uni.

Miss Hatter—I am in my fourth year, my final year, of doing a Bachelor of Education early childhood. I am also doing honours. I come from a slightly different background in that I started the degree externally, which meant I had only a few days here and there at uni per semester. But, again, the support networks were there through lots of emails and bulletin boards and those sorts of things and then phone calls if required. As other people have said, I feel that Macquarie is really good. It gives you valuable insights into the different perspectives on teaching and I think that it is able to guide you in the direction that you want to go. If you want to be this style of teacher, if you want to be another style, or if you want to, as Sandy said, go in a different direction or down another path to postgraduate study, I think all the options are there and it is all provided for you.

Miss Phipps—I am in my fourth year of the concurrent BA Dip Ed degree in secondary teaching. My teaching subjects are English and history. What I have enjoyed about Macquarie is that it has been a development for me as a person because I came straight out of school and I was able to really develop the theoretical basis that I needed before I got into the schools in my third and fourth years. So now when I go into a school I feel a lot more confident with my academic background, rather than if I had just been thrown in the deep end. And I would echo what the others have said: the sense of collegiality and the importance of the mentors in the department of education have been really great for me as well.

CHAIR—What about the pracs? Do you find the amount of pracs enough, too much, about right?

Miss Hatter—I feel that the length of pracs could possibly be extended within our degree, but due to time constraints I do not know that it is feasible. I feel that all the theoretical knowledge that you need to be a teacher is required; however, more practical experience would benefit you. I think there are two sides to the coin.

Ms Wong—One of the issues when you are a mature age student with family is child care. We have three children. Trying to do any more prac would have been a financial strain as well as trying to organise family. I think that we probably do just about enough at the Institute of Early Childhood.

Miss Palkhiwala—I really appreciate the way we do it in the Institute of Early Childhood. I would not have liked it if I had gone two or three years into my course and then done my first prac. I really enjoy the way we have the theory and then get the prac. Whatever subjects we have done that semester we get to implement there and then. We do not have to wait two years or four years. It is almost like little stepping stones rather than a big thing right at the end. I really appreciate that. All those little experiences build up to something you can take with you after you have finished university. The hands-on is invaluable.

Mr SAWFORD—At Macquarie it is the exception rather than the rule that you go out prac teaching early.

Miss Palkhiwala—I do not know what happens in other courses.

Mr SAWFORD—Someone was saying that they do not go out until their third year.

Mrs Watson—That is secondary. I am a postgraduate so I came in at the third year as an undergraduate and the pracs begin for primary in the third year. I have heard various things from different students saying they find it difficult that they spend two years studying and then they get out there into the schools and the theory and the practical are very different. They go hand in hand and you absolutely need to have that theory behind you. It is fundamental. I have heard students say that they go out in their third year and they do not like working in the school system and they realise they have spent two years studying. Personally, it worked fantastically for me because, having started in the third year, I went straight in with the theory and the practicals. In that sense it worked well for me but I have heard mixed things from other students about beginning practicals in the third year.

Miss Phipps—I came through from first year to fourth year and I had the two years without any practical experience. I did not find it a problem for me. I know others in my course have said that it might have been better to go in earlier. From my perspective I would not have felt, coming straight out of school, confident to enter a classroom. The possibility of more observation earlier on would be fine for me. At this age I am far more confident in terms of what I know, and I think you do need a sense of distance so that you can come back from the other perspective rather than going straight from being a student to a teacher position. For me, having that time to feel confident in my discipline as a secondary teacher was fundamental.

CHAIR—Did you do some observation in those first two years?

Miss Phipps—Not as part of my degree but I had worked in after-school care so I felt I had a connection anyway. A lot of students do tend to do that so they are getting some kind of experience working with children while they are doing their degree. That has been great for me.

Ms Wong—In the institute our practicums start in the second semester, so students right from first year spend at least two weeks and sometimes three weeks on prac every semester. Many of our students are working in early childhood settings anyway. They are either working in a child-care centre or after-school services or they do voluntary work. It is probably a little different from going into a senior school. I can imagine that would be quite challenging for somebody who is not much older than the students themselves.

Miss Phipps—I understand what you are saying. I was lucky enough to work with students from year 5 to year 8 from my first year so I have had experience with secondary school students, albeit they were junior secondary. I have not felt out of touch.

Mr SAWFORD—It seems to me that you could get to third year and go on your first visit to a school and think, 'My God, this ain't me.' I know you can have a transition to other courses but we have had it reported individually and anecdotally that that is a bit of a tragedy, particularly if there is some difficulty in being able to transfer to another course. You are affirming that basically the early childhood people have experience early. But, Mrs Watson, you say that you did not have any experience at all in the first two years.

Mrs Watson—I started in the third year, being a postgraduate. I went straight into the third year, so my first year, so to speak, was the theory learning at the university plus being out there in the schools.

Mr SAWFORD—You are not a good example, either.

Mrs Watson—I am not a good example either, but, just from having studied for the last two years, I can see the benefit in having observation time for the first couple of years. Obviously a lot of my colleagues did the straight four years. I think observation time in schools in those first two years would be good, just so you get a taste of what it is like, because being in the classroom with 30 five-year-olds or six-year-olds is very different from sitting in a lecture room and learning about it. It would be beneficial to have that time, just for observation, because I do agree that the theory and strategies you learn at university are very important and, when you get out there in your third year, you feel much more confident to then put those into practice. But observation in the first two years would obviously be fantastic because you could then sit in the schools and experience the school environment.

Mr SAWFORD—It was not so much in terms of the observation, but the very best career counsellors that I ever saw operate in secondary schools were those who took students out to various workplaces that probably would not normally fall into categories that they would think of—like work in the road industry. There were huge dividends. People were absolutely gobsmacked by how long it takes to operate that machinery and what skills you need. I think a lot of young people do not get that exposure to the variety of careers that are out there, and I would have thought that in terms of teacher education you would need that contact in the school, because I think young people know themselves better than anybody—better than their parents or anyone else—and you know where you are comfortable. If you move into a workplace that has some attraction to you, you will identify with that. By going into a school, even very early on, even if they do not do anything—it might just be for observation or minimal things—I reckon young people get a feel for it. Some will think, 'I like this,' while others will get the feeling, 'I don't like this.' I would rather those decisions were made earlier than later. That is the query I have, and you are reinforcing that in your different situations, because you went straight into it. Early childhood people are doing it straightaway, and you found a way around it by doing it yourself.

Miss Phipps—I think a lot of people do find that they work in a school related setting, and that is how they are having their experience. A lot of my friends at uni are doing that.

Mr SAWFORD—Do you think the people involved in teacher education at Macquarie actually knew what you were doing? Did you tell them that? Did they know that you were out there—

Miss Phipps—Do you mean the lecturers?

Mr SAWFORD—Yes.

Miss Phipps—I do not know that they did. Obviously I might draw on those experiences at times in terms of relating some of that theory but, in general, I do not think they did know.

Ms Britt—One thing that I loved about the way the prac was conducted through early childhood in study in first year and through doing two pracs a year was that you got to experience a really wide variety of different settings. Particularly in early childhood you can work in a long day care centre, a school setting or a preschool—there are a lot of different

settings that you can teach in. I know I had a few pracs in settings that made me think, 'This is absolutely not what I want to do,' and then other pracs in settings where I thought, 'I can absolutely feel myself being comfortable in this environment and working with these sorts of teachers with this age group of children.'

Mr SAWFORD—'I can do this.'

Ms Britt—Exactly. By being able to try, as you were saying, that variety of settings and experience a whole lot of different sorts of teaching while you are studying, by the time you have graduated there is a much firmer idea in your mind of what style of teaching you want to go into and what setting you want to teach in.

Mr HENRY—This is really following on from our last witness, but do you feel as though you are sufficiently equipped by your training to deal with parents and to talk to and communicate with them about their children that you might be teaching?

Miss Hatter—In early childhood I feel as though we are, because there are subjects designed specifically to address the needs of families and children and subjects on how to integrate the different needs of community members into the school or preschool setting. There is a lot of focus on how we need to support the families, develop greater involvement of the families into schools in particular, share our programming with them, build community links and that sort of thing. There is a great emphasis on that.

Miss Palkhiwala—Sandy was saying that a lot of us do not just do prac as our jobs. I find that we learn a lot about building relationships with parents at university but it is very premature to use that when you are on prac for three weeks. You are just coming in and they do not know you. It can be very difficult and strained when you are on prac. But, when you are working somewhere and that is your part-time or casual job, you have so much more time to build a relationship. I think that is where you can actually use your university knowledge and build those genuine relationships. You do feel backed up by the knowledge—you have learned how you do it.

Mr HENRY—Clare, you mentioned that, in the early childhood program, you really appreciated the opportunity of doing two pracs each year, was it?

Ms Britt—Yes. In the first year you just do a prac in the second semester but then in each year after that there are two pracs each year.

Mr HENRY—Do you think that in teaching generally there is sufficient opportunity for that practical experience of teaching in class? Elizabeth was saying that she was happy with doing the first two years. Do you think that you have had sufficient practical in years 3 and 4?

Miss Phipps—I think I have in the sense that coming into a secondary discipline I needed that academic discipline otherwise coming into an older setting with older students I would have been eaten alive, so to speak, because I would not have had that sense of confidence in my own academic knowledge. So coming in now I feel that, whilst I am older, I have more experience in terms of understanding what I have learned at uni and I have been able to relate that to practice.

Mr HENRY—So you have gained confidence from your academic knowledge. What about classroom management skills? Has the practicum provided you opportunities to explore different strategies there?

Miss Phipps—Obviously I have not done it until my third and fourth years, but it certainly has. I can imagine it could be difficult depending on your personality type. We do need practice in that and it is always an area of anxiety for people. There is a lot of opportunity for us to come back to our workshops and debrief about it and I know that topic is raised a lot. There is a lot of theoretical basis and theoretical discussion about that and we do integrate it. I would not say that it has not been sufficient because I feel fine with it. That is only personal experience.

Miss Palkhiwala—I was just thinking back to the pracs that I have done in school compared to long day care. I did find building a relationship with parents in school was much harder. I think the perception of the teacher in school is different for parents perhaps. Also, there is a three o'clock pick-up and they stand outside the door. I found from an early childhood perspective that I have to go outside and initiate the conversation otherwise it was not going to happen, whereas in long day care you can easily stand and talk to parents for half an hour about what their child has done the whole day and it is very natural. I noticed that that kind of barrier did exist in schools.

Mrs Watson—From a primary perspective I had very little contact with parents during my pracs. I felt very much that I was the student teacher. In the lessons during the day my master teachers were fantastic and I had support if there was a management issue that came up in the school. I felt that during the lesson I was teaching it was my responsibility to sort that out. Obviously if I was struggling then perhaps they would step in and assist. But I never felt that that was a problem. But, with regard to parents, I had very little contact at all in the primary pracs.

CHAIR—One of the things that we have been struggling with is that there are lots of suggestions for things that can be included in the teacher training curriculum, but a lot fewer ideas on what to leave out. Are there any things that you think you have done in your course that could perhaps be left out—that are not relevant to today or what you are finding as your career or studies progress?

Mrs Watson—I have done a few subjects that I thought were totally irrelevant to studying. I did one subject that was all about education way back when in America. It was totally irrelevant and while I was learning this subject I was asking myself why I was studying it as it had no impact on when I was going to go out there and teach. There were a couple of subjects that I felt, because I was doing the study in two years—being a postgraduate student who already had a degree—were not necessary. It was only a few. Most of the ones that I have done have been great, particularly the TEP subjects, which are the ones where you actually go in and meet with the lecturers and supervisors—and they have been fantastic in the special needs subjects that are all so important. I felt that a couple of the subjects that I did in the beginning, third year, were not relevant at all.

Mr SAWFORD—Were these because they were so content oriented? What was it about them that annoyed you?

Mrs Watson—I guess I just feel that I am out there to learn how to become a teacher. I did not feel that this one particular subject that I was doing was in any way going to help. It was all about history and things that I did not really need to know as a primary school teacher. Sorry, there was another subject that I did. It was a maths subject. I had my previous degree assessed by the department and they said to me that in order to teach I had to pick up a maths subject, so I did a subject that was in the maths department. It was equivalent to a three-unit mathematics subject—and I am teaching primary school children. So it was totally irrelevant to my studies, but in order to complete my degree I had to pick up a maths subject. Stats was taken out by the department. I was told I had to do a particular maths course. It was three-unit maths, a first year mathematics department subject, and it had no point at all for me as a primary school teacher. I would have benefited a lot more from doing a maths subject in which I would be learning, for example, about how children struggle with mathematical concepts and of the ways in which you can perhaps teach them. In this particular subject I was learning formulas.

Mr SAWFORD—So you were doing content rather than the principles of mathematics teaching?

Mrs Watson—I was doing content. I was learning about how to do these complex formulas—and I am teaching kindergarten to year 6 children. I would have much rather spent that time and money on learning about how I could reach kids who really struggle with mathematical concepts. I learnt nothing from that subject.

Mr SAWFORD—There is a huge problem with very poor levels of maths and science in primary schools. I think the point you are making is that that is going to make it worse, because you need to establish in students of teacher education courses the principles of teaching mathematics.

Mrs Watson—Absolutely.

Mr SAWFORD—That is very different from the history and the content. But if you do not have the history and the content you cannot do the other parts.

Mrs Watson—Absolutely. I have studied mathematics all through my schooling. I do not feel that I need to learn about some algebraic formula.

Mr SAWFORD—So no-one brought in the principles of teaching mathematics?

Mrs Watson—There was nothing. It was a maths subject. It was completely and purely a 100 per cent maths subject. I spoke to the education lecturers and they all agreed: they said it was absolutely pointless that we were doing it and they were going to be reviewing why we did it. I had to do a maths subject and that was the only option I had. Stats was taken out. How is stats relevant? Again, that was taken out and I had to do a maths subject.

Mr SAWFORD—Has anyone else had a similar experience with maths or other subjects like that?

Miss Hatter—In early childhood there are some subjects which we have to deal with. They are referred to as liberal studies. They are subjects that we have to do outside the early childhood

field. To some students it may be interesting to take a different path and learn about something completely outside the field. However, I think that if you were going to cut back on anything and introduce more content based subjects that would be one area that could go. If you are doing liberal studies you might be doing a science subject or you might be doing a history subject which is completely irrelevant to catering for a youth of 13 or to a preschool setting. It depends on what you are interested in but to me it is irrelevant.

Miss Palkhiwala—We had to do liberal studies as well, and I took the opportunity to do all my liberal studies from first year in the psychology department. I did that leading up to third year, when I finally did child development in the psychology department. I found that was invaluable to my perspective on early childhood because I got so much out of it. Development in early childhood is very much about the physical aspects, whereas psychology was about the mental side of it. However, I do have friends who do a bit of this and a bit of that and are not really streamlining all their liberals in one area. That might not benefit them. They might want to do what you were saying: more early childhood subjects. I really liked the fact that I could do a bit of something else which was relevant. I found it very relevant.

CHAIR—You chose well.

Miss Palkhiwala—Yes. I wish it was a double degree, to be honest. That is if it is offered—but it is not. If it had been offered I would have done it, because it does fit in—and I do not know why nobody realises that you need psychology to be a teacher; you need to know how a person's mind works.

Mr SAWFORD—Did you find in your teacher education courses that there was a good balance between you being the learner, the scholar, and also being a technician? Was there a balance between the two or was one area emphasised more than another?

Ms Britt—I actually really loved the philosophy focus that they have in early childhood. Until about halfway through my degree, I remember feeling a bit like you are feeling, Sarah, and thinking: 'Why are we focusing so much on this underlying philosophy and underlying theory—all of these 'whys' of education? Give me some hows and whats.' But now as a teacher, having gone out, it is the whys that are so strong—and from that you create the how and the what, basically. It means that you can go into lots of different situations and say, 'Okay, I'm going to make this decision based on this.'

So, while I was going through the degree, I would have argued: 'We need much more practical. Tell me how to program and tell me how to teach that lesson,' but I think the focus on the philosophy means that there are many different ways to program and many ways to teach that sort of lesson—and you have that grounding in the philosophy. My personal opinion is that there is a balance in early childhood between the theory and the practice and you being a teacher and a learner as well.

Mrs Watson—I actually agree with you, Clare. I am not for a minute suggesting that philosophy is not important in a primary course. I think it is important. I feel that as a learner and a technician, it is a great balance. I feel like I am prepared to go out there now and I have behind me the philosophies, all the theory that I have learnt—which is absolutely important—and the

practical side of things. All I am saying is that two particular subjects I did were not relevant. As for the primary side of things, the balance is definitely there.

Mr SAWFORD—Are there any other similar experiences?

Ms Palkhiwala—As for our lecturer's philosophy, they tell us from day one, 'We're not going to tell you what to think; we're just going to tell you how to think.' In first year that frustrated me because, coming straight out of high school, I thought, 'In high school you're told what to think.'

CHAIR—A few whats would have helped, do you think?

Ms Palkhiwala—Yes. You learn to become an independent learner. I am in my final year now and—like you were saying, Clare—I think that if I do have that foundation perhaps I will be fine doing all the whats and the hows later and that having the foundation is fairly important.

Mr HENRY—It is interesting to note that there are no blokes here. Do you have any comment on the gender issue? There has certainly been a lot of concern about a lack of young men going into teaching.

CHAIR—We have women on this side, but they are not here at the moment.

Mr HENRY—Do you have any comments or thoughts on that?

Ms Wong—In early childhood, in particular, we have an image problem, I think. It is certainly constructed as a women's issue and women's work. That continues to be reflected in the number of males who enrol in our course. In our last intake of students, we had a few more men, but they stand out a bit like sore thumbs and they do not always last the course either. It is very challenging for a male in early childhood education, in particular.

CHAIR—Do they usually move on to primary or secondary or totally out of the teaching field?

Ms Wong—Both. It is hard being a male student in an institute that is dominated by females. It is hard being a male working in the early childhood field or profession.

Mr SAWFORD—And it is a big turn-off to fellows.

Ms Wong—Yes. The fact that they even enrol in the first place is great, but we need to try to hold on to our male students.

CHAIR—Are you being too hard on them?

Ms Wong—I do not believe so. We love to have males in the tutorials because they bring a different perspective. And we certainly need them in the field, don't we?

Ms Palkhiwala—Definitely. I have been on a few pracs. One particular prac had two males in the centre, and it was just so refreshing. In a workplace where there are all females, you get your

typical issues—arguments et cetera in the staffroom. This was really refreshing. They came from a different perspective. I think we get so bogged down sometimes in what we must do and all the responsibilities, but they were there having fun with the kids and it was really refreshing and good to see. It was rare to see two male staff members.

Miss Hatter—I have to agree with Sandy about the image of the teacher, in particular the early childhood teacher. I do not believe that there is much respect publicly for the profession and the commitment you need to make to teaching. People do not see the amount of work you have to put in and that type of thing. If they were able to see that and to see that you were committed to and enthusiastic about your job, then the profession would be more respected and admired and therefore males might be more inclined to enter the industry.

Miss Palkhiwala—I think it is a self-perpetuating cycle. The reason males do not want to come is that sometimes they do not feel very welcome. I have a few male friends who have found it very difficult to find a job in a child-care centre because of the social stigma attached to it and what people presume automatically. That means that they are less likely to come in, which means that the process continues and the social standing of the whole industry and the whole work force declines. Unless something changes, it will keep going on like that.

Mr SAWFORD—Are you all aware, or are you taught in teacher education, that boys and girls learn in different ways?

Miss Palkhiwala—Yes.

Mr SAWFORD—And that your teaching styles need to cover those possibilities, just as they do when you deal with children with special needs or with disabilities. What is the emphasis that is given to you, as young women teaching boys? What are some of the stand-out things that maybe you need to have greater awareness of in teaching boys than you would in teaching girls?

Miss Phipps—For secondary English teachers, one of the biggest issues that immediately comes to mind is, in curriculum design, choosing the right kinds of literature. There are options now within the new syllabus that allow us to choose texts that are more engaging for boys and can be engaging for both boys and girls. So I think it is definitely about the choice of texts, and then the mode of delivery can have a big impact on getting kids involved in English and loving English. They both can; it is just a matter of targeting it.

Mr SAWFORD—What are some of the attributes that have been given to you that may work far more effectively with boys? One is the choice of literature. Are you taught that boys often respond more favourably to explicit information rather than implicit? Are you taught that they actually like competition?

Miss Phipps—Yes, absolutely.

Mr SAWFORD—Are you taught that they like the visual part of the curriculum rather than the verbal part and that they learn in different ways?

Miss Phipps—Yes, we are. Again, one thing that we always come back to is that we are teaching an individual. We cannot just say, 'These are boys and this is how they learn.' While we

are taught some strategies that generally work, such as the visual and that kind of thing, we are never going to say, 'These are boys. This is how I am going to teach the boys over there and the girls over here.'

Mr SAWFORD—No. Some girls learn like that.

Miss Phipps—We are teaching individuals. Individual needs is a very big theme within our courses—within my course anyway.

Mr SAWFORD—There is a disengagement of boys in schools. It is a significant problem. You can see it in every shopping centre in Australia every day of the week. They just vote with their feet and get out. Some of those children are very young. When those children are spoken to, they will tell stories that are quite frightening about what has been happening at the school that they went to. Their needs are not being catered for; that is why they have got up and walked. Are you taught how to deal with these children in your teacher education courses?

Miss Palkhiwala—That relates completely to seeing the child in the context of their whole environment. It is premature to point the finger just at the school. That child's environment includes their family, their community, their friends, their siblings and all their past experiences. As teachers in early childhood we are taught that it is not just one of those factors that shapes the decision that that child has made. If they have left the school on that day and decided not to stay there because it was not a safe haven, it is not only that particular situation that caused it. I think a variety of things have an impact.

As an early childhood teacher, I feel most equipped to deal with a child in the context of their whole environment, really thinking: 'I will not point the finger at one person or one reason. I will ask the child and really find out about their situation.' I feel very equipped to do that in early childhood teaching. I feel that that is the focus of our whole degree.

Mr SAWFORD—What do you think about the fact that, in this country, at a guess, 100,000 students—it is probably a lot more than that—are put on suspension every year? That figure has dramatically increased over the last 25 years. Schools are saying to a certain number of Australian students, 'We can't deal with you.'

Ms Britt—As someone who has been teaching in the school system for the last three years, I think that there is a massive systematic problem with schools rather than with teachers. Just about every teacher I know who has graduated recently has come out with a fantastic teacher education and a really great attitude towards children, towards learning—a great philosophical basis. They then come into a system where teachers are expected to teach the same thing regardless of the context, regardless of teacher's experience and regardless of the children and their interests.

I think children are expected to go through an education system that is like a factory, which says: 'This is what you will look like when you come out. You are all going to look the same, you are all going to think the same way, you are all going to sit the same tests.' In a system like that, which is basically dehumanising, there is no room for teachers to build a relationship with students. By the time some of these students are in their teens they do become a number and they do become someone who does not fit into that system. If teachers were freer within a system to

create relationships with the students, with the families and, as you were saying, with a child in the context of their world, their community, we would see a very different outcome, particularly for those children who are finding that they just cannot fit into that school system. I feel that the school system needs to change to fit the children rather than having the children change to fit the school system, if that makes sense.

CHAIR—Thank you for joining us for the student forum; they have always been valuable. Certainly your enthusiasm is very much in keeping with the enthusiasm shown by a whole range of teachers and student teachers we have seen as we have travelled around the country. You have been part of a process that will result in us providing some recommendations which should enhance the quality of teacher education in the future. Thank you very much. We will be providing you with a transcript of evidence for you to proof.

Resolved (on motion by **Mr Henry**):

That this committee authorises publication of the transcript of the evidence given before it at public hearing this day.

Committee adjourned at 4.38 pm