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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

Reference: Rural skills training and research

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TAMWORTH

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

Thursday, 9 March 2006

Members: Mr Schultz *(Chair)*, Mr Adams *(Deputy Chair)*, Mr Martin Ferguson, Mr Michael Ferguson, Mr Forrest, Mr Lindsay, Mr Gavan O'Connor, Mr Secker, Mr Tuckey and Mr Windsor

Members in attendance: Mr Schultz, Mr Secker and Mr Windsor

Terms of reference for the inquiry:

To inquire into and report on:

- The availability and adequacy of education and research services in the agriculture sector, including access to vocational training and pathways from vocational education and training to tertiary education and work.
- The skills needs of agricultural industries in Australia, including the expertise and capacity of industries to specify the skills-sets required for training, and the extent to which vocational training meets the needs of rural industries.
- The provision of extension and advisory services to agricultural industries, including links and coordination between education, research and extension.
- The role of the Australian government in supporting education, research and advisory programs to support the viability and sustainability of Australian agriculture.

WITNESSES

Committee met at 1.32 pm

CARRIGAN, Mr Zac Anthony, Student, Farrer Memorial Agricultural High School

HARRIS, Mr Graeme Francis, Vocational Education Teacher, Farrer Memorial Agricultural High School

LEVY, Mr James, Relieving Principal, Farrer Memorial Agricultural High School

SCHUTZ, Mr Chris, Student, Farrer Memorial Agricultural High School

THOMAS, Mr Jamie Robert, Relieving Head Teacher, Agriculture, Farrer Memorial Agricultural High School

CHAIR (Mr Schultz)—I declare open this public hearing of the House of Representatives Standing Committee on Agriculture, Fisheries and Forestry inquiry into rural skills training and research. This is the 14th public hearing for this inquiry, and is part of an extensive program of public hearings and visits designed to gather information from the people directly involved with the main issues of the inquiry. A further hearing will be held in Armidale tomorrow. I would like to take this opportunity to thank Mr James Levy, Principal of the Farrer Memorial Agricultural High School, and his staff for making us feel welcome today and allowing us to use the college as a venue for these hearings. Today the committee will be hearing from a number of invited witnesses representing a broad range of people and organisations interested in the area of rural skills training and research.

We will begin with the Farrer Memorial Agricultural High School, and I welcome its representatives. It is great to see young people involved in this very important inquiry. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as contempt of parliament. Would any of you like to make any opening remarks?

Mr Harris—I prepared the initial submission, which I think is No. 32, which was sent to the inquiry. My experience is as an agriculture teacher and also as a vocational education teacher at the school. I have also been an accredited SMARTtrain chemical trainer and a ChemCert chemical trainer so I am experienced in teaching both students from high school and those in adult education and working in agricultural industry. Agriculture education at the secondary level has been developing in what could be described as a piecemeal way across Australia. I foreshadow a presentation I will be giving later in the day on behalf of the National Association of Agricultural Educators.

The number of students undertaking agriculture as a stand-alone subject in New South Wales in the HSC has been declining over the last few years. At the same time, there has been an increase in the number of students undertaking vocational subjects. At the school we have a proud history of offering vocational education, and members of the committee I hope enjoyed a visit around our facilities earlier in the day.

We face a number of challenges. The challenge that is faced by all schools that are teaching agriculture and rural skills is that there are a number of campaigns and programs which have had the unintended effect of reducing the number of students who are interested in pursuing an agricultural career. Terms such as the 'clever country' and other campaigns resulted in a widespread community belief that agriculture was a sunset industry and that there was no future for any young boy or girl in agriculture—there were not employment opportunities and you only went into agriculture if you really were not suited to much else. Obviously, that is wrong. There is anecdotal evidence from discussions with parents over the years that most parents and teachers advise students that they have to get into computers to have any future, yet the job opportunities in agriculture are far greater than job opportunities in IT in Australia and likely to be so for a long time. In my submission I have alluded to a number of factors of concern. I will not dwell on those, because they are in the submission.

The focus of what is taught in schools has moved away from the development of skills and knowledge of agriculture into a more generic form of agriculture, one which is following very much the views regarding sustainability and social impacts of agriculture without students developing a sound understanding of the mechanisms by which plants and animals grow. That has further implications. The development of school based vocational courses has been exceptional in some schools, and in New South Wales I believe over 60 per cent of students undertake a vocational subject for their Higher School Certificate. At this school we have also obtained certification for a certificate III course in both crop and grain production.

The challenges that we faced in obtaining permission to do that were huge. There are many bureaucratic impediments. The ground seems to shift as we negotiate our way along that pathway. It is very tiring and requires a tremendous commitment from all the staff members who are involved and the support of the school, the executive and the students to obtain it. I have given a description in the submission of some of the difficulties we have encountered.

The submission also identifies the possibilities of enhancing primary industry skills through rural industry partnerships throughout Australia. This school has a relationship with the Australian Agricultural Company and we send students to the Northern Territory and Northern Queensland to work on properties for two weeks at a time and develop their skills. Some of the impediments that are put in our way with regard to those interstate arrangements are great.

Students are not allowed to fly—they can only travel by road, which means it is necessary for them to travel for 36 hours by bus rather than hop on a plane and four hours later be in Mount Isa. It means that they cannot travel by private aeroplane. As we all know, in the Northern Territory and north-west Western Australia the only way of getting from station to station is by plane and most stations have their own plane and pilots. That makes it very difficult and expensive for the AA Company because they have to drive vehicles into Mount Isa for 500 kilometres or so. The person who drives in has to stay overnight in a motel, and they have to take the kids back. All those things make it very difficult for us to run those sorts of programs.

The programs are exceptional. Student demand is ever increasing. The first time we offered the beef cattle course was last year and we had about 11 students in year 12. This year we have 35 students in total, so that is about 18 to 20 from year 11. So there is increasing demand for those courses because industry demands it and students demand it so we try to meet their needs.

CHAIR—Thank you for that comprehensive overview, Mr Harris. Does anyone else wish to make a brief statement before we move to questions?

Mr Levy—No.

CHAIR—Before we move to questions, it is very important from this committee's point of view that we obtain evidence from people affected by the inquiry that is open and honest and with warts or without warts, whichever way you want to give it. If we do not get that sort of in-depth knowledge from the people we are asking to contribute evidence to this committee then we cannot work out the recommendations that are designed to show the minister of the day the precise problems associated with, in this case, rural skills training and research in Australia. I will let your local member ask the first question.

Mr WINDSOR—Mr Levy, thank you for allowing your teachers and two students to be with us this morning. It has been an excellent morning, and I thank them. In operating a school such as this, obviously agriculture is a high priority but not the only priority. There is a boarding component—a lot of country kids come long distances to live here. Within the bounds of the department of education and not wishing to take to hours of your time, can you give us a snapshot of the difficulties and the ways in which some of those difficulties might be alleviated in the future?

Mr Levy—Are you looking specifically at rural skills education?

Mr WINDSOR—Not only at the delivery of those subjects but also at the administration of a body such as this.

Mr Levy—One of the problems we have relates to the education department as an organisation. It is a very large organisation. I believe it is the largest education institution in the world, and fitting an agricultural and boarding facility into that mould has caused us a lot of problems. We do not fit into the mould of a normal high school. We draw our students from a wide range of areas—isolated kids in particular, but also people who are strongly interested in agriculture. As a result, the curriculum structure has put some impediments in our way as well. In the junior agricultural course there have been changes. In the senior course there have been issues related to trying to get the vocational education courses off the ground and running. It is only through the persistence of the agricultural faculty, and Graeme's doggedness in particular, that we have pursued the requirements to get us up to be a registered training organisation to deliver these courses.

We have had impediments put in place by the Board of Studies, which is the body that recognises our qualifications for the students. Even as late as today, we are having hassles getting the qualifications for vocational education recognised as Higher School Certificate courses, despite the fact we have gone through all the registration processes. They just do not fit into the system or the framework of the Board of Studies.

CHAIR—Why is that? Why doesn't vocational education meet the criteria or fit into the system? Would one of you like to make a comment on that?

Mr Harris—The application form to run a school-developed board-endorsed course had three boxes. One box was two units in year 11, one was four units in total and one was two units in year 12. We wanted to do it as four units to be studied either in year 11 and year 12 or in year 11 or year 12. So we ticked only one box, which was the four-unit box. Now we are being told by the board, as late as this morning, that because students have not studied it in year 11 they cannot then study it in year 12 and have it count towards their Higher School Certificate, even though there is no reasonable basis on which to reject it. That is pretty typical of the sorts of impediments: because the box does not exist, it cannot be done. We have always worked on the basis of, 'Just find another box.'

CHAIR—So we are basically talking about what we commonly refer to as bureaucratic claptrap?

Mr Harris—Yes.

Mr WINDSOR—Would either of the boys like to make some comments about the things that you have learnt or the problems that you have come across? Feel free not to, but if you have something you would like to say, take the opportunity to tell us how to run the world.

Mr Schutz—Just on work placement and things like that: I have found that, because of government regulations and things like that they will not allow us to go further than 120 kilometres from the school. That is difficult for, say, people who have contacts out west and where places are further than 120 kilometres away to get to and work. It makes it harder for people who are from Walgett and other places who have places they can go to out there because they do not have many contacts around this area.

Mr Harris—Can I point out to the committee that that is actually a school restriction. That school restriction has been put in place because there is no funding that comes from the department for us to undertake the previsit inspection, which we are required to do under OH&S and child protection directions. Nor does the department provide any funding for us to undertake visits while the students are on work placement, which we are required to do under work placement directions. Also, there is no funding that comes in for the use of vehicles or the relief of teachers while they are doing it.

CHAIR—So, effectively, the state government has restricted you to a 120-kilometre radius?

Mr Harris—We have said that that is about appropriate for us to be able to travel to a property, visit a student and undertake meaningful discussions with the trainer or the work placement person at the farm and then return to the school. We will have 40-odd students out in one week, and to try to get around to those with even two staff is not only expensive but also very time consuming. And we still have to prepare lessons for our own classes while we go.

Mr SECKER—One of the problems we have with rural industries all around Australia in different areas is the shortage of people with skills to go onto farms. Often, the farmers' sons go off to university and never come back. It is often the same sort of thing with farmers' daughters, and they are often not encouraged. One way of getting over that problem is getting what I might term 'urban students' into the college. What percentage of your students would come from urban areas and do you actually promote the idea of rural studies to urban students?

Mr Levy—The proportion of students coming from the north-west of the state would be in the order of 90 to 95 per cent. We have a small number who come from the coast. We have very few students we would classify as coming from urban areas. We do not have very much success with those students when they do come, in the school and in agriculture in particular. We have a pretty high drop-out rate for kids who come from, for argument's sake, Sydney or Newcastle to this school. We do not have much success with them.

Mr SECKER—What about urban Tamworth, for example?

Mr Levy—Yes, there will be a significant number of students who come from urban areas within the north-west and from Tamworth in particular. Jamie, what do you think would be the proportion of students who are not agricultural?

Mr Thomas—My guess would be around 30 per cent.

Mr Levy—Yes, I was going to suggest 30 to 40 per cent of the kids would actually be coming from urban backgrounds within the north-west area. The majority of students are in fact coming from either isolated agriculture backgrounds or agriculture backgrounds, or they are involved in agricultural support industries in some way or another.

Mr SECKER—Any from interstate?

Mr Levy—A handful.

Mr Harris—Because we are a state school, we have to draw from within New South Wales. The only way interstate students would come here is if they have a sibling who is here or if they had enrolled here while they had a property or a place in New South Wales and then they moved.

Mr SECKER—Are you full and do you have a waiting list?

Mr Levy—We are full and we do have a waiting list in most of our years, yes. I think we are operating probably the second largest boarding facility in the state after Joey's.

Mr SECKER—I have three questions I want to develop a bit. I have a farming background. I would have thought this would be an ideal set-up for someone to get a feeling for veterinary science, for example. What problems do you have with students who come here, do your courses and then want to study veterinary science because they see that as their calling?

Mr Levy—Our courses are probably more aimed at, and our students are more directed into, the rural science industry and the study of agriculture, particularly at UNE in Armidale, for instance.

Mr SECKER—Even in those courses, say.

Mr Levy—A significant number of our students end up either in agriculture or in rural science and/or agricultural economics of some description. So a fairly high proportion of our students are successful and go on into the agriculture industry through tertiary studies.

Mr SECKER—Wouldn't they actually have a problem if they wanted to be a vet, in the scores they would be getting for what we call SOSE in South Australia? I am not sure what you call it here.

Mr Levy—The UAI. I cannot recall any students of ours in the last 10 years who have gone into veterinary science, but the UAI for that is in fact higher than for medicine in New South Wales. So that is a serious impediment.

Mr SECKER—Do you think the process that dictates the UAI levels is such that it pushes subjects like agriculture to the side and creates a problem?

Mr Levy—Graeme's submission alluded to that. The people who choose to do agriculture are in fact penalised in terms of trying to achieve a UAI that is going to be something like 99. I also believe that there are insufficient opportunities to study veterinary science—that is, there are a limited number of places available there. Clearly, if there were more places available, the requirements would be lower. Rural industries need veterinary scientists in them. I am not talking about veterinary science for cats and dogs; I am talking about people involved with cattle and sheep.

Mr SECKER—The vast majority of vets are going into dogs and cats in capital cities. It is easy work and easy money. But you actually need people with a rural background. They are more likely to go back to a rural background. That is just as it is with doctors. If the doctors grow up in country areas they are more likely to go back to a country area.

Mr Levy—I would like to suggest that having a veterinary science unit and/or a medical school in a rural setting would be of considerable advantage in trying to encourage rural students to get into those sorts of areas and come back into the rural areas to practise.

Mr SECKER—It is actually happening in South Australia. Flinders University is doing that in the Riverland and the south-east. Their doctors are getting better marks than at their well-funded university in Adelaide and they are actually staying out in rural areas. So all of the outcomes are very successful.

Mr Harris—I think that is why the Charles Sturt University at Wagga has introduced veterinary studies this year for the first time. I believe they met all sorts of impediments in registration and their students did as well. I think that sometimes within rural skills training there are some false walls that are put up to protect vested interests. It is important that those walls are recognised and removed.

Mr SECKER—That is what we want to hear about. Do you have a fear about the ability to get agricultural teachers in the future? It is all right to have the demand from the students, but if you have an ageing teaching population in agricultural areas we need to do something about that now.

Mr Harris—The belief that is held by the different members of the National Association of Agricultural Educators, which represents each of the individual state associations, is that there is a great shortage of agriculture teachers. Where agriculture and primary industries teachers do not exist, those places are being filled by someone whose husband might be a farmer. They are

expected to learn the skills by osmosis. They might have had an uncle who was a farmer. We end up in some schools having an agriculture teacher—and it is a very specialised field—who has absolutely no experience in agriculture whatsoever.

The number of training positions, I believe, throughout Australia to become an agriculture trainer has been reduced. Part of the problem appears to be that, in New South Wales, the only places to train as an agriculture teacher are Charles Sturt University at Wagga or Armidale. Armidale was considering closing its agricultural education component a few years ago, but it is keeping it open. The difficulties are the cap on student enrolments, the funding and the limit on the number of scholarships that are available.

Also, the state government has identified an enormous shortage in physics and chemistry teachers so anyone that has science in their background and would like to get in to become an agriculture teacher is being diverted to become a science teacher. That has had an impact professionally. In New South Wales now, to become a head teacher of science, you have to have had physics or chemistry as your major. In the past, agriculture teachers were able to become head teachers of science and they had their majors in biology. Now that avenue for professional development and a career path has been removed. I think there are four schools in New South Wales that have head teachers in agriculture. That is the only career path for people with agricultural training.

Mr SECKER—I note that you are still an all-boys school. Why is that? Is it discussed at the school whether you should admit females?

Mr Levy—There was a push some time ago to have the opportunity for coeducation here. After consultation with the parent body, the student body and the staff, there was pressure to say that they did not want to go to coeducation. The reality, I believe, is that there should be choice. Right now there are three agricultural high schools and the other two are co-ed. I believe there should actually be an opportunity for a girls' agricultural high school.

Mr SECKER—Girls only.

Mr Levy—Yes. And what you then do is present every option available, with Hurlstone being the city based one and Yanco being the country based one. I recognise though that there is a bit of inequity there in the fact that this is an all-boys school and there is not an opportunity for girls to be involved here. Nor is there any opportunity in the north-west for girls to go to an agricultural high school.

Mr SECKER—What do our students Chris and Zac think?

Mr Carrigan—Being at an all-boys school there are fewer distractions. When there are ladies around you tend to get more distracted and your grades will go down. By having it all boys you can concentrate on your studies and things you enjoy more. Farrer being an all-boys school, when you leave you have mates for life, as Mr Windsor would know. You are probably better off being at an all-boys school.

Mr Harris—I might point out to the committee that we do actually have girls enrolled in the school to do primary industries. The agreement by the principals in Tamworth is that each school

would specialise in an area of vocational education. We, because of our farm, specialise in primary industries. Any student, boy or girl, attending a state government school in Tamworth has the opportunity to undertake primary industries studies here, and staffing from the other schools is attracted to the school with those students. This year we have five students: three or four from Oxley High School and one from Tamworth High School. One is a boy and the others are girls. In previous years we have had them from Peel High School, Oxley High School and Tamworth High School. So, if a student has a desire to undertake a vocationally based primary industry course in Tamworth, whether they are boy or girl that opportunity is open to them here.

Mr SECKER—And they come out as a part-time student one or two days a week?

Mr Harris—Yes. They come out on Wednesday and Thursday afternoons from lunchtime till the end of school. The school has to fit the timetable around those students.

CHAIR—In reality, and correct me if I am wrong, history has shown that those schools that are co-ed in the college area are co-ed because they could not attract the numbers to fill the vacancies. But you do not have that problem—is that right?

Mr Harris—That is correct.

Mr Levy—That was the circumstance at Yanco in particular. Their enrolments were in serious decline. At Yanco at present the ratio is 60 per cent of the students are girls and 40 per cent are boys. You are right: in this place we are full and have a waiting list of students wanting to come in. We are providing a choice and obviously that is a choice that parents are wanting to take up.

CHAIR—The committee has heard evidence that young people are not encouraged in to excel academically when entering agriculture. Has that been the experience of this particular college?

Mr Thomas—I would not agree with that. I do not think that we discourage students from excelling academically. I think it is the opposite. Even though we offer a vocational stream, we still put a lot of emphasis on the academic stream. We set goals for our students choosing those particular lines to do well in them.

Mr Levy—In fact, in our Higher School Certificate results last year, for instance, our best result was in fact in agriculture. We were 8½ marks above the state average in that course. In addition, there were three candidates that got band 6s in that subject. In other words, they got more than 90 per cent in their examinations. So I would agree with Jamie and disagree with that statement.

Mr Thomas—We do try to encourage our students to choose carefully in year 11 so that they decide which way they are going to go and whether they want a UAI or whether they want to take a more vocational line.

Mr Harris—We also provide tutorials at night-time as part of the rostered duty arrangement. If a staff member has expertise and desires to run a series of tutorials then they can do so. For example, I am on duty every second Thursday and I run a tutorial for an hour every second Thursday night where students come along and we develop their ability to answer questions for the HSC, as opposed to increasing their knowledge. It is not usually, particularly with boys, their

knowledge of agriculture which is at question; it is their ability to convert it and write it into a meaningful form that meets the literary requirements of the markers.

CHAIR—Quite obviously this committee would not be undertaking this inquiry if we did not think there was a problem attracting people into agriculture. When I say agriculture, I mean the wide diversity of skills that assist, reinforce and make up the whole of agriculture. How does government create a culture of learning in agricultural industries and what suggestions do you have for government to develop and implement strategies to inform career advisers and students of career opportunities in agriculture?

Mr Harris—As part of a project that operated last year with federal government funding, I believe, the Rural Training Council—I might have the wrong organisation, but one of those organisations—brought two careers advisers from Victoria and two from New South Wales who were representatives of their associations. They brought them on a tour. They went to Farrer and Tocal at Maitland and they went to somewhere near Moree. They had a look at what was going on and they saw that the industry was developing. The cotton industry made a big presentation to them and they then took that information back to their own careers adviser bodies, so it could then be disseminated. Government has to get the message across that to be involved in agriculture research is a worthwhile, lifelong opportunity. People who attend university and get a degree in agriculture have the potential to earn significant salaries and have a very worthwhile and gainful life.

One of the problems that people who go into research have is that, because their research is funded usually on a triennium, if they introduce a project and start to run it, they do it for the first two years and then during the last year of their project they are developing the submission so that they can get follow-on funding for the next three years. That makes it very difficult for people such as workers in the CSIRO to maintain their professional life. Perhaps a model that operated on a longer time scale might be more appropriate in agriculture. It is quite different to other industries such as manufacturing, where you develop a new gadget, you introduce it, you turn it on and it runs. It does not work that way in agriculture; there is a much longer lead time.

CHAIR—So you are advocating that governments move away from the three-year political cycle that motivates them to fund various projects across the nation, move into private industry sector thinking about forward planning and taking it on on a 10-year cycle, regardless of what political persuasion the government of the day may be after the three years have lapsed?

Mr Harris—Or even who controls the particular funding committees. Some of the committees that are represented by particular bodies I think are also biased in terms of which institutions they prefer to see the money go to, depending on where they originally came from.

Mr WINDSOR—How do you see the CRC process? Does the school have any involvement at all in terms of research into agriculture as being a process that has got, in the main, a longer time frame and not this panic to reproduce themselves halfway through the process?

Mr Harris—The CRC relationships that we have had have been at distance. We had a gentleman that works with the beef quality CRC in Armidale who came down. He undertook agricultural training so that he could become a better communicator. He came down, did a work placement here for two or three weeks and then went back to the CSIRO in Armidale. From what

I have seen—I use a lot of the CRC research as part of our agricultural studies—the outcomes that they produce seem to be very good. It seems to have an industry focus and seems to explore some very interesting issues that probably would not have been investigated unless those CRCs existed.

CHAIR—Could you or somebody from your group comment to the committee on the financial assistance provided to isolated students which flows from the Commonwealth and New South Wales governments. Would you like to comment on whether it is adequate or not and why it is or is not?

Mr Levy—Right at this present moment, the scholarship program for isolated students is under review. One of the reasons for that is because the Commonwealth funding has in fact increased and, in some instances, if students at this school access the funding available for isolated students from the Commonwealth and from the state government they end up making money because the funds fully cover the boarding fee. I believe that right at this present moment the support for isolated students by the federal government is very good. The impact is that some isolated students are able to come to this school and have all of their fees covered by the isolated students program.

CHAIR—Did I hear correctly that you said it is so much that it is relieving the pressure of the commitment of the New South Wales government in their contribution to the educational process of isolated children?

Mr Levy—That is exactly right.

Mr SECKER—We were talking informally before about the idea of technical colleges. They are a new idea from the federal government; they are only a bit over 12 months old. There are 24 technical colleges in place around Australia now. They are more on the side of traditional trades, I might call them, such as mechanics, fitters and turners and so on. What do you see as the potential—because I do not believe there is anything in Australia for the agricultural trades when it comes to technical colleges—of Farrer, for example, becoming a rural technical college when you probably have 90 per cent of what you need here already, considering you are doing certificate III and you have bricks and mortar and pretty good facilities?

CHAIR—Before you answer that, extrapolating on that a little bit and picking up the point made by Mr Secker, what about a mechanism to ensure that agricultural colleges such as the Murrumbidgee College of Agriculture fit into the system and keeps them viable and offers a facility for a market that you cannot accommodate because of the way in which you operate?

Mr Levy—There is a clear potential for this school to be part of a technical college organisation. It need not be a bricks and mortar place. This place is ideal to provide a technical college base in this particular area. I think that we have had some connection in the past with Tocal. We have also had some connection in the past, with Graeme getting us as a registered training organisation through the Murrumbidgee College of Agriculture when we were trying to get our certificate III delivery process. There is a clear potential for us to be involved in that. We are ideally placed here. Not only have we got this institution but also across the road we have the New South Wales research station which has some amazing assets that would complement us.

CHAIR—You raise another issue there. You have to get certification from the Murrumbidgee College of Agriculture which, because of a lack of funding from the state government, is in a very perilous situation in terms of remaining viable and staying open. You have to go to that particular college to get certification for the skills that you are teaching at this particular college.

Mr SECKER—They already have.

Mr Levy—That is why I would be very keen to explore the concept of a Commonwealth technical college for agriculture that would, if you like, be a college that did not have a college but had a network of organisations that would be able to provide that. I think there are some clear opportunities. Would I be talking out of line there, Jamie?

Mr Thomas—No, I think you are dead right.

CHAIR—That is good information. Perhaps the two young students, Chris and Zac, would like to take the opportunity, as students at this particular college, to tell us what you, as students, believe government should be doing to assist more appropriately the younger people coming into colleges like this. Is there any particular issue that you guys have experienced, coming from your families into this place, that governments have created for you at state and federal level, that you think needs to be looked at?

Mr SECKER—They probably want airconditioning!

Mr Carrigan—We would not mind that! One problem I do find is this. Last year, I wanted to pick up crop—just a few subjects. They said they were going to run it. Actually, this is probably a school thing as well. They said they were going to run it, so I went and put my name down for it. But they did not have enough people to run the course, so I could not do it. I am missing out on the course; I am not going to benefit from it. So I have to kind of change my way of learning that.

Mr Harris—Because he could not do that course last year, he is now doing it this year. It is a two-year course. Because of his extensive experience in cotton production on his family's property, we were going to, through an RPL process, allow him to get his certificate III at the end of this year, but the Board of Studies, in its wisdom, is indicating that he will not be eligible for a Higher School Certificate because he did not do the subject in year 11. That is an issue on which we will be working with the board. The board has actually become more helpful in recent times.

Mr SECKER—Is that 'the board' as in the education department?

Mr Harris—The Board of Studies. It has become far more willing to allow us to explore alternative activities. For example, we have been trying to get a vocational course into years 9 and 10 for quite a while. We used to run one, years ago, and then the board said we could not. We have been working with Rural Skills Australia and Cotton Australia to implement the cotton seeds course, which is a 100-hour course. The New South Wales department of education has submitted an application to the board of studies to offer that. That application is still pending but, when Tocal ag college, Rural Skills Australia and we put in a submission to DEST, we were able to obtain some funding to facilitate that program, and the Board of Studies is viewing it

favourably and finding ways of helping that to progress, by running it as a project. So there seems to be some movement. The movement, I believe, is as a result of the federal government's requirements on funding—to introduce more vocational and prevocational studies into years 9 and 10—and that is being reflected by the board. However, there are parts of the board that probably still do not listen as much as they should.

CHAIR—I was going to say that hopefully it is because the board has realised, from the public comments made and from committee inquiries such as this, that their inflexibility in terms of their processes as a Board of Studies is creating massive problems out there and some of them have come to the realisation that they have got to change their ways. It is pleasing from my point of view that the Commonwealth has tightened up on the funding process, because that might speed up the process of introducing a little bit more flexibility into their thinking.

Mr Harris—We actually found the New South Wales vocational education and training advisory board a far harder organisation to deal with. The requirements appeared to be reasonably simple for us to complete our documentation to obtain our courses, but each time we passed the information down to them it would be rejected and there would be an extra thing applied. That went on for probably nearly 18 months, and each time it required far more work. Eventually we ended up having to submit nearly 600 pages of documentation which took time that we did not have to spend on our students.

Mr WINDSOR—Just on that: this is a national inquiry; are those particular problems you are alluding to specific to New South Wales or are they happening in other states as well? What should we be doing? The second part of the question is: is this subtle downgrading of the UAI ranking for agriculture, because of the way the UAI is structured, happening in other states as well; is that a national problem?

Mr Harris—I do not have the knowledge to say definitively whether it is happening in other states or not in terms of their UAIs. I think that in Queensland, instead of sitting for an exam, they have a standards based submission where the schools assess the students. Work samples are then taken to a group who assess those against their standards and say, 'Yes, it is okay for you to give the marks you have,' or not, and on the basis of that the universities construct their measurements. The difficulty with the UAI is not with the Board of Studies or the New South Wales department of education, because they do not have anything to do with the UAI. The UAI is run by the universities through the Universities Admissions Centre, and they use a range of statistical methods to ensure validity.

We used to have a TER, or tertiary entrance rank. The TER was based on bringing every subject to the same mean standard deviations so they were standardised. After they did that, judges would assess the papers for each subject and say, 'This paper was harder than that paper so these students should have their marks diminished or increased.' That, depending on who the judges were, may have worked to the benefit of agriculture and the sciences or to their detriment. But the way the UAI is constructed at the moment is, I think, to their detriment: the better students realise that, because of the smaller candidature, a lot of them cannot get a high band 6, they cannot get 100 per cent in the subject, and then the proportion of that mark that goes towards the UAI is further diminished because it is then mapped against the high-level English marks.

CHAIR—I thank each one of you for the contribution that you have made to the evidence taken at this inquiry today. What we wanted to get from you at the outset of your contribution has been forthcoming and we thank you very much for that. I look forward to hearing further evidence at a later date on the same issue. Thank you very much.

[2.23 pm]

GREGG, Professor Peter Charles, Chief Scientist, Cotton Catchment Communities Cooperative Research Centre

ROTH, Mr Guy, Chief Executive Officer, Cotton Catchment Communities Cooperative Research Centre

CHAIR—I welcome the witnesses from the Cotton Catchment Communities Cooperative Research Centre. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement in relation to your submission or would you care to make some introductory remarks?

Mr Roth—We will make some introductory remarks and then take questions, if that is how you would like to do it.

CHAIR—Feel free to do so.

Mr Roth—First of all, thank you very much for the opportunity. We feel that this inquiry is very important for the obvious reasons that it was created. We represent one of the few regionally based CRCs. My understanding is that members of this inquiry are familiar with CRCs, so I do not have to explain what cooperative research centres are. Both Peter and I have an education background and have been involved in teaching and rural skills and training and extension. This is very relevant to our business. We feel the CRC concept, or model, is a very good model for bringing universities, research organisations, agricultural departments and private industry together to achieve outcomes for farmers and end users. We are looking forward to discussing the needs in rural and regional Australia. We have issues in trying to recruit and keep people with very specialised skills in some of our various disciplines. We would like to talk about infrastructure and how we might be able to improve infrastructure in the bush for science, education and extension. We are located west of the Newell Highway. Infrastructure for science, education and training is pretty thin on the ground once you start looking west of the Newell Highway in both New South Wales and Queensland. Yet a vast area that you and the community are debating, in terms of natural resource management, soil science and agriculture, is west of that highway.

I heard the previous witnesses, from Farrer, talk about career structures and the links to schools. We have initiated some things to try and improve the linkages with schools, but career structures for scientists and attracting PhD students are major problems. Many of the issues we are going to discuss have close relationship to DEST and the federal Minister for Education, Science and Training. We need to see some outcomes and some better linkages by taking these agricultural issues to the minister and portfolio of responsibility. There are a number of inquiries going on about universities, science and science infrastructure under that portfolio but we really need to ensure that the agricultural issues are represented. We have had a lot of experience with

extension, making that link and getting our research rapidly adopted. The cotton industry is well known as a rapid adopter of research. It is a tremendous success story in terms of increasing yields and profitability over time. These are some of the issues which we have flagged in our submission that we would like to discuss with you.

CHAIR—Thank you very much for that. Professor Gregg, do you want to make a few comments?

Prof. Gregg—The only thing I could add to that is to clarify that, although this submission was made by the Australian Cotton CRC, that CRC came to an end last June and has since been replaced by the Cotton Catchment Community CRC. I am Chief Scientist for that new CRC but I have been in that position for only a couple of months. Before that I was at University of New England for 25 years, teaching crop protection and agricultural ecology. What I might say here I will say with my CRC hat on, rather than my UNE hat—although obviously my opinions will be coloured by my experience.

CHAIR—We will be happy to take anything, with any hat you have got, that helps the committee. I am sincere in saying that: it helps this committee to put together a well-balanced report based on information we receive, warts and all, from various people. If we want to fix the serious problem of rural skills shortages in this country we have to take on board the negatives and the positives and be able to put up some strong recommendations which a minister of the Crown could and should take notice of. One of the criticisms that we have is that many reports come out of the government committee system but not too much of what they say is acted upon. We want to make sure that our report makes the minister sit up and take note. So I thank you for that, and I encourage you to give us anything that comes out of your other hat that you think is relevant to the evidence-taking here.

Prof. Gregg—I am just conscious that you are a going to be talking to the University of New England tomorrow. They have a separate submission. I was not involved in the preparation of that submission.

CHAIR—That is all right. You are entitled to an individual point of view, and *Hansard* will record it that way. In 1982 a Senate standing committee said that there was frustration felt by rural industries at the apparent lack of clear Commonwealth policy on a commitment to rural research. What is the current view of Commonwealth policy on rural research and extension? Have things in your view improved since 1982?

Mr Roth—Since 1982 there would have been a number of improvements. I cannot reflect back that far—I was still studying at the University of New England or something along those lines. Certainly in the early 1990s the Commonwealth government established the Rural Industries Research and Development Corporation. It has been very successful in fostering research and development, links with industry and solving industry problems. That has been a tremendous step forward, as has been the establishment of the Cooperative Research Centres Program. There are somewhere between 50 and 70 CRCs in Australia, of which about a quarter are involved in agriculture. Quite a few of them are based right here in this region. There are three or four in Armidale and ours in Narrabri. There have been some very positive steps forwards in progressing whatever that inquiry said.

CHAIR—You say that with some conviction. That is very pleasing from my point of view, because there is so much Commonwealth money that goes out there and continues to go out there but does not return too many positive outcomes for the community and more particularly for the taxpayer. So I am very pleased to hear that. How does the CRC address intergenerational transfer of knowledge and information within its system and can you tell me what challenges arise in that process?

Mr Roth—It is an interesting question, because the cotton industry is actually going through its first generational change now. The industry started in about 1960, so it is relatively young compared to, say, the wool industry. There is a massive generational change going on now. There is a younger guard, if you like, starting to come through the ranks in leadership roles and also taking over the family farms and those sorts of things.

We manage our extension. There are a number of processes. Obviously we do reviews trying to find out what farmers want and how they like to get information. Some people like to get it face to face. That is a standard teaching and learning experience: you learn by doing—experiential learning. Others are happy to get an email and read it and digest it. Others like printed materials, CDs, videos, field days and workshops. We run a plethora of types of activities to suit all the different needs of farmers and what we call cotton consultants, or farm advisers. That is the way they like to learn and like to adopt. So we have a multipronged approach to extension.

The key to it is having those links. There is a grower body in our case that advises us on direction and issues. They say, 'Crop nutrition is an important issue,' and then we respond and try to implement a program to address that issue. That is the beauty of the CRC. Because we are all in this joint venture, it is very easy to get communication and collaboration and marshal resources across state borders. That is another real success of the CRC Program. Our industry is based in two states principally—Queensland and New South Wales. That helps the process of rapid adoption as well.

CHAIR—Thank you, Mr Roth.

Mr SECKER—In years past in South Australia the department of agriculture, for example, used to have a whole lot of extension officers go out to farms one to one. That has virtually disappeared now. It has been somewhat replaced by private enterprise—different stock agent firms—getting out running field days. How do you see the balance between those two sorts of things—I am not sure what happens in New South Wales, but it would be much the same? Do you see any problems coming out of that? Obviously the government-run services were meant to be totally independent, whereas a private firm might be pushing one way or the other. How do you see this unfolding and what can we do to fix it up if we need to?

Mr Roth—There are similar trends with reduced resources available to the state departments of primary industries, and that is affecting the one-on-one extension. That has been supplemented by the rural research and development corporations and the Commonwealth government investing in those sorts of activities. We obviously try and target growers and do a lot of work in small groups, but some work is done individually. We have identified that farm advisers are a key connection to the individual grower. If we can target them, then they can target the individuals.

Water extension is a very important issue. There are not many water extension officers in this part of the world. One of the reasons for that is that there has been a lack of skills and knowledge, so we are trying to build up the supply side, if you like, and the capacity to deliver that. We also have to create the demand for the service. I see the public sector creating the demand, providing some training and building the capacity and then, as you move this way, the private sector can take over the one-on-one consulting and doing the real detail. So there is room for both sectors. That is how we are trying to address that strategically within our CRC, and I think I included a graph in our submission that explains that.

CHAIR—Perhaps you could be a contact source for the parliamentary secretary who has just undertaken the major portfolio of water on behalf of the Prime Minister. You might be a source for him to contact. I might pass that on, because what you have just said is very pertinent to the management of water that he is undertaking.

Mr Roth—We would really appreciate that.

Mr WINDSOR—Early on in your submission, one of the things that you say is that the financial cost of vocational training seems to outweigh the benefits of some of those courses. You might comment on that. The other thing I think is fairly interesting, and there is a thread developing in some of the information that is being given to the committee, is that the focus of vocational education has to be more towards the client than the other way around. In some areas, training has become the business of training rather than having a focus on what you do when you are trained. Could you comment on both those things—the cost outweighing the benefit and, particularly, the focus on the client?

Mr Roth—I think you have had a submission from and a hearing with Cotton Australia, and they describe vocational education and training as the 'alphabet soup'.

Mr WINDSOR—I think your cooperative approach is working.

Mr Roth—I do not see any point in going over all that. One of the things that the CRC Program changed recently, and this is something that the government initiated, was to focus on end users, the clients, and at the end of the day delivering what the end users want rather than being trainer driven. It definitely has to be targeted to what people want rather than just having a course for a course's sake, and I think there is a lot of that going on. I think that is what you are alluding to. As for costs and benefits—

Mr WINDSOR—Is that part of the same problem?

Mr Roth—It is part of the same problem. There are costs and bureaucracies and, if somehow the committee can come up with recommendations that would help simplify that process, that would be very strategic.

Mr SECKER—We would love to.

Mr WINDSOR—As a resident of this part of the world, I find one of the difficulties that we have with agriculture is profitability. Cotton has probably been at the glamour end of the marketplace in terms of profitability. New technologies can be adopted. People can actually

make some money if they are reasonable managers. How do we assist in the problem that is coming up in other industries where it is seen as a second-class business for young people to go into? Other than increasing the profitability, do you have any marketing ideas for encouraging people into agriculture?

Mr Roth—I think we will both have comments on this. This is something we are really trying to target, say with the University of New England. We want to get graduates and students out to our industry, so we have a summer scholarship program. I believe it has been one of the most successful things we have undertaken in terms of attracting—in our case, we are targeting future researchers. We provide them with $5,000 to come and work with a CSIRO expert or someone like Peter Gregg, do a project through December, January, February, earn a few bob so they have got some money when they go back to university, and get that real life experience. That has been very successful for us, and they love it. We get students from Sydney uni. They have a ball. In fact, one of the Sydney uni students said to me the other day, 'I'm not looking forward to going back to uni. I'm starting to enjoy it in Narrabri.' It has been very successful.

CHAIR—That is interesting. I went to a small country show last weekend and the shire president suggested to Charles Sturt University in Wagga that the medical students they had from Sydney as part of their training process to try and attract rural doctors should perhaps come out to this particular small rural show—which is a very successful one, I might add—which they did. I will say this for what it is worth: I talked to five out of the 12, and they said to me that it was wonderful being out there because the trip out there successfully destroyed the myth that there was nothing out in the rural areas and there were dirt roads, no bitumen. The point that I am getting to is that they were quite overcome by (a) the spontaneous friendship of people, (b) the lifestyle, and (c) that it was not what they envisaged it would be. Many of them were making noises that they would probably come back and maybe not take up a permanent position but do part-time work in the country when they graduated. That picks up on the point that you just made, and I just interrupted to make the point that, if it is offered to them and they see what is there, it installs a positive attitude in their minds about what rural and regional Australia is all about.

Prof. Gregg—The comment I would make on that is that people who are doing agricultural degrees in universities or perhaps people who are doing medical training that are destined for rural areas already know what they are doing. They do not need much convincing that the bush is a good place to work and a good place be.

CHAIR—If they come from the rural areas, but these young people did not. They came from urban based backgrounds.

Prof. Gregg—What I was suggesting is that the perception that a career in agriculture is a second-class career probably begins in schools and with careers advisers. That is where you need to be targeting, I think.

Mr SECKER—I agree. Many of them in my experience are still telling their students the only worthwhile thing to go for is university. Seventy per cent of the kids will never go to university, and there are plenty of jobs, great careers.

Prof. Gregg—If you go to university, you do not do agriculture; you do law or business or something like that.

CHAIR—How do you overcome that, given that the people we are talking about generally come out of the state trained system?

Mr Roth—We have targeted schools. In the past with schools, we have been a bit ad hoc—I am talking about towns from Emerald to Hillston—but we have decided to put more resources from this new CRC into the school program. We are starting at primary school to get the interest at primary school level. We have got a little partnership with an organisation called Primary Science Matters and a couple of different initiatives at the high school level for careers advisors. The federal government has initiated a program through DEST that is encouraging science into schools. I think that has been very positive. There are lots of opportunities. We probably have not grasped those opportunities as much as we should have.

CHAIR—Resource kits, information, CDs and all those sorts of things.

Prof. Gregg—I will put my university hat on for this one. In the universities there are individuals who go to careers nights and who are very enthusiastic and present agriculture in a very favourable light. But it does tend to be a little ad hoc. Those people are perhaps not properly rewarded by the university system for doing that sort of work.

Mr WINDSOR—I notice you made a recommendation about FarmBis that it should be purely the focus of one level of government—the Commonwealth—rather than get confused in the tennis match of politics. Would you like to say anything in relation to that, or is that just a straight statement?

Mr Roth—I am not sure what the best solution is, but it is certainly a problem. Between Queensland and New South Wales there is a very different approach.

Mr SECKER—It is the same between South Australia and Victoria—a completely different approach.

Mr Roth—A cotton farmer could have a farm right on the border, on both sides of the border.

Mr SECKER—We have the same problem.

Mr WINDSOR—You might have heard us talking to the teachers from Farrer about one of the problems they have. It seems to me that, continually, when bodies are reliant on government for some of their funding, we have this industry now that is redesigning its next submission so that it maintains its life. A lot of the focus is on existence rather than on what it was set up for. Do you think the time periods that CRCs are running are long enough or too short? Do you have any thoughts on that?

Mr Roth—They run for seven years, and that is one of the strengths. Within the CRC and the various places where we get funds, we are often caught in a three-year funding cycle. That has major implications for our staff and keeping them there. If you are a staff member in a small country town and you know that your grant is running out, and there is some review going on

within your organisation as well, you feel a bit insecure. If a better opportunity comes up, you are mad if you do not take it. The seven-year time frame for the CRCs is better. The rebidding process at the end is very resource intensive. That was a huge cost to us in time and, in a way, distracted us from what we should have been doing in our CRC for the last two years. It was all about renewal and getting another one up.

Prof. Gregg—I will add to that by saying that there is a general perception among people who make decisions on which CRCs get funded that the more times you have been funded the higher the bar is going to be next time. While I can understand that, it does mean that the contribution, the special role that the CRC has played in cotton education, is in one sense a strength but in another sense a weakness, because we recognise that sooner or later they are going to put the bar too high. Nobody can jump over it. My comment would be: is that philosophy that you have to get bigger, better and more different every time you have a CRC the right way to go or not?

CHAIR—They are very good points. Two issues have been raised here. One, which has been raised before, is the issue of short-term funding. Of course, short-term funding has always been centred around the political cycle of going to the people and being re-elected again, rather than the long-term visionary process that is undertaken as a matter of course in private enterprise. Most private enterprises look a decade ahead—those that survive do.

The other thing is that—and you have alluded to it—if organisations funded by the Commonwealth, such as CRCs, are getting positive outcomes, that is all the more reason why they should continue to be funded. That is after all what the exercise of funding is all about. Far too often you hear stories that are the exact opposite of that, where hundreds of thousands, and indeed sometimes millions, of dollars of taxpayers' money is totally wasted and achieves no outcome but keeps people employed for a period of time. I think that more emphasis should be put on making sure that those organisations that are funded and have positive outcomes be continually funded but on the basis of a longer cycle rather than a short-term cycle.

In your submission you refer to the recent decision by the federal government to remove undergraduate certificates as recognised higher education university awards and that that should be reconsidered. Would you like to elaborate on that?

Prof. Gregg—I will comment on that, and it is probably something that you will hear from the University of New England tomorrow. DEST has apparently made a decision that certificate courses—that is, four-unit courses at undergraduate level—are not to be considered approved higher education awards and, therefore, will not attract HECS funding. We in the cotton CRC have our cotton certificate. It is based on four units, and so it is now under that regulation and no longer attracting HECS funding.

Mr WINDSOR—When was that decision made?

Prof. Gregg—It would have been a year, perhaps 18 months, ago. I am not exactly sure, but it would have been some time around then. The minimum we can now give is a diploma course, which is eight units, and many people in the cotton industry, being busy people, are saying, 'I don't want to sign up for such a long, protracted course.' On the other hand, we are getting quite a lot of people doing both the cotton certificate and the grain certificate, which is modelled on the cotton certificate, and coming out with qualifications relevant to both those industries. But,

on the other hand, I think we are losing a lot of people. That is the feedback we are getting from students: a lot of people are being put off by the fact that they have to enrol in a course that is eight units.

Mr WINDSOR—This reflects on exactly the same argument Mr Roth proposed a while ago about the focus on the client. My son has done the course you are talking about. A lot of people who were doing the course were farm operators, farmhands or whatever and did not have years of time up their sleeve. This course did exactly what they needed in terms of the client—the people they were working for. We should really look at this, because it is a good example of where the system has eroded the process rather than assisted it.

CHAIR—I could not agree more. It is another classic illustration of what I would refer to as the dumbing down of agriculture, either deliberately or ignorantly, by the people who control the direction in which education goes. That is a real concern. The more evidence we take the more indication we are getting that the education industry itself—at the levels where the bureaucracy and the universities have input—is creating massive problems and is escalating the deterioration of rural skills right across the country. It is good to hear those points.

Mr WINDSOR—Who made the decision not to subsidise one area of learning as against another through HECS?

Prof. Gregg—My understanding is that it came out of DEST and was presumably influenced by federal government policy somewhere along the line. I do not have the details.

Mr Roth—Probably after tomorrow we will know. Regarding the dumbing down of agriculture, Mr Chairman, as you would know, years ago agricultural science degrees were by and large four-year degrees. Rural science was a four-year degree. Now you have a lot of three-year agricultural degrees, and students are not opting for the four-year degree. Why would you? If you do a three-year degree, you still get your diploma and out you go.

CHAIR—If I can be provocative, which is most unlike me, the people who are advocating their commitment to the rural sector are the very people who have ignored the problem that we are talking about. They are the agripoliticians in the farmer organisations and the politicians who make great play out of representing the rural sector. Where have they been on this issue? This issue has been occurring in their own backyards. I just make the comment for what it is worth.

Mr Roth—That is precisely why we were very keen to meet with the committee. This is a very important issue that you are deliberating on. For the future of rural and regional Australia, the knowledge based economy is going to be very important. How are we going to stay competitive in the world market? Whether it is cotton, beef or whatever, we are going to have to further increase our yields to keep the profitability up. We are going to have to compete with Brazil and China and countries like that. One of the main ways we are going to be able to do that is through innovation, science, research and R&D. We need to put the farmers together. They are great innovators themselves. It has an outcome for the nation and really that is why we have to keep our foot on the accelerator.

CHAIR—You will be very pleased to know that there are some people around in this committee that do have a real concern about what is happening. In fact, my parliamentary

colleague Patrick Secker has put some ideas up to one of ministers of the Crown around the issue of tech colleges and making them more flexible in terms of agricultural needs. There are other people making suggestions. We just need to ensure as a committee that, when we put a report out, the report is a strong one with very pertinent, achievable recommendations. It is up to us to make sure that the minister reads them.

Mr WINDSOR—I have just one question, which is a bit of a philosophical one in a sense because it gets to the heart of our attitude to agriculture. It is not meant in any political way. Your industry has been probably one of the most innovative industries that we have had in agriculture and also one of the most profitable too at times, although it goes up and down, I know. It is also one that has been at the forefront of some of the new technologies in terms of water usage and genetic technology. Do you feel as though government in general reflects on your importance in a positive sense or tends to head towards the negatives—that is, why you should not exist? In that context of agriculture generally, do we want agriculture in this country?

Mr Roth—I hope we do. I do think government has been supportive. It appreciates that rural extension and the contribution of agriculture. But, unfortunately, in government and society at large it is declining in its relative emphasis, I guess. Declining terms of trade is an analogy. There used to be a faculty of agriculture in every university. They used to have faculties of agriculture. Now they probably have a school, or agriculture will be part of a larger faculty. That is just evidence of that.

Mr SECKER—South Australian state governments go out there and say, 'We can fix up our water in Australia if we get rid of the rice and cotton industries.' That is the attitude of some state government ministers, I am sorry to say, and one from my own state.

Mr WINDSOR—They are not forward-looking like Patrick. We believe we should get rid of South Australia!

Mr SECKER—So you want to get rid of a $3 billion industry, do you? Okay, that is smart politics!

CHAIR—On that note, can I thank the witnesses for their contributions. Once again, we have been able to solicit in evidence some very strong issues centred on the problems related to rural skills shortages. Your contributions will be very greatly appreciated by the committee when we get down to it. I apologise that there are only three members of the committee here, but other members of the committee have other committee commitments. I just came last night from Perth in Western Australia, where I was because I am a member of another committee. Despite what some in the community might think, we do work for our money. Thank you for your contributions.

Proceedings suspended from 2.59 pm to 3.16 pm

[3.16 pm]

EDEN, Mr Anthony James, Private capacity

RHODES, Mr John William, Private capacity

CHAIR—I welcome the representatives of the group of Australian apiarists. Do you have any comment to make on the capacity in which you appear?

Mr Rhodes—I am employed by the New South Wales Department of Primary Industries in honey bee research and extension. I am the author of the appendix attached to submission No. 91 and I also contributed to submission No. 99.

Mr Eden—I am a local honey producer and I am also the President of the Tamworth branch of the New South Wales Apiarists Association. I am here as a contributor to a paper put in by Dr Max Whitten on behalf of a number of concerned Australian apiarists.

CHAIR—Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament and consequently they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement in relation to your submissions or make some introductory remarks?

Mr Rhodes—The Australian beekeeping industry is a small industry in size with about 10,000 registered beekeepers. Of these, about 2,000 beekeepers are dependent on bees for the whole or major part of their income. In numbers of people, it is a relatively small industry and those people are spread all round the countryside. There are no very large groups in any one area, so there are widespread groups of small numbers of people. The gross value of the industry is about $65 million per year from the production of honey, wax, queen bees, other hive products et cetera. However, the overall value to the Australian economy from incidental or unpaid pollination of horticultural, agricultural and pasture crops from hives of bees managed by those 2,000 beekeepers and from feral colonies has been estimated to be between $600 million and $1.2 billion per year.

The industry itself is a small industry, a relatively small group of people with an overall production which is quite small compared to other primary industries, but we would like to promote ourselves on the basis that the industry contributes to the increased production of other industries and that is where we see our importance within the scheme of things. A major loss of beekeeper managed hives and feral colonies of bees in Australia could result in reduced production for sections of the agricultural, horticultural and animal industries. As an example, in the USA about one-third of the fruit and vegetables used are from honey bee pollinated plants. The recent entry of the honey bee parasite, the varroa mite, into the USA has resulted in the total loss of feral bee colonies in some states of the USA and a loss of more than 70 per cent of beekeeper managed hives. This has resulted in a major shortage of bee colonies for pollination

purposes. The home of the varroa mite is South-East Asia, around Indonesia, so it poses a constant major threat to the Australian beekeeping industry.

The potential for a large increase in the development of a paid pollination service provided by beekeepers to crop growers in Australia is high. Recent studies in New South Wales have shown a 16 per cent increase in lint yield for honey bee pollinated cotton. This represents an increase in value of about $550 per hectare for the cotton grower. If the beekeeper were to put hives on a property he would receive payment of about $150 per hectare for the use of his beehives. So the cotton grower benefits and the beekeeper benefits. Almond trees are 100 per cent dependent on insect pollination and the projected requirements for the expanding almond crop in Australia is 150,000 hives by the year 2010. The beekeeping industry is likely to have difficulties in meeting this requirement without some sort of support, probably from the government, in research and education. Beekeepers also need to increase their profits from honey production, which I am sure Tony will talk about.

Honey bee pollination also results in a crop being pollinated in a shorter period of time, allowing the crop to be harvested earlier. Whereas a crop might take, say, six weeks to produce a certain volume of crop, if you were to put bees in you could get that same volume in maybe three weeks. You would have shortened the overall life of that crop by three weeks. The benefits to the crop grower can then be measured in terms of reduced water and pesticide use—using less irrigated water and applying less pesticide. The crop volume produced is still the same but the benefits are measured in another form.

These sorts of things demonstrate the benefits to both beekeepers and crop growers if paid pollination is incorporated into crop grower management plans. This could be applied to a number of agricultural and horticultural crops grown in Australia. In all Australian states beekeeping and education services for both experienced and new beekeepers are severely limited. Competency course templates have been developed but the course materials have not been produced to date. Again, there are problems with the small number of people and the high cost of producing those courses.

CHAIR—Can I suggest that because of the time factor you try to sum up your opening statement as briefly as you can, and then perhaps we can get into questions.

Mr Rhodes—Research, education and training facilities for the beekeeping industry are at very low levels. To sum up, there is an ageing population of beekeepers and low incomes being received for honey compared to the high cost of production. Beekeepers involved in pollination and other parts of the industry all have to depend on honey production as their staple income. The number of education services available is quite low. There has been a reduction in the availability of government finances for advisory and support services.

Mr Eden—As a brief background of my life with bees, I had my first swarm at 10 years old and I am 52 this month. So I have had a long involvement with these insects. After leaving high school I went to Hawkesbury Agricultural College. I had very good training at that institution, which is no longer with us and no longer teaches beekeeping. With a diploma in applied science and a high distinction in apiculture I then went to the McNeil brothers in Tamworth, who were excellent beekeepers. I have become a reasonably successful beekeeper.

My concern with all this is that this industry is of such importance to this nation. In fact, it is of almost supreme importance because we all eat food. Bees are the prime pollinator for our agricultural system. We do not live on an Australian system here; we live on a European system. Without those bees, you do not have food. It is as basic as that. Our whole industry is driven by honey price, which is highly ironic because, the way I figure it, the actual economic value of apiary products is probably one-fifteenth, one-twentieth or one twenty fifth—a fraction—of the value of what bees in the Australian environment contribute to the wellbeing of Australians. In other words, it is just like a tail that wags a dog, basically. That is why we are here. We do the little thing, but the big picture is feeding the population.

That spills also into the soil fertility of the country. Honey bees are the prime pollinator of legumes, which bear rhizobium, a part of the nitrogen cycle. That has not been put into any of the figures. I think incidental pollination has been valued at $1.6 billion. There are various figures ranging from about $800 million to maybe $2 billion. It is very hard to calculate, but it is enormous—I have no doubt about that. If you throw in the nitrogen production as well, that could boost that significantly, I think, particularly wherever there is lucerne and white clover growing. This industry is vital to this country.

For any industry to survive, it must have good training and it must have good research. I was employed in research with New South Wales Agriculture, over the road here, in the seventies. I have also worked for Ampol research—a totally different field—in crude oil and refinery processes. So I do know and value research. It answers most of our problems. This industry is tiny but it is not a stand-alone industry. It is an industry that impacts on the total life of Australia. Governments have to be pretty tight with their money and they have to finance research in these types of things. You are often looking for contributions: 'Okay, your industry puts in $1; we put in $1.' I figure that in our industry, if you are looking at a 15 to one ratio of value that is incidental to what the actual production is, you should be looking at at least a three to one or a five to one ratio. If our industry can put up a buck you should be able to put up five or 10—I do not know. It is far-reaching and not as simplistic as it may seem to be.

I think that the country is going to be worse off. If we do not have a healthy apiary industry, this country is going to be in dire straits. I spent two weeks in the USA last July. They have had some few years now of varroa mite infestation, as well as tracheal mites and the African small hive beetle, which we have now been blessed with and which is causing major troubles right here, right now. Their agricultural systems are suffering, and suffering badly. I think we are really going to have to look after the beekeepers—I might be a bit old, but the next generation. You must make sure you have some or you might go hungry.

Mr SECKER—With reference to the information you have given today about a five-for-one allocation instead of a one-for-one allocation, I think that would probably only happen if you got other industries to put in as well so we would be giving one to one for the amount that they are putting in for research. I am being realistic here, which is what the Treasurer would say. It is going to be one for one, but you could get more money from the other industries. What success have you had in getting other industries interested in being involved in research? I know from my own personal experience of the lucerne industry that they could not do without the bee industry. I am not sure if they have ever been asked to be part of a research inquiry, submission or anything like that.

Mr Eden—I am not at the highest level of politics in the bee industry. It is such a small industry and we run on such low profits that we do not have time to expand into that type of thing. But I gather we are definitely tied up with the horticultural people. There is a meshing there. I think there is even talk that perhaps we should be moved out of the animal area and into the horticultural area, that the insect has more relevance to horticulture. It is a tiny little industry that is unobserved and virtually unknown, yet it has such a highly significant effect on the Australian population.

Mr SECKER—Is it affected by GM cotton at all with the BTG?

Mr Rhodes—The quick answer is no. Are you talking about the honey coming out from a genetically modified crop?

Mr SECKER—No. For example, one of the biggest problems with having bees around crops is the sprays that are used. Is the BT that is naturally in the—

Mr Rhodes—No, that is specific to modified crops, so it does not affect honey bees.

Mr SECKER—That is good news.

Mr Rhodes—It is for us.

Mr SECKER—And cotton are reducing their sprays by quite a bit. I studied bees at school 30 years ago at Urrbrae, which is a bit similar to this. I have to say I never went into it because I did not want to get stung for the rest of my life. I would not have a bar of it. I got stung there instead—I had not thought of that. That is obviously going to be a deterrent for some students to getting involved in the bee industry but what do you think is the biggest deterrent to students going into the industry? In my experience, most of it was one-on-one training. Other beekeepers taught another person to be a beekeeper.

Mr Eden—I think you have pretty much hit the bullseye there with the sting and the pain angle. Also, they were talking about dumbing down agriculture before. We are at the bottom of the pecking order. I could not be more frank than that because of the size of the industry. For anybody employed in our industry, it is very hot work in the summer along with the pain of the stings. The pay is not good. I do not do it for the money. It is just a lifelong hobby. I am lucky. I make my living out of it. We have employees and that type of thing, but the hours are arduous.

Mr SECKER—How many employees do you have?

Mr Eden—Full time, there are three of us, and five or six part time.

Mr SECKER—A lot of it is night work.

Mr Eden—No, day work but you do the night shift after that.

Mr SECKER—Right. It is long hours, but you transport them at night.

Mr Eden—Yes. We put them on trucks and trailers and things and transport them through the night You hope you are going to get three or four hours sleep. If you get five or six, you have a good night.

Mr SECKER—A bonus.

Mr Rhodes—One of the disadvantages is there is little room for advancement in the bee industry. If a person does so many years study and goes out and works for a beekeeper, because the business is so small there is nowhere for that person to go to. I think that deters people from getting involved.

Mr SECKER—Do you have an answer for that? Tell me if I am wrong: bees are a very specialised area. You could learn about bees but you might not have any way of relating it to another industry except for the bee industry.

Mr Rhodes—I do not know of any answer to that. It is going to be a long time before we get beekeeping to the stage where there are big businesses that employ staff at different levels. Until that occurs, anybody who comes in and studies at a low level is likely to stay there for a long time.

Mr SECKER—What percentage of the industry would be weekend beekeepers versus full-time beekeepers?

Mr Rhodes—A large percentage. We are not counting those in our figures.

Mr SECKER—What are the diseases—foulbrood or something?

Mr Rhodes—There is quite a number of diseases. American foulbrood is the major one that is affecting bees, but we have European foulbrood, which is another serious disease. We have a number of viral diseases—about six or seven. We have chalkbrood, which is a fungal disease, and currently we have the small hive beetle. It has only been here a couple of years now but, as it spreads, it is going to become a major problem for beekeepers.

Mr SECKER—What effect does that have on your hives?

Mr Rhodes—The adult beetle lays eggs inside the hive attaching to larvae, and the larvae move through the hive consuming protein. They slime the hive, so the whole hive collapses and the bees fly away and you have got a big nest left of them.

Mr SECKER—Is that potentially a more serious disease than any of the foulbroods?

Mr Rhodes—At the present time it is.

Mr SECKER—How much research are we doing into all the bee diseases?

Mr Rhodes—There are some funds being spent on research into small hive beetle because it is fairly new. There is no money being spent on the other diseases to my knowledge.

Mr SECKER—Do you think that might be because it is such a small group of people—2000?

Mr Rhodes—It is what you were saying before. The annual budget of the honey bee research council, which is part of RIRDC, even with funding from the government, is only about $400,000 a year so you have got very little to work with.

Mr SECKER—A couple of workers, and that is about it.

Mr Eden—I do not think you would need two hands to count the top bee researchers in Australia. John is leading the world in research on queen bees and drones. He is operating on a minuscule budget in almost impossible circumstances. This country does not have a bee research centre—not one.

Mr SECKER—I think part of the lack of knowledge out there is of other people in the agricultural community who are not aware of the advantages of pollination by bees. We have used them in my area for lucerne for quite a while and recognised this advantage. Some are starting to use them for canola, but this is just not generally recognised out there. I suppose, until you actually get that education out there, it is going to be very hard to convince other agricultural industries to get behind you.

Mr Rhodes—There have been a number of reasons for that. One is that Australia has a fairly large population of feral colonies. Not so much now, but in the past most crops have been reasonably small in size of acreage. These people are probably finding that they get sufficient pollination without paying a big company. That is changing. The other thing is the profit margin people make through producing the crop. They have to make enough to pay for their costs, make a profit and pay the beekeeper on top of that. That is very marginal. The other thing is the use of pesticide sprays. While there are sprays that will poison honey bees, it is quite dangerous for beekeepers to put bees into areas like that. They are extremely careful in their management practices.

Mr SECKER—I have one last question. What is your attitude to the American leafcutter bee and how would that change the industry?

Mr Rhodes—The American leafcutter has been tried twice in South Australia—

Mr SECKER—Yes.

Mr Rhodes—with limited success. The story I got is that when they put the leafcutter bees out in the paddocks, the leafcutter bees disappear.

Mr SECKER—They do not have a hive, do they?

Mr Rhodes—They just have a nesting box.

Mr SECKER—They have free range, almost.

Mr Rhodes—They only fly a few hundred metres and come back to that nesting box. But other things attack them and eat them. So the theory is good and the potential to pollinate lucerne

is quite high. The benefit of honey bees is that you have a number of commercial honey beekeepers who have 1,000 or 2,000 hives. They pick up a truckload of bees and move it in and out without any effort. So all that experience and knowledge is already there. Even though, one for one, a leafcutter bee is superior to a honey bee, because you have a beekeeper who knows what he is doing and can lift tens of thousands of bees in one shift, one must ask if it is worthwhile worrying about the leafcutter bee.

Mr WINDSOR—I noticed that there are something like seven submissions from the beekeeping industry, which indicates that there is some real concern. We heard from a few of them earlier. You have mentioned research but, in terms of the training agenda, what needs are there at the moment? Assuming that young people want to go into that industry—and you have cast a bit of doubt on that in terms of the financial opportunities—what is missing and what could we as a committee do to assist your industry in terms of training arrangements?

Mr Eden—Firstly, there is nowhere left in Australia that actually runs a beekeeping course, as such. The one I did was two semesters.

Mr WINDSOR—So it is all done on the job?

Mr Eden—Pretty much. There are some very basic TAFE courses. New South Wales DPI prints a lot of Agfacts and some really good stuff. One thing that I would like to see is funding for the production of the course templates. A lot of that work has been done for all the different units that could be used to assess people.

More recently, over the road, the guys that do the pig research have now put out a kit for each unit. They are way in front of us. They have the template, they have the CD-ROM and they have the DVD in a nice little case. Our industry needs something like that yesterday. That would be a start. Surely it is not very expensive to do that rather than setting up some sort of beekeeping school that probably not too many people are going to front up to. To get back to your question of how we get around attracting people to the industry, the bottom line is the price of bulk honey in Australia. That is all it is. It is low. For one full-time worker on my level playing field, I could have 15 Chinese workers for the same money. I operate on world prices—Chinese prices—with Australian priced diesel, OH&S and paperwork up to your eyeballs. On the roads there are the police, RTA and people on your back from all parts of the show, and I am getting paid a world price. My level playing field is about 45 degrees on wet grass and I am in a two-wheel drive car at the bottom, but I survive somehow. I cannot afford to pay people. I think that the work that they do for me is probably much harder work, Throw in 100 stings in a day, a bit of pain and effort. It is a bit dangerous. We often run into brown snakes or whatever. I think they are probably worth three or four times what I pay them.

Mr SECKER—Don't the protective overalls stop you getting stung?

Mr Eden—No, if you want to wear two pairs, but it is extremely hot. I just wear one pair of overalls.

Mr SECKER—And a helmet?

Mr Eden—Yes. That is it. If you have sunstroke, you have overheated. You cannot work anyway. Maybe we can get some new materials with air coolers on them. I do not know. You basically cannot work with bees without being stung; end of story.

Mr WINDSOR—There has been no involvement with any real training at all?

Mr Eden—Gatton Agricultural College used to run a course. John would know more about that.

CHAIR—Do they run one here?

Mr Eden—There is the odd short school. John, you have just run a queen bee breeding course over two days, haven't you?

Mr Rhodes—Our department in New South Wales runs a two-day course in August and a three-day queen bee rearing school. It is a queen bee breeding school. We do that once or more per year, depending on the demand. They are the two major courses available in Australia. No other states do that sort of thing.

Mr WINDSOR—With regard to the recognition, this $60 million business that is worth $1.126 billion—whatever the number is—does the scientific community agree with you there, not in terms of the number but in terms of the importance of the beekeeper to food production?

Mr Eden—Some people certainly do. The commission I was involved in with Dr Max Whitten, an ex-CSIRO principal entomologist, was very aware of it.

Mr WINDSOR—I am not doubting you. There is a very real scenario where we could lose that industry altogether. What happens if we do not have a beekeeping industry?

Mr Eden—There are thousands of these amateur beekeepers, and I was included in that originally. Not many break through to eventually become professional beekeepers. I have noted over the last 30-odd years people coming and going all the time. They do not usually last very long in the industry. That is the nature of the business. If you shoot the first 1,000, the next 1,000 jump up. Bob Galliford stated that at a public meeting here 15 years ago. Everyone is in agreement with that statement. Now the events have turned around with the small African hive beetle. You asked about the number of smaller, weekend beekeepers and that type of thing. I can tell you about some areas of the coast where there are hardly any of them left. The hives are all dead, as of January, February, March last year. They are gone.

Mr WINDSOR—So what you are saying is that in the past, irrespective of profitability, there were always people there to do the voluntary job for us but we are at risk from now on.

Mr Eden—They are a fascinating insect. It gets you in.

CHAIR—I think you answered the question I was going to ask about migration and the cost of labour compared to the cost of labour now, so I will not ask the question. What marketing initiatives is the apiary industry involved in? More specifically, what marketing initiatives are there to attract students and skilled labour into the industry?

Mr Rhodes—There are no courses to advertise, to bring them in. The horticulture department of the University of Western Sydney has a number of people doing research projects and they do attract people who are interested in bee keeping at a higher level, but it is just a few people. There is nothing available for people at the lower level who want to work for a beekeeper.

CHAIR—Thank you very much for your evidence. I do appreciate it. It is very important that we get input into this inquiry from all industries. Thank you for the contribution that you have made today. I wish you well in your future endeavours. Hopefully, the information that you have given us will enable us to make the appropriate recommendations in not only your industry but other industries, which will be picked up and heeded by the minister of the day. Thank you very much.

[3.47 pm]

McINERNEY, Mr Raymond, Private capacity

MUTTON, Mr Keith John, Private capacity

CHAIR—We have to go through some preliminary stuff before we ask you for your contribution. Although the committee does not require you to give evidence under oath, I should advise you that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement in relation to your submissions or make some introductory remarks?

Mr Mutton—Yes, thank you. We would each like to say something briefly. Firstly, both Ray McInerney and I are employed as teachers by TAFE New South Wales at the New England Institute. Any views or opinions expressed by us are our own and in no way should be considered those of TAFE. We are appearing independently of our employer. Both Ray and I have no vested interest as such, because within the next 12 months or so we will both be leaving the job for retirement. We are putting our views as interested people, rather than with some pecuniary interest.

As to my qualifications, I have a Bachelor of Science in Agriculture and a diploma in education from the University of Sydney. I have TAFE qualifications in horticulture, wool classing and chemical management and a certificate IV in workplace assessment. I have been a teacher of agriculture and horticulture since 1976—for approximately 30 years. I have had quite extensive involvement with trainees and apprentices, training both groups in the past. I am still involved with those groups. I have done that sort of training at TAFE and also out in the field, on site.

As to my industry experience—and this helps me to formulate my opinions—I own with my family 870 hectares of mixed farming country at Currabubula. I employ casual labour and contractors as the need arises. I am finding it harder to find experienced, well-trained workers. In summary, the thrust of the submission that Ray and I put in is that, although we would like to see more education, it is not so much the amount of education but the actual quality and the outcomes from it that we are concerned with in regard to the rural industries.

Mr McInerney—As to my qualifications, I have a full builder's licence, certificate III in horticulture, post certificate in landscape design, a diploma of teaching and a certificate IV in workplace assessment. I am a Building Industry Skills Centre assessor. I have had 34 years of experience in a wide range of building and horticulture industries. I have employed as many as 25 people at one time. The last 20 years I have spent as a full-time teacher at Ryde and at Tamworth college of TAFE to senior head teacher level. I have also been the head assessor for the Building Industry Skills Centre and I still play a big part in the centre, assessing applicants for structural landscape licences. I have had 20 years involvement in WorldSkills as chief judge

and project designer at a national level. As Keith mentioned, it is the quality of training that is my interest.

CHAIR—The committee has received comments on the poor educational outcomes in TAFEs in many states due to their highly casualised nature. Would you like to comment on that observation?

Mr Mutton—I think it is a problem in TAFE at the moment. Any good or well-trained teachers or industry people are not going to hang around just for a few hours of TAFE every now and then. It is going to become harder now with workplace IV assessment being required. It is basically mandatory to do that if you want to be a part-time teacher. There is a difficulty in attracting people to the profession who are committed for the money that they are going to earn.

CHAIR—So you are basically reinforcing the comments that we have received?

Mr Mutton—I think it would be very patchy. I think at some colleges you would have very good standards. In some states you would, because there would be good resources. But in other places it is a problem. That is one thing that we have put in our submission. We mentioned in our submission that everyone can offer everything rather than concentrating on certain areas of excellence. This is happening more and more with the way that training is being opened up. It is going to get worse.

Mr McInerney—One of the problems is that we cannot advertise for what we actually want when we put an ad in the paper. I am going through this problem now. I am trying to put on a full-time teacher on a 12-month contract, but I cannot advertise what I want. I am arguing with human resources about the ad that is going in the paper. In the ad that has actually gone into the gazette, people who are at point 4 can apply. People out of the industry that I know have the skills that I am looking for cannot apply until they are at point 4. People at points 1, 2 and 3 will look at that and say, 'I've got no chance—I won't bother applying.' But the people who would satisfy points 1, 2 and 3 have probably spent all of their time collecting paper qualifications and have not spent any time, with all due respect, collecting any skills.

CHAIR—The first three points of your advertisement centre around the scenario you have just painted, that it favours people who have done a lot of paperwork.

Mr McInerney—Another thing I have pointed out is that it also looks as if I am setting up a position for somebody who already works within the system. I do not want my name put to that sort of thing, but they say it is the way they have to go these days.

CHAIR—Thank you for that. It is an angle we have not picked up before, but it was a very constructive contribution.

Mr McInerney—We need to be able to advertise for exactly what we want.

Mr Mutton—Because we are running courses now with national competencies, they are also asking for AQF IV workplace assessors. You can get them done cheaper by private providers. TAFE, for example, does them for $2,500. One part timer we use is a plant pathologist and insect

man; he is retired department of ag, but he is a leader in his field. He is not going to want to do an AQF IV—

CHAIR—What is an AQF IV?

Mr Mutton—It is Australian quality framework for workplace—the training industry has national competency levels that you are supposed to meet. All the states have to meet them. We provide different courses, but they are embedded in the course. You are supposed to have them to train. No-one is going to do part-time teaching for $59 an hour one night a week for 10 weeks if they have to go to a six-month AQF IV training course to get it.

CHAIR—It sounds unreasonable.

Mr McInerney—It is.

CHAIR—We have also received evidence that competency based training does not provide the flexibility or adaptability to move with or between rural industries without further training. What are your views of competency based training?

Mr McInerney—This raises the point of traineeships versus apprenticeships. There is no way in the world that a workplace trained trainee can walk away with a certificate III when it takes an apprentice three years to acquire the same thing coming to TAFE on a part-time basis. We are expected to go out and sign somebody up who has been working in an industry for six months as an existing worker, for which the government pays their employer X amount of dollars. From that X amount of dollars, they pay me about $1,800 to train that person and put them through a three-year course in 12 months using the employer or anybody else they might have supervising that trainee. It just does not work.

Even worse than that, you have what they call new entry trainees. This is a trainee who is coming onto the job for 12 months, and they have to do a 12-month traineeship. Basically, if they did a 12-month traineeship, that takes them through to certificate II. If they did another traineeship, that would take them through to certificate III. But we are expected to get these brand new trainees, straight out of school or from another industry somewhere, and train them within this new industry in 12 months at the workplace. We try to encourage them to come into TAFE on block release, which is three days every third week, so they can interact with and bounce off our fund 1 students, who are our other mainline students, but their employers will not allow them to come to tech—or most of them. I cannot say all of them, but a lot of the employers will not allow them to come to tech for those three days every third week. They want them as cheap labour.

When they have finished their 12-month traineeship, nobody else wants them. They have struggled through the certificate II—a lot of them do not make it—and then nobody else wants them, because they are not tradespeople and they do not really know enough of the industry to get a job in it. Nobody wants to pick them up, so they have to go and look for work somewhere else in an industry different to that which they really want to work in. Traineeships versus apprenticeships is a very sore point with me. My big question is: if apprenticeships are so bad and traineeships are so damn good, why are we so short of tradespeople?

CHAIR—That is a good question.

Mr Mutton—I would like to add to that by putting a scenario to you. The average age of farmers is 55 or so—my age—and I have been in the industry for a long while, as have a lot of farmers. They have a lot of good background but a lot of them do not necessarily have a particularly good education. If you take on a trainee, he gets signed up, especially with a lot of the private providers, and the pressure is getting put on the government providers to do the same. The trainee goes to TAFE for a week and then goes out to work for 12 months. He may go to TAFE for another week or fortnight during the rest of the time. The assumption is that the person he is working for is actually training him. Mr Windsor will tell you that farming involves spending hours and hours on a tractor. What sort of training do you need for that? And while you are on a tractor what is the other person doing? As the farmer, you are supposed to be doing the training. The assessor—that is, the TAFE person or the private provider—will come out and say to the trainee: 'Show me what you can do.' Especially with private providers, if the assessor says the trainee is not competent and keeps saying so, then next time the farmer wants to put another trainee on, who is he going to ask? Is he going to ask someone who is being fair dinkum? Pressure is being put on government training organisations because of that.

To summarise, competency based training is only as good as the person giving the training, and much of the competency based training is being given by people on the job, on the site, who are interested in cheap labour and getting the job done. They do not care whether or not the person is trained; all they want to do is get someone in and get the dollars. There are businesses around Tamworth that turn trainees over and over like sausages, and a lot of times they are not even interested in meeting their commitments when they are supposed to be off the job. Competency based training is excellent if you have someone who is really committed to doing the job but it is very poor if you have not.

Mr WINDSOR—I would advise the secretariat to have a look at the summary that we have of this document, because I think it highlights what is actually happening on the street. There are certain recommendations—I think there are only six lines in the summarised version that we have—and it does highlight what I am hearing on the street, and I am sure a number of us are hearing it. There are a couple of things I would like to flesh out so that it is on the record. In your submission, you refer to the 'flick and tick' mentality approach from many trainers to get the job done. It is not necessarily the job that the client wants in the end, but it is the job done for the trainer. The other comment you make which I think is fairly important follows on from what Mr Mutton was saying a moment ago:

> [It is] possible that we will end up with lots of young people with a little bit of training in lots of areas but not having mastered any because employers replace them as soon as the training money is finished with another trainee—NO security for trainee.

Can you elaborate on those issues?

Mr Mutton—The 'flick and tick' approach is what has happened with the training industry. I say it is an industry: once upon a time training was probably a vocation; it has now become an industry to make money from. People operate out of the boots of cars, so they have to get something. They go out, sign up a heap of people—trainees—come and see them once every two

months or whatever and they have got all the outcomes they are supposed to have. They say, 'Can you do it?'; if the trainee answers, 'Yes'—tick.

You have just said yourself, Mr Windsor, that you get the word on the street. If you talk to other training organisations, they will tell you the same thing. Unfortunately, I do not think it is just limited to private providers. The pressure is on other providers, state type providers, who need to stay there to do it. It is creating a lot of problems with people who are interested in training.

Mr WINDSOR—So do you see as the answer pre-apprenticeship courses—apprenticeships, rather than traineeships?

Mr Mutton—That is one of our recommendations.

Mr McInerney—Yes.

Mr WINDSOR—What about some skills based employers? They would suggest that as well. I am not arguing against you, but they have said that sometimes they have trained an apprentice, so that they could get a real worker on the job, and then others have come along and poached them.

Mr McInerney—That is true. That does happen. There is no doubt about that. But I think that, if we really want to get tradespeople for the future, we have got to look at the apprenticeship. We have got to get rid of the traineeship system because it is not working. We have got to look at apprenticeships, even if it means TAFE or the government setting up group apprenticeships, so that they can be farmed out at different times of the year. That gentleman who spoke earlier was talking about beekeeping. We have often thought about starting a beekeeping course but, really, you have got to get the students that are interested in it or people like that, who work in the industry, who want to come along. I think you have to set up some sort of an organisation that will allow an apprentice to complete their job in rural areas. Shared apprenticeships could be a way to go, where they might be in horticulture amenity for six months and then they might be in horticulture production for six months. They might even go across to Ag in certain areas for a few months. But it needs somebody to set up an organisation where that is going to be controlled.

When I mentioned the idea that I am about to raise 20 years ago I almost got hung, but I will try again. I did my national service in 1956 and I still remember the first day I got off the bus. I was from a rural area. There were all these weird and wonderful-looking shapes that got off that bus. But within seven days, we were one group—one uniform. We do have the defence services, and I believe that there is a white paper—I think you referred to it as a white paper—floating around somewhere that says, regarding the military equipment that we are buying today in this country, that the person who is going to operate that equipment is not yet born. Companies need old people; the Defence Force needs new young people. Maybe TAFE and the Defence Force could get together, and run all sorts of apprenticeships right across the board. I do not know what you think about that, but I said something like that 20 years ago and I did not think I would get out of the room alive! Today it might be different.

Mr Mutton—You asked about there being no security, and that is exactly what is happening. People are getting rolled over. Trainees are getting rolled over. They are fodder, in many cases; they will be put on, and 12 months later, off they go. Another trainee comes in; 12 months later, off they go.

Mr WINDSOR—So the business is the delivery of the package rather than the training of the packaged?

Mr Mutton—Yes. And with respect to TAFE teachers who have a life-long commitment to the job, and who are leaving the system in the next 12 months or so, that is what worries us, because we are looking at the outcome for younger people. In some cases it is great; some sectors of the rural industry and the horticultural industry are great. They will keep someone on as a trainee for 12 months and then roll them over into an apprenticeship. But we know many, many places that keep them on for 12 months and then just give them the shunt and pull someone else in.

The upsetting thing is it would not even be so bad if in the 12 months they were there they got good training. But in the 12 months they are there they might just sit on a lawnmower, or they might work at the tip or something, or just watering the trees. The people involved are not really honouring their obligations to the trainee to give that person good training.

CHAIR—So in effect they are subsidising their operating costs and using the government to do it?

Mr Mutton—Yes, very much so. We are not supposed to say 'pass' or 'fail' now, but if the person is not competent at the end of it that does not matter to them, because they have not done the job. I mentioned skills auditing in the submission. It is on the bottom of the first page. Organisations get audited all the time. What they are being audited for is whether they have ticked that box; whether their assessment is valid. What is not audited to any great extent is this: the auditors do not go onto the job and say to Freddie Nerks there, 'Freddie, you have been assessed that you can actually operate a chainsaw. Could you just pick that up and do a cross cut on that log for me?'

CHAIR—We are auditing the paperwork to see it is filled out correctly?

Mr Mutton—Yes, and it is becoming more and more prescriptive and tight that way, but skills-wise it is abysmal. Ray and I between us have probably got 70 years of teaching and industry experience. I can truthfully say that the standard of training now compared to 15 years ago has quite dramatically declined.

Mr McInerney—I would just like to add that our curriculum is just as bad. The TAFE curriculum has been watered down every year.

Mr Mutton—That is because we have had to go on a national basis for national competencies.

Mr McInerney—It is because of the pressures we are under and the pressures with trainees. We have got to meet these deadlines and the only way we can do it is cut costs, which means we do not deliver the quality of service that we should.

Mr Mutton—Can I deal with the issue of the government subsidising workers. You may not be aware of it, but there is a program with existing worker trainees. I will give you an example. You could have a local council, a local irrigator or a local horticulturalist. They could have someone picking tomatoes for their job who is there for six months. They then say, 'Right, we'd like an existing worker trainee.' So they sign that person up for a certificate III, which is basically the trade level of qualification. That is what our apprentices and tradesmen do. A new entrant trainee would do a certificate II, a lower course. This person may have spent the last six months picking tomatoes—this is the existing worker. He has got no knowledge of or involvement in the rest of the complexities of the business. He is then signed up for 12 months, and trainers are expected to put him through what takes apprentices three years three days a week to finish. There is no way that guy has got the basic background, understanding or whatever to get through. But it is surprising how many people end up after 12 months with a certificate III. I can only surmise that there is something happening.

Mr McInerney—This is what we refer to as 'flick and tick'.

Mr Mutton—That is what worries me: they get money for this. There are businesses around here in Tamworth that put every one of their employees as existing trainees.

Mr WINDSOR—I know tomorrow we are receiving evidence from another private individual, who will reinforce what you are saying.

Mr Mutton—I have no problems with training existing workers, but we should be using the money that is going into training to actually train people who need the training.

Mr McInerney—And quality training.

Mr Mutton—Yes, and quality training; not someone who has worked at a tomato production plant or a hydroponic set-up or something or other for the last three or four years and is then signed up as an existing trainee.

Mr WINDSOR—One of the success stories that I am hearing about apprenticeships is from Country Energy. Have you had any involvement with them? They have developed a different psychology to some of the other businesses. Rather than centralise as an energy provider, they have decentralised and they are actually putting on apprentices in the smaller country towns rather than having them all go to a big place. Have you had any contact with them?

Mr Mutton—No, I have not.

Mr McInerney—Lenny Scott, an old colleague of mine whom I worked with at Ryde, now works with Country Energy. He is a horticulturist and is in charge of their environmental issues. I am sure that Lenny would have had a fair bit to do with the upkeep of Country Energy's profile as an employer of a lot of apprentices over the years.

Mr Mutton—One thing that we have noted from our observations is that some of the better, more conscientious employers rurally are your local councils; they are interested. We have people from Barraba, Warialda and Inverell who are interested. They have a commitment to putting local young people through—and they do get them through. Ray and I were talking earlier about this. If we go back maybe seven or eight years, we were probably getting 10 new apprentices a year. We are flat out now if we get two or three. Where have they gone? There are plenty of trainees out there, no doubt about that, but it is roll over, roll over—and that is what they want. We have landscapers at bowling clubs, racecourses and all those sorts of places. That is what we are finding, and we are not the only ones. You will also find that it is pretty much the case with heavy industry—what heavy industries still exist in provincial towns!

Mr SECKER—Just on that point, the New Apprenticeships consultants sign up the traineeships. If they see that an employer is chucking one trainee away and getting another and not giving them proper training, they are supposed to refuse to sign up new traineeships or apprenticeships. I am interested to hear about this, because from what you are saying that is not always the case.

Mr Mutton—They have projected budgets. One of the things that they are looking at is sign-ons or sign-ups, and that is their motivation. That is why Ray and I are here today. Over the last seven or eight years, we have found that the educational situation is being driven by the dial-up for the person who is doing the employing rather than by the outcome for the person who is being trained and the employer in the long run, which is our community.

Mr SECKER—Are there many school based apprenticeships in New South Wales? I know that Queensland and South Australia have quite good school based apprenticeships. That is not with any particular employer—that can be shared around, as you suggested. An employer can come along and say, 'I like this person,' and grab them out.

Mr Mutton—We have TVET whereby students can come from school to TAFE for part of their course. But I personally—and Ray agrees with me—do not particularly like it because they tend to get the kids who are trouble at school and stick them in TAFE. These kids are not one thing or the other—they are neither Martha nor Arthur. They would be better off staying at school. It might be a waste for them to go to TAFE. If you are going to be a TVET in welding, why not go and do a pre-apprenticeship, which is what you were talking about?

CHAIR—Young people from years 10 at the technology high schools in New South Wales can take on apprenticeship type training in a trade for two years. The TAFE is attached to the school—they are on the same grounds—and the student is accredited with that two-year apprenticeship training when they leave school at year 12.

Mr McInerney—Can I add a little bit to that. Some years ago in Sydney, I was involved with what was called the HSC pathway. I was very much in favour of it. Someone who had finished their school certificate could go on, but instead of staying at school they could enrol in one of the TAFE courses and do so many units towards their apprenticeship. That is what you are talking about.

That was the HSC pathway that we ran at Ryde. That, I thought, was very successful, because we had an interview night where people that were involved came along, sat down and wanted to

talk to us. The first lady brought her six-foot-two son in, sat him down and said, 'Now tell me, how can we get a 75 TER?' I said, 'Stay at school. If you want a 75 TER, stay at school. We are looking for people who cannot fit into the school system and who want to go off into the trade area. But, by combining the two, you can still get your HSC.'

That was very successful but, for some reason or another, the school system looked at us as taking their students and they were deadset against it. That kind of died and now TVET has come up. The curriculum now is nothing like that first HSC was. We would take them out of the school room, bring them over to the TAFE and I would have them laying bricks that afternoon. And they loved it. That is the sort of thing they wanted. But now we take them out of the school situation, we bring them to TAFE and we sit them down in another school situation. That is why it is not working.

Mr Mutton—I was talking to a bricklaying teacher at work today about the TVET system. He was saying that basically the only way you can learn to be a bricklayer is to lay bricks.

Mr McInerney—It is to go and do it.

Mr Mutton—If you are only coming down for two hours an afternoon twice a week, how many bricks do you lay? You do not get to develop your back and your arms. The other thing which I think is really important with pre-apprentices is that you get to develop a work ethic if you get into a course and can say, 'I am a pre-apprentice carpenter,' or, 'I am a pre-apprentice landscaper,' or, 'I am a pre-apprentice brickie', whereas if you just come in—

Mr WINDSOR—You are part of the team.

Mr Mutton—That is right. We were finding at TAFE that everyone you spoke to in the trades area who has run pre-apprentices in the past—and there are still a few running, fortunately—would tell you that they do not have any trouble placing those young people into a second-year apprenticeship, because they have already done a lot of the gawky, gunky things that stupid apprentices do when they are first on the job. They do not go and get a left-handed screwdriver because they know; they are smart. They are job smart and they work.

Mr SECKER—For apprentices to be paid realistic wages while training, who will pay them?

Mr Mutton—It is not in here, but I think we could look at rediverting some of the training money from things like existing workers to other legitimate things. My son is an apprentice and we live 13 kilometres out of town and 40 kilometres from his job in Gunnedah. He has managed to survive on his wages of $5.50 an hour in first year because he had parents who could subsidise him. But if he did not have parents who were subsidising him, he could not. So we need to take the money from places like the big companies around that are just churning—

CHAIR—It is interesting what I spoke to an electrician about the other day. He said that he did not know he had the flexibility to do it. If he could put the $5,000 that he gets from the government for putting on an apprentice aside as an incentive for the apprentice when he finished his apprenticeship to pick up as a cash bonus, he would keep his apprentices longer. I said, 'You can go and ahead and do it. There is flexibility in the system.' I rang and checked that with the minister.

Mr McInerney—That is a great idea.

CHAIR—Thank you very much for your contribution. It has been very worthwhile. We thank you for your frankness on the issue of traineeships. It is very important that we hear that sort of thing.

Mr WINDSOR—Could we put into the *Hansard* that we should get some departmental people in to answer some of those questions posed on traineeships and apprenticeships.

Mr Mutton—We might not have a job!

Mr WINDSOR—No, but on the costs of one and the costs of the other and the net benefits.

CHAIR—Sure. I think it would be good.

Mr McInerney—We really appreciate the opportunity to get some educational frustrations off our chests. Thank you very much.

CHAIR—Good on you. No problem at all.

[4.30 pm]

HARRIS, Mr Graeme Francis, Secretary, National Association of Agricultural Educators

CHAIR—Although the committee does not require you to give evidence under oath I should advise you that these hearings are formal proceedings of the parliament. Consequently, they warrant the same respect as proceedings of the House itself. It is customary to remind witnesses that giving false or misleading evidence is a serious matter and may be regarded as a contempt of parliament. Do you wish to make a brief statement in relation to your submission or would you care to make some introductory remarks?

Mr Harris—As well as being the Secretary of the National Association of Agricultural Educators, I am also the past president of the New South Wales Association of Agricultural Teachers and a teacher at Farrer Memorial Agricultural High School. The submission which we made followed a teleconference between the various presidents of the different states in which agriculture teachers associations operate and so it represents the views of the whole association, although there will be times when I will be giving my own personal views rather than those that are necessarily endorsed by the group. The submission refers in places to the linkage of courses with industry requirements and to meeting industry skills. I refer particularly to the second page where we are now working with industry in the development of Cotton Basics, which is a branded course. By branded we basically mean it is comprised of various units from within the national training package in rural production which have been extracted and placed under one heading of cotton production. Certainly, a similar thing exists with ChemCert, which is one of the two certifying bodies for chemical applicators in New South Wales. The development of these branded packages seems to be a way forward in training. It allows industry to recognise and be confident of the training that is provided because they see it is relevant and it is directly for their particular course. For the trainers it means that they also see relevance because they have links directly into particular industry rather than talking in generic terms.

I raised a number of points including the high level of administrative overheads, which I believe the inquiry has heard about from a number of other submissions. The repetitive assessment of student competency I guess relates to the 'tick and flick', which was referred to in another submission as well. The difficulty that exists is where students have a number of pre-existing skills and the course that they may be enrolled in is set at a level which is below their level of skills. There is an artificial ceiling placed by the necessity to have the institution registered under its scope of registration as an RTO to offer those particular competencies.

The source of funds for teacher training is very scarce. For vocational training in agriculture, they are almost nonexistent. At some stages, in some states, some federal government funding has been accessed. In New South Wales the state government accessed Australian Quality Teaching program funds, they identified VET as a significant area of expenditure and teachers throughout the state were able to access that for funding. However, when the state determined other priorities later on, the sources of those funds dried up and they were redirected. So the ability of teachers to maintain currency in the subject areas is diminished. The casualisation of TAFE has led, in our belief, to a piecemeal approach in some areas. It is our belief that because of the fact that people are employed for a series of contracted hours they have less engagement

with students and their willingness to go that extra mile and have an understanding of where they fit in the bigger picture is diminished.

The last point I wish to raise is regarding the concentration of training, the specialisation of training in a few training institutions, so that students from rural and remote areas have to travel very long distances to undertake their TAFE training, whether they are on a traineeship or an apprenticeship. If students are in Sydney, that probably is not a major issue because they can hop on a train and go from one side of Sydney to another in an hour, as long as the trains are running. In country New South Wales, if a student from Boggabilla wishes to do heavy vehicle mechanics, the only centre doing that might be at Newcastle and so they have to travel. Such a student might never have been away from Boggabilla and there is no facility in place to guide them in travelling to undertake their studies. It is not only that the studies are new but the students are placed in a completely unfamiliar environment and they do not have any mentorship or supervision in terms of where they stay. They do not have the guidance that they really should have. That is why I believe that a distributed model, where the competencies are developed in local high schools by competent teachers, meeting the needs of individual students and reflecting the needs of their local communities, is probably the better model.

CHAIR—Thank you very much for that comprehensive introduction. I will lead off the questions by referring you to submission 32, under your name. In that submission, you say:

> The focus of what is taught in schools has moved away from the development of skills and knowledge, to meeting the political and social agendas that reflect the needs and aspirations of the cities and universities.

Could you give us some detail or quote an example of what you mean by that?

Mr Harris—Certainly. The senior agriculture course used to be very much centred on studies of the biology of plants and animals and the interrelationship with soils and the environment. Following on from there, students would follow study a topical issue, which could be genetic engineering or salinity or whatever. In the last few years, the syllabuses have changed in agriculture so that they are very much following the political push, I guess, for students to study lots about the sociology of farming, the sociology of marketing and issues of sustainability. While they are important, it is important that people have a solid understanding of the science on which the agriculture is based so that they can then take steps to ensure that they are sustainable.

In the junior school—I am referring to years 7 to 10—agriculture used to be very much plants, soils and animals. When you were doing animals, you would take students and train them to lead steers and take the steers to the local carcass show or whatever. When students did that, there was a sound understanding of ruminant biology, reproductive biology, animal behaviour and nutrition and all the things necessary to get that steer to the sale or to the market. Now the emphasis is far more on satisfying about seven or eight outcomes on the syllabuses. They can be obtained by completing five enterprise studies over the two years. So in that two years it does not matter whether you study rockmelons or Brahman bulls; you can still meet the guidelines.

The difficulty with that is that students tend to have a broad-brush view of how to grow things but they do not understand why those plants grow the way they do or why any of the things that you do to animals to get them to grow better work—the underlying basis of it. Because of that, I think the basis of the scientific understanding does not proceed through into the senior years and

then into the universities, so students do not see agriculture as being a science to study; they see it as something where you go out and grow lettuces or raise sheep, pigs or bees.

CHAIR—Today I referred to it as the dumbing down of agriculture, because it appears to me and other members of the committee, following the evidence that we have taken so far as a committee, that the educational process is focusing away from agriculture at the expense of agriculture, and the UAI process in New South Wales, for example, is in no small way contributing to that. Would you agree with that, and would you like to make some comments on how that is contributing to it?

Mr Harris—Yes. This is my understanding of the way the UAI operates, because I believe the actual construction of it is subject to certain secrecy provisions that the Universities Admissions Centre maintain.

CHAIR—You can see why when you see the outcomes of it.

Mr Harris—Yes, you can. It is a mystery to parents, students and many teachers, and that makes it very difficult for students to plot a career path. If the average mark in every subject in New South Wales is 70—which it is supposed to be, because we cannot have students that fail—students can achieve an average mark in every subject but then get a university admission index of 35 out of 100. That is soul destroying for many students. The reason that they get that UAI is because the subjects they choose happen to be ones where other students also did not choose to do high levels of English and each subject in the UAI is mapped against performance in English.

Mr SECKER—We often get complaints about people who have been doing the existing thing for years, sometimes decades, and then they are asked to get their certification so they can do what they have been doing for 20 years in going through prior recognition attainments. However, we seem to get the same sort of complaint about the amount of paperwork involved. Are you having the same experience here?

Mr Harris—Yes. As I might have mentioned in one of the submissions—probably submission 32—the paperwork warfare is enormous and escalating all the time. There is no provision of time in the staffing to schools to allow people to deal with that, so it has to come out of the supplementary staffing that schools might have, or it means that other subjects have to disappear or the teacher does it in their own time. In my case, I administer the operation of the training conducted by seven staff in primary industries at certificate II and III across a Board of Studies HSC subject in primary industries and two school developed courses in grain and beef. For that I get one hour per fortnight in that allocation, and it is not enough.

Mr SECKER—I think I heard a reference to 18 modules at $100 each.

Mr Harris—To be able to undertake the course, with the Australian Quality Training Framework it is my understanding that to be a trainer you have to have a qualification at the same level as you are teaching as well as have industry experience and the certificate IV workplace assessment, which was referred to in another submission. Each of those units has to be accredited externally, so you have to find another organisation which is registered to offer that certificate and those individual units. You then have to submit to a process where either you

undertake the course on offer that they have for each unit or you apply for recognition of prior learning.

That requires a submission of evidence and an interview under an assessment scheme with, I think it is called, HORTUS, which is an acronym for various assessment methods. That requires a large amount of presentation of information. So not only do you have to have information for each unit of competency, you have to have information for the individual elements of competency within that unit and industry recognition. I had to assemble recognition from a number of primary producers for whom I had worked as well as the fact that I had coordinated the cropping program here at the school for some 23 or 24 years. It was rather demeaning to have to apply for recognition for something that you have been running above an AQF III level for a long time.

CHAIR—How much paperwork was involved there? How many pages of paperwork?

Mr Harris—Roughly, 600 pages. It was a large A4 box crammed to the top, and then we had to send supplementary material.

CHAIR—How much was in the supplementary material?

Mr Harris—It would have been about 600 pages in total. It is hard to tell because they kept asking for more. For each unit you would send information away and they would say, 'Can you give us more information on this particular element of competency because we are not really sure.' You would have to find more evidence and that could be copies of soil test reports that had your name on it or a photo of you standing at a sale with Joe Bloggs selling cattle or whatever.

CHAIR—You are talking in that particular instance of somewhere in the vicinity of 1,000 to 1,400 or 600 pages just to satisfy the needs of—

Mr Harris—No, It was probably about 600 in total.

Mr SECKER—You could not just show them the crops that you were growing. That is not enough.

Mr Harris—No. It is a very substantial amount of work and the costs are not insubstantial. The school had to fund that. We gained some funding from our registered training organisation, which is the New South Wales Department of Education and Training and the New England directorate, I think—they keep changing the name. They funded half of that the first time round until we had four staff certified. One staff member has gone on leave. Another has been promoted to another school, so we have to replace them. We have two new staff who are more than competent. We cannot accredit them because we are not allowed to self-accredit, and so we have to pay $100 per unit for each person. That is going to work out at about $3,600 for the two of them.

Mr SECKER—Plus the time.

Mr Harris—Plus the time. That all happens while you are still supposedly teaching. Something has to give, and it is the time that you have with your student that suffers.

CHAIR—What about the comment in your submission 32:

The availability of learning resources is improving, however more resources and support is required for secondary schools in rural Australia..

Would you like to elaborate on that?

Mr Harris—The main sources of information for a practising vocational ed teacher are trade magazines, newspapers, the internet and, where industry bodies exist, some of the output from those. The cotton industry is way ahead of every other industry in terms of presenting packages. You can pick up a package of information on CD that you can print out. It has work sheets, assessment schemes and all those sorts of things. The federal government with the New South Wales government and the Catholic Education Commission has partly funded the development of a website called GoVET. I am the primary industries coordinator of that, and we provide support for other vocational teachers through that website. Whether that continues or not is subject to funding, and there is a possibility that that funding will not continue.

One of the things that seems to happen is that people put submissions to various government authorities and organisations at all levels saying, 'I have a great idea—I want to produce a website on agricultural training.' They get the money for three years, two years or 12 months. They develop the website and the money disappears. That stays on the web until whoever the service provider is pulls the plug on it. Someone else at the same time or previously says, 'I've got a good idea—let's develop a vocational education website.' So you tend to get repetition occurring rather than a development of one really good existing site. That occurs at national level and also at state level.

CHAIR—The committee has received evidence that young people are often not encouraged to excel academically when entering agriculture. Has this been your experience? Has this deterred students from studying agriculture? What is the balance between training for farm business and systems management and practical hands-on skills?

Mr Harris—I will try to remember all of that, but I may ask you to rephrase the question part by part as I go.

CHAIR—Firstly, has it been your experience that there is evidence that young people are often not encouraged to excel academically?

Mr Harris—If students wish to go to some of the universities, particularly the metropolitan universities, they need to gain high UAIs. They are very difficult to get when you do subjects such as some of the sciences and agriculture. It then becomes a self-fulfilling prophecy. Because your best students have not done the subject, they are not going to do as well in English at the high levels and so the UAI is going to suffer in the next year. It becomes a spiral downwards. It then gets to the point where any student who is academically highly able and has a desire to go into agriculture and research will avoid doing agriculture or chemistry or biology at high school. So they go to university with a high UAI, because they have done a number of humanities, then they have to do a lot of bridging courses. They really struggle because they are now doing first year chemistry at uni and they have not done chemistry since they were in year 10.

CHAIR—Secondly, what is the balance between training for farm business and systems management and practical hands-on skills?

Mr Harris—It depends on the course. In New South Wales in primary industries there is a great emphasis on vocational skills with very little in the way of managerial skills. We are talking about AQF II courses. An AQF I is basically someone who walks around behind you watching what you do. They might pick up a shovel and shovel stuff into the wheelbarrow. An AQF II undertakes a role under direct supervision. With an AQF III, you give them directions as to what to do and they go off and do it, but they may need to be checked on occasionally and given some advice. When they get AQF IV, they should be self-starters. They should be able to manage or undertake an enterprise on their own. Then, when you go to AQF V and VI et cetera, you are getting into the higher levels of management.

I think that is probably where some areas of industry have been disappointed. They get a kid who comes to them with a certificate II in agriculture and they expect them to be a self-starter who is able to go out and run something on their own. They are not. It was never designed to be like that. It was meant to be someone who has had some experience and developed some skills, but they still need some supervision.

I think there is that mismatch between what the AQTF levels are and what the community perceptions are. I had a student with a lot of experience in the cattle industry. He went and did workplace in northern Queensland last year with a fairly small employer, not a major corporation. The gentleman was very disappointed in this kid because he said that he did not think he had the skills that he should have after he had been in agricultural college for five years.

At the end of year 11, this kid had started beef cattle only three or five months before. He had done high school agriculture from years 7 to 10. There was a great mismatch about the expectation about his skill level, and yet we have sent that student out to a number of other properties and they rave about his involvement. His grandfather was responsible for breeding two new breeds of beef cattle in Australia, so the kid comes with some credentials in the industry. It is just that there is a mismatch between what some employers expect from a qualification and what the trainers following this national training package agree on.

Mr SECKER—He is not a Gadge, is he?

Mr Harris—No.

Mr SECKER—Who is his grandfather?

Mr Harris—He is James Pesaturo.

Mr SECKER—Okay, he brought the key Angus over—

Mr Harris—Mandalong Specials and Square Metres, or something like that.

Mr SECKER—Yes.

Mr WINDSOR—One thing you said a moment ago was that people did not understand what the certain levels would deliver in competency. From my perspective, therein lies one of the great problems. There is so much jargon out there now about training and competency levels, even when it gets down to the construction of the UAI, and most people do not understand what is being talked about.

Mr Harris—That is right, and one of the problems that exist is that you end up with a bureaucracy that self-feeds; to generate more positions, it often creates new terminologies. If you can call something old a new name then you might be able to get funding for it and run with it—and perhaps even create a new division if you are successful. I guess in education—and this is purely a personal view and certainly not the view of the national association—we tend to see things go in cycles. Outcomes will come in as a major focus, and then over a few years they disappear and we go back to a particular set of standards, and then we will go to norm referencing, and then they will rename it something else and each time people get confused—not only the teachers, but the students and the community.

Mr WINDSOR—It is a pretty nasty cycle when the trainee, in some cases, does not understand where he is going to end up, and the person who wants to utilise his skills does not know what he has got.

Mr Harris—That is exactly right. With respect to the private submission made by the two gentlemen from TAFE, to me that clearly demonstrated the lack of understanding even on a level within the education industry about what sorts of standards kids should have when they are a pre-apprentice. Pre-apprentice is just that: it is an AQF II. They can do a few things; they cannot do them without supervision. They have to be supervised, and yet tradespeople, if they see someone coming up with a certificate II, expect them to be able to lay a course of bricks around a corner and make an arch.

When I took the committee on their tour of the school farm this morning we stopped at a shearing shed. There are various levels in shearing. To be able to shear five sheep under supervision is 'shear sheep to novice level', whereas to be able to shear 250 sheep a day is a certificate IV. If a student came out and went to a farmer and said, 'Look, I've got a certificate II in shearing,' then a lot of farmers would expect that they are actually pretty handy shearers when in fact they are really only novices and they need supervision.

I guess that permeates the whole industry, and unfortunately it can lead to some of the problems we have seen—for example that terrible case a few years ago in the Northern Territory when there were two young lads placed on a farm, and they went to go to another one and their car broke down. That, to me, is because of this mismatch and lack of understanding about levels of competency.

Competency based training, where you mark students off, is a great idea. If they already have those competencies then you just tick them off and you move on to others. You are not locked into doing a two- or three-year apprenticeship. If you already know 1½ years worth of work and you can be marked off for it, mark it off. Then you can complete the rest of it in six months and go and do something else. I see some great advantages in competency based assessment, provided all parties are aware of what the level of competency is at which they have been

assessed and as long as it is not a system which could be perverted because of requirements to get a certain amount of fodder over the wall.

CHAIR—Thank you very much. I thank you for the quality of the contribution that you have made today, Mr Harris. It has been very good evidence for the committee. It is certainly going to be evidence that the committee will use very constructively in its deliberations once it gets to the report stage and the recommendation stage.

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

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

Committee adjourned at 5.01 pm