COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

SENATE

EMPLOYMENT, WORKPLACE RELATIONS AND EDUCATION REFERENCES COMMITTEE

Reference: Current and future skills needs

TUESDAY, 10 JUNE 2003

DARWIN

BY AUTHORITY OF THE SENATE

INTERNET

The Proof and Official Hansard transcripts of Senate committee hearings, some House of Representatives committee hearings and some joint committee hearings are available on the Internet. Some House of Representatives committees and some joint committees make available only Official Hansard transcripts.

The Internet address is: **http://www.aph.gov.au/hansard**

To search the parliamentary database, go to: **http://search.aph.gov.au**

SENATE

EMPLOYMENT, WORKPLACE RELATIONS AND EDUCATION

REFERENCES COMMITTEE

Tuesday, 10 June 2003

Members: Senator George Campbell *(Chair)*, Senator Tierney *(Deputy Chair*), Senators Barnett, Carr, Crossin and Stott Despoja

Substitute members: Senator Allison for Senator Stott Despoja

Participating members: Senators Abetz, Boswell, Buckland, Chapman, Cherry, Jacinta Collins, Coonan, Denman, Eggleston, Chris Evans, Faulkner, Ferguson, Ferris, Forshaw, Harradine, Harris, Hutchins, Johnston, Knowles, Lees, Lightfoot, Ludwig, Mason, McGauran, McLucas, Murphy, Nettle, Payne, Santoro, Sherry, Stephens, Watson and Webber

Senators in attendance: Senators Allison, Barnett, George Campbell, Crossin and Tierney

Terms of reference for the inquiry:

To inquire into and report on:

a) areas of skills shortage and labour demand in different areas and locations, with particular emphasis on projecting future skills requirements;

b) the effectiveness of current Commonwealth, state and territory education, training and employment policies, and programs and mechanisms for meeting current and future skills needs, and any recommended improvements;

c) the effectiveness of industry strategies to meet current and emerging skill needs;

d) the performance and capacity of Job Network to match skills availability with labour-market needs on a regional basis and the need for improvements;

e) strategies to anticipate the vocational education and training needs flowing from industry restructuring and redundancies, and any recommended improvements; and

f) consultation arrangements with industry, unions and the community on labour-market trends and skills demand in particular, and any recommended appropriate changes.

WITNESSES

Committee met at 4.43 p.m.

CULLY, Mr Mark Robert, General Manager, National Centre for Vocational Education Research

KARMEL, Dr Tom, Managing Director, National Centre for Vocational Education Research

CHAIR—I declare open this public hearing of the Senate Employment, Workplace Relations and Education References Committee. On 23 October 2002 the Senate referred to the committee an inquiry into current and future skills needs. While knowledge and skills are the key to a secure and prosperous future for individuals, communities and the nation, there are concerns about the low level of public and private investment in the development of our skills base. There is concern about the low number of highly skilled full-time jobs that are being created and which are being lost, especially in some regional areas.

Questions arise as to whether our current training policies and programs adequately support the development of a high skills base and our culture and practice of lifelong learning. Unemployment remains unacceptably high, particularly in some regions and communities, yet many employers claim to have difficulty in recruiting appropriately skilled people. At the same time there are many training providers, employers and communities exploring innovative approaches to identifying and meeting their current and future skill needs. The committee would like to learn from these successful models.

The committee has also identified other concerns, including the effectiveness of current training incentives and training policies, whether skills programs can support a flexible labour market, the capacity of Job Network and other parts of the employment system to match skills availability with labour market needs, and the adequacy of current consultation arrangements. The committee looks forward to consulting a wide range of industry representatives, training providers, and government, union and community representatives.

Before we commence taking evidence today I wish to state for the record that all witnesses appearing before the committee are protected by parliamentary privilege with respect to the evidence provided. Parliamentary privilege refers to special rights and immunities attached to the parliament or its members and others necessary for the discharge of the parliamentary functions without obstruction and fear of prosecution. Any act by any person which operates to the disadvantage of a witness on account of evidence given before the Senate or any of its committees is treated as a breach of privilege. I welcome any observers to this public hearing.

I now welcome the witnesses from the National Centre for Vocational Education Research. The committee prefers all evidence to be given in public, although the committee will also consider any requests for all or part of the evidence to be given in camera. I point out that such evidence may subsequently be made public by order of the Senate. The committee has before it a copy of your report, which is submission 66. Are there any changes that you wish to make to the submission?

Dr Karmel—There are no changes.

CHAIR—I now invite you to make a brief opening statement.

Dr Karmel—I would just like to say a couple of things. First, the whole nexus between the labour market and the training system is very complicated and has gone through major changes over the last 10 to 20 years, and no doubt it will go through major changes over the next 10 or 20 years. It is very difficult to look into the future and say exactly how that is going to happen. There is no one way that our society can meet its skills needs. What will happen will depend on the labour market, technology, the parameters of the training system and what happens with the rest of the world.

The first point that I would like to make is that the changes that we have seen in the industry and occupation structure over recent decades have really been very major. There have also been very major changes to the education system. We have seen very large increases in university participation, with the numbers of students going up very quickly. The numbers of students in the vocational education and training system have gone up quite remarkably. So we have seen very large changes. On the whole, my observation would be that the system has worked pretty well in meeting the skills needs. We do see from time to time some skills shortages, but often these are of a cyclical nature or because of particular problems in an occupation. Several years ago there was a skills shortage in the IT industry quite noticeably, but this has now disappeared; it was a cyclical phenomenon. So that is one example.

That is all I want to say as an opening statement. I would point you to a couple of the tables in our submission which I think are particularly interesting. I have talked about the occupational change table. If you look at table 1, you will see how much the occupational structure has changed. We have seen professionals grow particularly rapidly; associate professionals also quite quickly. Some groups have decreased their share of employment, such as tradespersons. That shows the way that the economy has been changing over those years.

The other particularly interesting table is table 12, which looks at the numbers of apprentices and trainees. What we have done in that particular table is to express the numbers of apprentices and trainees as a proportion of people working in those occupations. There are a number of quite interesting things in that. The first thing I would point you to is that the proportion for tradespersons is around 11 per cent, so the training rate in that particular area is very high indeed. To some extent that reflects the nature of that occupation: that persons trained as tradespersons do not necessarily work in the industry for a long time, so there is a lot of turnover in that industry rather than that training rate reflecting a large increase in that occupation.

The other thing that is quite interesting is how much the system has changed. If we look at some of the figures for intermediate service and clerical workers or intermediate production workers, we can see how the apprentice and traineeship system has expanded to cover occupations that were not traditionally covered. There have been some major changes in that part of the training system.

CHAIR—Dr Karmel, just on that table, what do you define as intermediate production?

Mr Cully—It is essentially the old notion of a semiskilled operative.

CHAIR—So that increase in figures could be related to the fact that you now have AQF1-2 training systems there which you did not have previously; it may not necessarily denote that there has been an increase in the number of people engaged in that area?

Dr Karmel—That is exactly right, there has been an increase in the amount of training in those areas. You can see that there are a number of areas where that has happened: retail would be another example and the hospitality industry. You have seen the introduction of formal training into those areas.

I was also going to point you to table 15, which is more or less the same information but cut more finely. We can see that the actual training rates in some occupations are really very high indeed. For automotive tradespersons, the rate has increased from 13 per cent to around 15 per cent. That is a very high training rate. That is not an area where there is expanding employment, and indeed in some senses there is probably declining employment because of technological change in the ways cars are serviced and so on. So there is a fair amount of variation there but there are some very high training rates indeed. Many of those high training rates reflect what is happening in the occupation rather than in the training system.

CHAIR—Would those figures be exclusive of plant producers, or would they include plant producers such as Holden and Ford?

Dr Karmel—I think automotive tradespersons are basically car mechanics, although I would have to check the detail to be sure of that.

CHAIR—So they would be the—

Dr Karmel—I do not think so, no.

Mr Cully—It is limited to people doing an apprenticeship or traineeship which is classified at AQF3, certificate III or above.

CHAIR—Yes, but they would be people mainly employed in garages, not directly employed in plant producers such as Holden and Ford?

Mr Cully—My point is that they are not assemblers.

CHAIR—Yes, but you would also have tradespersons employed in those automotive plants?

Mr Cully—Yes.

Dr Karmel—Yes, but they typically would not be automotive tradespersons.

CHAIR—Are you saying that they would be or they would not be?

Dr Karmel—They typically would not be automotive tradespersons; they would be presumably fitters and turners, electrical workers and so on. They were the main things I wanted to draw your attention to.

Senator CROSSIN—Dr Karmel, you said just then that sometimes it is a reflection of what is happening in the occupation rather than in the training system. Wouldn't changes in the occupation require further training? Isn't the current training system structured to encourage people—and employers for that matter—to get certificate I and certificate II levels rather than more advanced training?

Dr Karmel—I do not think the incentive system works in that way. In fact, the increases that we have seen in recent times have been at the higher levels rather than at the lower levels. But I think there is a difference between the level of the qualification and the need for ongoing training. For example, if you are a motor mechanic now, you will need ongoing training once you have had your entry level training merely because the cars keep changing. Typically, the manufacturers will supply much of that training.

Senator CROSSIN—Where is the evidence to show that the increase has been in the higher levels?

Dr Karmel—We produce statistics on a quarterly basis. We can provide those to you.

Senator CROSSIN—I thought that the last time I had seen those there was an explosion of numbers at the certificate I and II levels rather than at, say, the certificate IV or diploma levels.

Dr Karmel—My recollection was that the recent figures had shown an increase in the higher level ones, but I can certainly look at that if you wish me to.

Senator CROSSIN—To what degree of accuracy is one able to predict a skills shortage, given that your tables show us and that at any point in time there might be a whole lot of people who, say, are qualified to work in the trades area but are not employed? They might be choosing to not exercise those skills, so you might have a database of the number of people who are actually trained or skilled in that particular area. How does that translate then into knowing whether or not there is a skills shortage, and is there always a fair degree of inaccuracy in that sort of prediction?

Dr Karmel—That is exactly right. The notion of a skills shortage is really in a particular situation where there are sufficient people who are willing to work under the wages and conditions that employers are offering them at that time. So there are many trades where there will be many people with the qualifications who no longer work in those trades. Sometimes it is because working conditions or wages do not attract them. In some cases it would be time of life: some occupations are more suitable for younger people than for older people. But you are quite right: it is very difficult to predict a skills shortage because there are so many factors that come into play.

Senator CROSSIN—What is the predominant indicator when a statement is made?

Dr Karmel—The indicators that one tends to look at for skills shortages are job vacancy rates, and you look at what is happening to wages.

Senator CROSSIN—What do you mean?

Dr Karmel—If wages go up very rapidly, for example, then that is indicative of a shortage. So, for example, looking at the IT situation with the year 2K boom, there would have been some programmers making some very handsome money, but once the boom is over then the wages tend to go down.

Mr Cully—The indicators can also be very geographically specific. Just to pick up on another example, I was doing some interviewing recently. In Adelaide Holden has put on a third shift, and all of a sudden toolmakers were a very scarce supply in Adelaide. Holden was paying very generous rates and attracting all of these people, and the other companies were not able to. I dare say there are a lot of toolmakers in Melbourne, Sydney and Brisbane who could have relocated to Adelaide, but one never knows how long this shortage of toolmakers will last.

CHAIR—The reality is there is a general shortage of toolmakers, not just confined to Adelaide and to General Motors Holden's third shift. All over the country there is a general shortage. Companies in New South Wales are setting up shelf companies in order to train toolmakers because those companies cannot get trained toolmakers through the system. In table 13 I think those figures with respect to mechanical and fabrication engineering tradespersons are quite indicative of the fact that there has been a significant decline in that area and that there are real skills shortages in that area. In fact, it is argued that the real skill shortages are only in that metal trades area and in manufacturing and that the skills shortages in other areas are very much what you say they are—cyclical—and that people will catch up, but in those areas of metal trades and manufacturing the shortages are real. Those figures tend to be indicative of that. That is also because there has been structural change in the industry. At the front of your submission is the table on the shift to services in those areas. In fact, there has been a shift of those traditional manufacturing jobs into the services sector, those jobs now defined as services rather than manufacturing or metal trades. That is an unidentifiable group at the moment that you cannot put a figure on.

Dr Karmel—Yes. Even if manufacturing is declining overall, that is not to say there are not some parts that are growing quite quickly.

CHAIR—That is right. But the metal tradespeople will be at that higher level that you are talking about. So, with growth in the higher level, some of those people may be that step above tradesman level essentially, particularly in the services area.

Senator TIERNEY—A rather fascinating statistic is the two per cent rise in the cognitive requirements of most jobs. Over what period is that measured and how on earth do you measure that?

Mr Cully—I had better answer that seeing I am responsible for that statistic. It must be quoted in here if you have pulled it out. The United States has a system whereby it classifies occupations. It goes through a job evaluation exercise to measure the amount of technical skills, people relational skills and also problem-solving or cognitive skills that are needed to conduct a particular job. I do not know whether a fellow called Nick Pappas has appeared before you. He is based at Victoria University of Technology, or at least was a couple of years ago. I have taken some work he has done which uses this US data and matched it to Australian occupational data and added it all up. The net effect is that there was a two per cent rise in the cognitive skill measure. That is an average which reflects the fact that there has been a very large rise in

professional jobs, which do require a great deal of cognitive skill; a very substantial rise in lower level service jobs, which by and large tend not to; and this what you might call hollowing out in the middle of the occupational-skill distribution.

Senator TIERNEY—The traditional trades areas.

Mr Cully—The traditional trades area, but also in that advanced clerical and service area.

Senator TIERNEY—So you have applied his methodology to the Australian work force?

Mr Cully—That is right. The report that NCVR have published, which is referenced in here, called *Pathways to knowledge work* goes through that in some detail.

Senator TIERNEY—Over what period is that two per cent?

Mr Cully—1986 to 2001.

Senator TIERNEY—The pathways paper notes there has been a fair level of skills wastage, particularly amongst women. Could you elaborate a little further on what that actually means or why particularly women? What are the factors occurring there?

Mr Cully—If I have used the term 'skills wastage' in that particular paper, I will explain what I meant. I was looking at the extent to which people who had acquired vocational qualifications were able to work in what, for want of a better term, one might call a 'knowledge job'. I found that particularly women with basic vocational qualifications spent most of their lives not working in a knowledge job. That was also somewhat the case for women with higher level vocational qualifications. But generally most of the people who had the higher level vocational qualifications, which I guess is something akin to a traditional apprenticeship, ended up in these 'knowledge jobs', which were again defined by the occupational classification.

Senator TIERNEY—In this series of hearings we have discovered a fair bit of controversy around the country relating to competency based training—claims that it is too atomistic, that it is not providing long-term skills in a rapidly changing economy where people might have to change jobs five or six times during a lifetime. Could you comment on competency based training and perhaps the relationships between focus on that in recent times, over the last 15 to 20 years, and perhaps more generic skills that might be longer lasting in terms of job changes throughout a lifetime career?

Dr Karmel—This is pretty difficult to comment on. Obviously the emphasis in the training packages over the last five or so years has been on training people with skills that are directly required by industry. Those skills are being labelled 'competencies', but we have found a very large degree of interest in this whole area of generic skills. We are in fact doing some work on that at the moment. We will be running some public forums later in the year. There is no argument that generic skills are important, and there seems to be a view that they are perhaps becoming more important rather than less important.

There may be arguments about how you teach those and whether you can teach generic skills separately from the other sorts of skills—the extent to which you really should try to embed

those generic skills in the way that people learn the other competencies. So I think it is really just a matter of degree. I do not think there is any debate about how important generic skills are. There is debate about the extent to which some of the competencies address those generic skills, but from my perspective sometimes the debate is a little metaphysical. These issues are really very difficult to separate, and often I think there are arguments about language more than about anything else.

CHAIR—There is also debate, Dr Karmel, about who should provide that training and those generic skills.

Dr Karmel—Yes, and there are issues about the extent to which you can learn those through your education, how much you really need to learn those on the job and the extent to which some generic skills cannot be learnt out of context.

Senator TIERNEY—Do you have a general view? Do you come down on any particular side in that debate?

Dr Karmel—I guess this is a personal view, but I certainly have the view that generic skills are really important and that, because all jobs are changing so quickly, in any occupation if you have the skills you must have the understanding behind those skills to be able to adjust as the occupation adjusts. That is my view.

Senator TIERNEY—Earlier in the forum someone was asked to comment on the way we approach vocational education in schools. More or less the broad thrust of the comment was, 'How do we know what people will be doing in five years time, 10 years time or 20 years time?'

Dr Karmel—Yes, and that emphasises some of the basic educational values that you need to learn any individual competency.

Senator TIERNEY—One of the most disturbing things we have found going around the country is that the generic skills are tending to fall down probably around the years 7, 8 and 9 level—what different years are called varies across the states, but the junior secondary level. Evidence in a number of states suggests that the real problem is probably at the point of moving people into trades with a sufficient level of generic competencies. Has any of your work gone back to that level? I know you are dealing with the vocational training level, but it seems to be a precursor to that.

Dr Karmel—Certainly most of the work that we have done is on the training that happens in the post-compulsory years. I am aware of the sorts of things that you are eluding to.

Senator TIERNEY—It then kicks on to create a problem for you in the post-compulsory years, doesn't it? A lot of trades need a mathematics base and of course all trades need a good English base. It gets back to the basic questions on literacy and numeracy levels.

Dr Karmel—Yes.

Senator TIERNEY—Which then go right back into the school system.

Dr Karmel—I do not really have anything to say. It is really outside my area of expertise.

Senator TIERNEY—It is just one thing we are grappling with. We will be having schools people before us tomorrow, so we will put that to them as well.

Senator ALLISON—Can I comment on something I think is fascinating, and that is your table A3, which shows the number of apprentices and trainees in training from 1995 to 2002. Firstly, what does 'two digit ASCO level' mean?

Dr Karmel—ASCO is the occupational classification used by the Bureau of Statistics.

Senator ALLISON—And 'two digit'?

Dr Karmel—The 'two digit' is finer than the 'one digit'. Basically the 'two digit' lists all the occupations here. There are I think 50 or 60 of the two digit ones compared—

Senator ALLISON—So it relates to just the occupation—

Dr Karmel—Yes, that is right.

Senator ALLISON—A lot of areas, even as recently as 1995, had no apprentices, and some have grown enormously. Intermediate sales and related workers have gone from having 793 trainees in 1995 to 41,000 in 2002. What can we read into those changes? Are we training sales people when we do not need to, or did they receive their training in a different way in 1995?

Dr Karmel—That is an interesting comment. What we have seen there is an introduction of formalised training into the retail industry. I guess that has been a product of government policy. It really depends whether you thought that individuals were getting sufficient training informally before the more formal qualifications were introduced. But I think there was a view around, and there probably still is, that in some of those service sector occupations the level of service was not very good.

Senator ALLISON—So where do we go in assessing that, apart from looking at the numbers and a general policy thrust? How do you determine whether spending money on these kinds of programs is delivering anything useful?

Dr Karmel—That is a pretty tricky question. The only way that you could make a firm judgment about that is to ask consumers whether they think they are getting better service from salesmen than they used to.

Senator ALLISON—Is anybody doing that?

Dr Karmel—I am not aware of any. I will ask my colleague whether he is aware of any study on that.

Senator ALLISON—They still talk on the phone while you are in the shop, as far as I can see.

Dr Karmel—You should ask those people whether they have done one of these certificates.

Senator CROSSIN—But is that linked to the McDonald's in-house training? Wouldn't these numbers also reflect that?

Dr Karmel—Not that particular number. But you are right, those numbers would be reflected in these figures. That would be one of the hospitality ones.

Mr Cully—It would be included perhaps over the page in the elementary sales workers.

Senator ALLISON—If I can go to another one, 51, secretaries and personal assistants, we had nobody on apprenticeships in 1995, but, by 2002, 3,840 were. Secretaries and personal assistants do not walk into jobs untrained. In fact, we used to have a lot of them and they used to get training in a whole range of different ways.

Dr Karmel—That is right. That reflects the change in the nature of the training system. Before, typically a secretary or personal assistant would have gone to TAFE and got a qualification. The difference with the traineeships is that they are employment contracts; so these are people already in a job.

Senator ALLISON—Which is interesting, because we are also told that a whole lot of professions are moving out of on-the-job training. For example, nurses are now trained principally in universities before doing their work on the job. It would be fascinating to take this table and extend it to some sort of written analysis of what is actually going on in those industries. Is anyone doing that work?

Dr Karmel—I am not aware of anything in particular. The relationship between the training and the work force seems to change all the time. For example, in the medical profession certainly both doctors and nurses are trained at universities but there is a long period of training on the job before people are fully-fledged doctors or nurses.

Senator ALLISON—Where do nurses fit into this scheme of things? Are they under health professionals or health and welfare associate professionals?

Dr Karmel—They would be health professionals, but I do not think there would be very many apprentices or trainees.

Senator ALLISON—There were 1,250 in 2002 and none in 1995, which suggests something other than—

Dr Karmel—These are health professionals, yes. I do not know too much about that particular figure. We would have to scratch beneath the surface to find out exactly what they are doing. But I do not think they would be nurses.

Senator ALLISON—It is hard to imagine who else they are if they were not training in—

Senator CROSSIN—They are not health workers, are they? They are certainly not Aboriginal health workers, because they are not apprentices or trainees.

Dr Karmel—I would be happy to find out some further information on that particular figure if you are interested.

Mr Cully—Physiotherapists.

Senator BARNETT—They could be allied health workers.

Dr Karmel—They could be, that is right.

Senator CROSSIN—But since 1997-98 I notice you have not used the terminology 'new apprentices'. That terminology has changed, hasn't it? The federal government is now collecting figures under a different label to what it was in 1995.

Dr Karmel—The federal government has a program called the New Apprenticeships program, which pays a range of incentives. In the statistics we use more generic terms because names of programs change and programs change over the years. So we collect figures on apprentices and trainees, which are covered by the New Apprenticeships program at the moment.

Senator ALLISON—The new apprenticeships or whatever you call them are all included?

Dr Karmel—Yes, they are in these figures. That is why you see some of these major shifts, because they have been a product of changes in policy.

CHAIR—I do not know how far you dig behind the figures, but it could also be argued that some of these major shifts are attributable to the fact that some of these systems are being used as wage subsidies. A lot of employers put a lot of their staff onto traineeships or new apprenticeships.

Dr Karmel—And then the issue about whether the programs worked is whether they are getting good training out of that training program.

CHAIR—Or whether it is just simply being used as a wage subsidy. There have been examples of some companies putting the whole of their staff on as trainees.

Dr Karmel—Yes.

Senator ALLISON—Cleaners would have to be in that category. In 1995 there were only seven apprenticeships in cleaners' jobs, and there were almost 7,000 in 2002.

Dr Karmel—And clearly they will not be high-level qualifications. They will be AQF certificates I or II.

Senator ALLISON—Since we are in the Northern Territory, have you done breakdowns for Indigenous workers? Do you have any data on that for the committee?

Mr Cully—We do, and we publish them. If you wanted a breakdown, we can customise a table to whatever way you would like it customised. There are roughly 60,000 Indigenous people currently doing an apprenticeship or traineeship.

Senator ALLISON—Chair, that would be useful to the committee.

Senator CROSSIN—They are not all in the Northern Territory, though, are they?

Mr Cully—No, they are not all in the Northern Territory.

Senator CROSSIN—So you can break it down by state and territory and by Indigenous?

Mr Cully—Yes, and by occupation. There are several ways in which we can cut the data to produce tables for you.

Senator ALLISON—Is there further information about the length of those apprenticeships and the funding which they attract? Do you have tables of that?

Dr Karmel—We certainly can provide data on the expected duration of the training, because that is part of the employment contract. We can provide data on the AQF level; that is easy. In terms of the incentive that they attract, I think you would be better off asking DEST for that information. We basically have the numbers, but we do not have the incentive data.

Senator ALLISON—Thank you.

CHAIR—But that will be easy for us to link anyway if we have the AQF qualification.

Dr Karmel—This is a very large database. The issue is how do you want it cut. Obviously we can produce tables a foot high, but that is really not much use.

Senator BARNETT—The data in the submission is very comprehensive, and we appreciate that. All that background information helps us. Has any benchmarking been done vis-à-vis other countries and how Australia rates against perhaps comparable countries like those in the OECD?

Dr Karmel—There are certainly educational indicators that do compare Australia with the OECD countries. The difficulty with those indicators is that every country's training system is really quite different. So it is particularly different to compare, say, our apprentice and traineeship system with those overseas. You can get some crude numbers, but that does not really help you a great deal. For that reason, we are engaged in a project at the moment where we hope to do some detailed work in this area—to really take into account the economic and social context of the countries—to make some sensible comparisons.

Senator BARNETT—So what has been done there or what are you doing at the moment?

Dr Karmel—At the moment we are doing a seven-country study of the trainee systems which will cover not all OECD countries but some of the major ones. We are particularly interested in the United Kingdom and Germany. New Zealand is interesting. We will also look at North America—the US and Canada. Singapore and Japan are interesting to us as well.

Senator BARNETT—Did you mention New Zealand?

Dr Karmel—Yes.

Senator BARNETT—When will that be available?

Dr Karmel—It will be later this year. It is not something that we are just about to finish.

Senator BARNETT—Do you have any feelings as to the outcome of such a study and how we will shape up?

Dr Karmel—I think the feeling is that Australia will shape up pretty well.

Senator BARNETT—I suppose Tasmania, where I come from, is not dissimilar to the Northern Territory in terms of microbusiness and small business and providing training for employees in those sorts of businesses. Are there any solutions as to how to get to those people? They often miss out, whereas big business seems to benefit from the programs designed by government.

Dr Karmel—It is certainly the case that the larger businesses use the training in general more than the small businesses. Getting into the small businesses seems to be a long-term problem. Obviously the apprenticeship system/the group training system must have helped a fair bit to widen the scope. But it is a long-term problem.

Senator BARNETT—Can you make any suggestions about how we can address the problem to try to make it easier for small business and microbusiness to access training?

Dr Karmel—The research that we have done tends to suggest that for small businesses you really need to have a training system that is very flexible and tailors courses for those small businesses. One of the problems with small businesses is that they do not have much time to be able to take off from work to get the training.

Senator BARNETT—Yes, but that means on-the-job training, doesn't it?

Dr Karmel—It means on-the-job training and it means training in respect of things that the business has to do. For example, I think we are about to publish something—or we have just published it—which looks at how the GST implementation was used for training small businesses. That is an example of providing something that is very concrete to help them actually implement a system. Then you can get the training across to them.

Senator BARNETT—Are we improving our method of getting this training to far-flung places in rural and regional communities?

Dr Karmel—The TAFE system is actually very widespread, more so than certainly the higher education sector, so it has a very large footprint. That is not so say that TAFEs provide everything in every place. Clearly they do not. Online learning is helping to some extent, but it is not a complete substitute, from what we have seen.

Senator BARNETT—What has the uptake been like with online learning?

Dr Karmel—It is very difficult to figure that out because in general online learning is given in a mixed mode. That is one of the strategies used, so it is hard to give you definite figures on

that. But we have learned about online learning that students still like contact with their teachers. Sometimes that can be done online if the technology is sophisticated enough but it is usually, I think, seen as a complement rather than complete substitute.

Senator BARNETT—With regard to TAFE in the different states and territories around the country, have you done any analysis of what state laws apply to their quarantining certain training regimes, for example for the agricultural sector, because they need economies of scale to be able to provide that training? Have you done any analysis of what areas are quarantined in different states by the state governments to allow TAFE to provide that training? Has that analysis been done?

Dr Karmel—You are talking about user choice?

Senator BARNETT—Yes.

Dr Karmel—Quarantining from that?

Senator BARNETT—Yes. That concern certainly was expressed in Tasmania by Northern Group Training.

Dr Karmel—I am not aware of any work that we have done in that area. I will check for you, but I am not aware of anything.

Senator BARNETT—Do you have a view as to the appropriateness of quarantining so that—

Dr Karmel—I think it is one of these difficult things. Obviously we do not have a free market in the training market and some things are rather more expensive to train in than others. So I can see that in some cases you do need economies of scale in order to be able to deliver it, otherwise it becomes uneconomic for the provider.

Senator BARNETT—But, on the other hand, they become cumbersome, a little top heavy or whatever and they do not meet the needs of the people, and that is when you do not have competition.

Dr Karmel—Yes, that is the tension.

CHAIR—Dr Karmel, has there been any analysis of the impact of either the carrot or the stick approach in terms of training? Have you looked at the two approaches and which one is more effective in achieving real outcomes?

Dr Karmel—A fair amount of work has been done. There was obviously an evaluation of the training guarantee, which I guess was the stick. We did not do that; the Commonwealth did that. You could chase that up with them.

CHAIR—I am also wondering whether there has been any empirical evidence internationally in these areas as well.

Dr Karmel—I am not aware of any offhand, but I could check for you. We have done some work on the effect of incentives for the apprenticeship system. We did that for DEST. I could check with them whether they would be happy for us to give that to you or, alternatively, you might like to ask them for that.

CHAIR—Could you do that and we will do the other.

Dr Karmel—Yes, we will follow that up.

Mr Cully—Picking up on Tom's earlier comment about what other countries do and the need for context, France and Germany are very interesting contrasts. They border one another. France has, as you probably know, a levy system, which is regarded I think by most observers as being largely dysfunctional. The German system, which has incredibly high rates of apprenticeship, is largely unregulated. It is unregulated by statute. It is regulated by collective bargaining. It has a curious feature, which I am sure we probably would not want to encourage, in that apprentice wages are about a third of the rate of an adult tradesperson.

CHAIR—They also have a long history of involvement in that engineering discipline.

Mr Cully—That is right.

Dr Karmel—My understanding of the dual sector is that there are a large number of retail apprentices, for example. I think it is a three-year apprenticeship—a very long period of training. But many of these people do not end up in the retail industry. So it seems to have a large element of general training as well as the specific training.

CHAIR—But to what extent do employers generally make a contribution to that training agenda?

Mr Cully—In Germany?

CHAIR—In the broad, yes. You say they have a levy system in France.

Mr Cully—Yes.

CHAIR—How do employers contribute to the training agenda in Germany?

Mr Cully—It is regarded that most employers, notwithstanding the fact that they have very low apprentice wages, lose money over the lifetime of an apprenticeship in terms of looking at the net effect of the wages they pay out relative to the amount of product that the apprentice generates. I think about 40 per cent of employers generally participate, but they tend to be the medium to large employers. So they have the same issues in Germany relating to participation by small microbusinesses.

CHAIR—But the structure of their industry is better so that they support many more large firms with the capacity to train.

Mr Cully—Yes, but it is a social convention.

Dr Karmel—It seems to be a cultural thing.

CHAIR—I think it is very much a cultural thing as far as they are concerned. Have you looked at the impact of both short-term incentives and long-term incentives?

Dr Karmel—I am certainly aware of the apprenticeship incentives and what we have done there. I cannot recall anything else. Do you have something in mind?

CHAIR—The argument essentially at the moment is that the amount of incentive for short-term type training, traineeships et cetera, compared to the incentive for apprenticeship training is skewing the system in favour of short-termism rather than longer term training type arrangements. Therefore the focus is on traineeships because you can push through two, three, maybe four trainees in the same time you can push through an apprentice, virtually, and overall the relative outcome at the end of the day is greater, despite the fact that it is half of what you get, I think, for an apprentice. It is roughly $4,000 for an apprenticeship now.

Dr Karmel—I would have to go back to our figures, but I do not think there is any reason to believe there has been a substitution between the longer term and the short term. The whole system has expanded quite remarkably and I think I would be right in saying that the longer term training, whether or not those being trained are called apprentices, has been expanding but probably not at the same rate.

CHAIR—There seems to be a skewing between the traditional apprentice, the sort of three- to four-year period—

Dr Karmel—I guess what I am saying is that I do not think it has been at the expense of the traditional apprentices; that the growth has been in this other part but not really at the expense of those traditional apprentices. So the system has expanded, but one part has expanded faster than the other.

CHAIR—But in some of these figures you show there has been a decline in some of the traditional apprenticeship areas.

Dr Karmel—There might be in a couple of the examples, but generally I do not think that is the case.

CHAIR—Certainly metals engineering and fabrication—

Dr Karmel—That is the one, but many of the others have been expanding.

CHAIR—Yes, on those figures, although there seems to be some dispute about the veracity of some of the figures. Have you undertaken any research into the length of time it has taken to complete a traditional trade since the introduction of training packages and competency based training, and has there been a reduction overall in the time frame?

Dr Karmel—I will have to take that question on notice. We may have done a little on that, but I cannot answer that off the top of my head.

Mr Cully—I think by definition there probably has been, because the system now allows the flexibility for apprenticeships to be completed in a shorter time than the traditional four years. So almost by definition there are now traditional apprenticeships which are being completed earlier than the conventional four-year period.

CHAIR—I think that is true, except we have heard some evidence that some employers are still maintaining the four-year time frame, irrespective of the competency based component of the training agenda now.

Mr Cully—That is right.

CHAIR—It would be interesting to see any figures you have on that.

Dr Karmel—Also a further complexity is that there are now some part-time apprentices, who do tend to take a very long time.

CHAIR—Yes, exactly. Finally, you mention in your paper the issue about the mix of occupational skills and employability skills. There seems to be confusion of the terminology. We talk about it in terms of more generic or core skills. There have been some concerns in recent times that in terms of the apprenticeship system, which is essentially being driven by the move to New Apprenticeships or traineeships, in fact many employers are engaging in industry or company specific type training and the core or generic skills of the trade are not being provided. As a consequence, instead of getting tradespeople coming out at the end of the day we are getting essentially semiskilled workers who are, to use an example, General Motors-Holden fitters or Ford fitters; whereas in the past we would have had fitters who had the generic or core skills to be able to perform the work in the variety of companies available to them. That is a different issue to the employability skills that we are talking about in terms of the use of information technology and the ability to work in teams et cetera.

Has any research been done in this area? Is there any evidence of this? It seems to be a very strong message coming through in some areas. It has been put to us in the housing construction industry, I think, that they are seeking to break down the bricklaying trade into separate components because they think they should have a trade now to cover people who lay pavers in driveways as opposed to that being a bricklayer's job. So they are looking to sort of semiskill, I suppose, the trade down. The concern there, Dr Karmel, is that that tends to be a total reversal of what the whole competency based training agenda is about, which is about opening up the breadth and range of skills and having much more highly skilled people out there. I just wonder what research has been done in that area, if any, or whether you plan to do any research in that area.

Dr Karmel—Nothing comes to mind, but I will take that on notice. We have a very large research database, and I will get our people to query that. You would have thought that the whole idea of the training packages was to provide things for the industry rather than for individual manufacturers. But you are saying the interpretation has gone in a particular way.

CHAIR—I think it is a combination of the training packages and the modular training framework where some employers are picking the eyes out of the modules to simply suit them. So they are getting their tradesperson or their skilled person without having to go through the

full 40 modules. Essentially my concern is that, if there is an incentive, it ought to be payable only if they have done the full 40 modules and qualified.

Dr Karmel—I will get my people to have a look. As I said, we have this very large research database which we will have a look at. But we also have a huge amount of data down to the actual courses/modules that people have done. So it might be possible to do a piece of analysis which would go some way to answering your question.

CHAIR—If there is data in that area it would be interesting to make that comparison; thank you. I think that concludes the questions. Thank you, Dr Karmel and Mr Cully.

Committee adjourned at 5.37 p.m.