ECONOMICS AND INDUSTRY STANDING COMMITTEE

INQUIRY INTO TECHNOLOGICAL AND SERVICE INNOVATION IN WESTERN AUSTRALIA

TRANSCRIPT OF EVIDENCE TAKEN AT PERTH WEDNESDAY, 6 APRIL 2016

SESSION TWO

Members

Mr I.C. Blayney (Chair) Mr F.M. Logan (Deputy Chair) Mr P.C. Tinley Mr J. Norberger Mr T.K. Waldron

Hearing commenced at 10.10 am

Mr SIMON WALKER Executive Director, Policy, Planning and Innovation, Department of Training and Workforce Development, examined:

Mr GARY FITZGERALD

Director, State Workforce Planning, Department of Training and Workforce Development, examined:

The CHAIR: On behalf of the Economics and Industry Standing Committee, I would like to thank you for your appearance before us here today. The purpose of this hearing is to assist the committee in gathering evidence for its inquiry into technological and service innovation in Western Australia. You have been provided with a copy of the committee's terms of reference. At this stage I would like to introduce myself and the other members of the committee here today. I am the chair, Ian Blayney; with me is the deputy chair—he is absent at the moment; he will be back in a minute—Hon Fran Logan; and other committee is a committee of the Legislative Assembly of the Parliament of Western Australia. This hearing is a formal procedure of the Parliament and therefore commands the same respect as is given to the proceedings in the house itself. Even though the committee is not asking witnesses to provide evidence on oath or affirmation, it is important that you understand that any deliberate misleading of the committee may be regarded as a contempt of the Parliament. This is a public hearing and Hansard is making a transcript of the proceedings for the public record. If you refer to any documents during your evidence, it would assist Hansard if you would provide the full title for the record.

Before we proceed to the inquiry-specific questions we have for you today, I need to ask you the following: have you completed the "Details of Witness" form?

The Witnesses: Yes.

The CHAIR: Do you understand the notes at the bottom of the form about giving evidence to a parliamentary committee?

The Witnesses: Yes.

The CHAIR: Did you receive and read the information for witnesses briefing sheet provided with the "Details of Witness" form?

The Witnesses: Yes.

The CHAIR: Do you have any questions in relation to being a witness at today's hearing?

The Witnesses: No.

The CHAIR: Before we ask you any questions, do you have an opening statement?

The Witnesses: No.

Mr J. NORBERGER: Gentleman, just quickly for my benefit, I know that the training aspect of your portfolio is obviously limited to VET; right?

Mr Walker: Yes.

Mr J. NORBERGER: Is the workforce development aspect of the title of the department equally limited to workforce development within the VET sector or do you look more holistically at

workforce development irrespective of what the education or training or development requirements might be?

Mr Walker: In the broad, workforce development is wider than VET, and certainly some of our modelling and research will necessarily extend into higher education in particular, and potentially make some reference to school education, so I could possibly talk a little bit about some of that work which is relevant to your inquiry, but it does take into account, for instance, the supply of graduates and higher education and the nature of the qualifications people will need into the future.

Mr F.M. LOGAN: In terms of your analysis so far of changes in the economy, what do you see are the skill sets that will be in demand that TAFE will have to respond to?

Mr Walker: There are different horizons for this. We are just about to publish under the State Training Board a report that looks out to 2030. That is looking at the nature of the occupations that will be needed into the future. It is a parallel piece of work for WA that was already done nationally under the old Skills Australia auspices. That shows quite a significant shift. It is based on a number of economic scenarios, but there is some commonality within those scenarios. It looks in particular at the profile of the educational needs of the working-age population in, say, 20 years' time, which are quite different from what they are today.

Mr F.M. LOGAN: What type of skills are we talking about that have been identified?

Mr Walker: If you like, higher order skills. I will preface that by saying there is still a need particularly for technical and trade skills—that is not likely to go away—but you are necessarily seeing a long-term shift away from semi, low and unskilled jobs through to more tertiary-type jobs into the future. So if you look at the supply of education, it has a greater emphasis on higher education qualifications, away from certainly unskilled and lower skilled VET qualifications, but VET still features.

Mr F.M. LOGAN: If that is what the modelling is saying, how will TAFE respond to that, given the fact that TAFE is set up for lower level to trade and para-professional training?

Mr Walker: TAFE will still have a role certainly because of the diplomas and advanced diplomas, so that is in that sort of range, I suppose, into the undergraduate space. As we can see in the modelling, technical and trade workers are still a very strong feature of what we need in WA's economy. They will still have a role in that as well. The profile—if you like, the mix—of students that might be doing, say, lower level certificates through to higher level diplomas might shift. In fact, we would expect it to shift. Although it is more a government policy decision, the role of TAFE and other VET providers in higher education is a sort of an emerging issue. There is a little bit of that going on already in the TAFEs.

The CHAIR: I have some questions about the industry-linked training councils. I understand there are 10 of those: They provide you with advice and help prepare the industry workforce development plans; is that right?

Mr Walker: Yes, that is right.

The CHAIR: How do you identify which training councils to work with?

Mr Walker: Under our legislation, the State Training Board recognises bodies for the purposes of providing advice for those industry sectors. We have had industry advisory bodies in some form or another certainly in my lifetime in VET, so that is 20 years, and they occasionally reconfigure themselves, I suppose, but, by and large, they are much the same as they have been for some time. We go through a process—we are going through one now—of re-recognising bodies. We have a couple of them we are looking to merge, for example. We have got a couple of sectors, just as one example, local government, where it would make more sense to actually recognise the local government authority rather than a training council to act on their behalf. They tend to, if you like, bring themselves together, so they will be representative of, say, the automotive sector. And then

between the board's recognition arrangements and our purchasing arrangements for those services, there might be something on the margin to configure the training councils to represent sectors, and we get down to quite a level of detail that shows that the coverage through the Australian and New Zealand Standard Classification of Occupations very clearly identifies what their coverage is.

The CHAIR: What input does the department have in the preparation of industry workforce development plans?

Mr Walker: Primarily a facilitation role. We provide data services as well to whoever needs it. I think, Gary, you are probably better placed to describe the architecture of the alliances and the plans as they come out.

Mr Fitzgerald: As Simon said, our role is facilitation. We purchase the service from the training council, so we expect them to provide us with a range of information—for instance, some contextual information about their industry, where their industry is heading into the future, what are the major issues that industry is facing—then working towards what are the major implications from a workforce perspective, and then that trickles down to the response from their perspective that they believe we should be looking at from a training and an education perspective.

The CHAIR: Do you take demographics into account when you do that?

Mr Fitzgerald: Sure.

The CHAIR: And do you publish the information that comes from the industry training council?

Mr Fitzgerald: As part of our contractual arrangements we ask them to publish it. So, that is publicly available.

Mr F.M. LOGAN: So all 10 industry councils are contracted at the moment; they are all up and running and working.

Mr Fitzgerald: That is correct.

Mr F.M. LOGAN: Why does the department purchase that information off them? Why is that not provided by the council to the department?

Mr Walker: For free, you mean?

Mr F.M. LOGAN: Sure. They are getting a public service to the employers and to the industry. Why are you buying it?

Mr Walker: We typically do not get a lot of volunteer information about that. Some of them are quite discrete services. You have talked about workforce development plans, which take quite a while to compile, but there are other services they provide that we do not have a source for.

Mr F.M. LOGAN: Such as?

Mr Walker: They help us with the determination and variations for apprenticeships and traineeships, which is a legislative requirement. So, when you want to establish a traineeship, for example, there is a process that runs through the board to the industry advisory bodies and back up to the minister. They help us with industry advice around appropriate qualifications for VET and school students. That is a specific service that they provide. They are there really to garner information and intelligence from their industry sectors and distil that for our purposes. The notion of having it for free has not really, I suppose, been tested but on the basis it might be available nationally and otherwise, we are not likely to get a regular and focused service if it was expected from them.

[10.20 am]

Mr P.C. TINLEY: You are paying them to go through data collection, effectively.

Mr Walker: We do the data collection in the main. They get, if you like, direct input from employers and industry, which we would otherwise find difficult to reach across all sectors.

Mr P.C. TINLEY: Just to follow through on that, have the 10 industry councils changed much over time in terms of the segments of the economy they represent, if you want to put it in those sorts of terms.

Mr Walker: In the broad no, but there has been some minor reconfigurations over time. I think, going back to when I started there might have been 14 and now there are 10, so there have been some merges there. Some of those sectors have been swapped from one to the other but on the margin, I have to say. Right now there have probably been two quite profound changes. One was around about 10 years ago when a significant amount of additional money was put into them to give them more scope to do more work. We are just on the cusp of taking money back out of them as part of a budget mechanism, so the total envelope was roughly \$6 million for the last six years. That will go down to \$4 million.

Mr P.C. TINLEY: Per year?

Mr Walker: Over the whole 10 training councils, so roughly \$400 000 each.

Mr P.C. TINLEY: In your submission you talked about disruptive technologies and their impact on a range of industries and I take, for example, the manufacturing sector is now almost a redundant word because of the way technology has disrupted manufacturing. We have got good-less factories and a whole bunch of different things happening where the ideas are sometimes more valuable than the product. The Apple product, for example, yes they are manufactured in China, but they are actually invented in the US, so the ones and zeros that they are making there are actually more valuable than the thing. So, my question or my interest is: are our industry councils established for the future? Are we actually getting an eye to where we are going to be moving up this technical spectrum or need to be moving up this technical spectrum as the jobs move further up?

Mr Walker: I think it is important to acknowledge that the role of the councils, the services they provide to us and for that matter the department itself, is to actually get a training and workforce development response to technological change in this instance and other changes in the economy. We are not a driver or a catalyst even for the things you have just mentioned. That is not our role. What we are in the broad trying to do is to understand the implications of those changes to the economy, technological advances, all sorts of things and how does that translate to the nature of particularly the type of training, the nature of the training, including the product itself, the qualification and, other, if you like, workforce development responses that we might need to put in place or at least encourage because we do not have direct line of sight to all those things that can, if you like, build the human capital to be able to adapt to the new world. That is, I think, a more reasonable explanation of the training councils.

Mr P.C. TINLEY: The department is a futurist sort of department. It is there talking about what the future workforce will look like or should look like and the enabling activities that will deliver that. That might in part be a stopgap of recommending the import of skilled labour at certain points. I am sure you get involved in that while you address the organic issue. You talked about the various economic scenarios on which you were basing some of it, so it is an assumption-based model?

Mr Walker: Absolutely. In terms of that long-term future, because it is a mixture of the here and now and the medium term or the long term, and the bulk of our work is probably around the medium term because that is what people want to know now, what skills people need.

Mr P.C. TINLEY: What is medium —

Mr Walker: We tend to plan on a four-year horizon.

Mr P.C. TINLEY: Okay.

Mr Walker: Labour market forecasting is a very imprecise science, so you would not want to go too far out and set the system up without really knowing what is going to happen in the future. This is the first piece of work for a long time that goes right out, the scenarios report, that goes out

to 20 years. Again, you would not want to be too precise about the outputs, but where there are four different economic scenarios, and just for the purposes of this committee, there is a sort of complete terms-of-trade collapse, there is a long-boom scenario, there are four clear obvious ones. What we are looking for in the scenarios is not a forecast. It is just saying that under these scenarios this is what might happen and where the insights come from is as much about under each of those four quite different scenarios, some things hold true, some things are constant. So what it tells you is irrespective of the economic scenario that you know you have to deal with certain things. The most obvious one is the demographic change; we are ageing. That is not going to change whether we are in a long boom, a short boom, in terms of trade shortage, whatever, so those sorts of things. Although the quantum and the distribution might be slightly different, the nature of work is again coming out of the low skilled and semiskilled area and moving into the, if you like, tertiary job market. That is not likely to change either. Within those scenarios there is a different mix, but they are the insights that you glean out of that report, which has taken us a while to get out but hopefully we will have it up and ready by June or thereabouts, I imagine.

Mr P.C. TINLEY: Will it be publicly available?

Mr Walker: It will be publicly available, yes.

Mr F.M. LOGAN: Just following on from your statements about future skills and needs and stuff, whatever happened to the advanced manufacturing training centres in East Perth?

Mr Walker: I can only go on my understanding of it because I have only been in the system since pretty much when that was first established. So, that was a college in its own right, I think, going right back to the early 1990s.

Mr F.M. LOGAN: It was looking at all the future skills needed.

Mr Walker: It was looking at advanced manufacturing; I think it was called the Advanced Manufacturing Technologies Centre.

Mr F.M. LOGAN: That is right; it was right opposite Silver City.

Mr Walker: That is right, yes. I know it started to get into a little bit of R&D and partnering with universities, I think at that stage—remembering it is going back nearly 20 years—it had, for example, some broadband capacity that otherwise did not exist in the general world.

Mr F.M. LOGAN: It also focused on robotics —

Mr Walker: Yes, a little bit of that.

Mr F.M. LOGAN: — and a whole series of technologies that are currently in use now.

Mr Walker: Yes. They do exist in other TAFE colleges. The Midland campus has a fairly high technology component to some of its manufacturing areas. Other campuses of TAFE also have to varying degrees.

Mr F.M. LOGAN: Has Midland still got that at that moment or has it been shifted to another college?

Mr Walker: My understanding is that Midland called it the something manufacturing centre, and it is still there. But I must admit that I am not that close to it. Are you talking about the changes? Yes, okay.

Mr F.M. LOGAN: It might not be there. Go out and have a look to see whether it is still there.

The CHAIR: Actually, that is something we could make a note of. Are you able to give us a snapshot, if you like, of those capabilities within the TAFE system—the whole advanced manufacturing area and what they do in those areas?

Mr Walker: Sure. It is a pretty broad sort of description, so we will likely exercise some judgement, I suppose, about what we think that means. But we have a reasonable view, I think, so

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we will be able to do something for you. So you are looking at the facilities and the programs offered; is that roughly what you are looking for?

The CHAIR: Yes. Where it is offered, and maybe even a little bit of history. I do not know whether you would want to go back to this East Perth facility that Fran was talking about, the capabilities that sat within that and where they sit within the system now.

Mr Walker: We will give it a go; it was a while ago. We will have a go.

The CHAIR: There is bound to be someone with a long memory in the organisation.

Mr Walker: I think that is me, apparently.

Mr Fitzgerald: I just want a clarification, chair. Was it just on advanced manufacturing or were you also looking at agriculture and the other areas? Was it just advanced manufacturing?

The CHAIR: Yes, at the moment. There might be other things as we go along, but certainly that is one we would genuinely be interested in.

[10.30 am]

Mr J. NORBERGER: As you know, there is a lot of talk at the moment about spurring on innovation and entrepreneurship and the like. Specifically, what role do you see for your department in helping to drive the cultural change towards innovation, but also from workforce development, from providing recommendations to government, from policy advice, training package? What role do you see for your department in helping to move us to a diversified or innovative economy?

Mr Walker: Probably the main one there is the training packages that you mentioned. That is done nationally, and there is currently quite a bit of work based on the same premise that the nature of work will change in 20 or 30 years. If I can put it reasonably simply: the current qualification structures under the training packages are still predicated on a traditional design of a qualification with a set of tasks and competencies that meet a job outcome today. So it is in that sense a fairly narrow—I use the word guardedly—qualification-to-job relationship. We know, based on the research, that the nature of work will be different in the future and that there will be what they call more adaptive capabilities. If I can put a simplistic example, training someone to do a specific job today may not be the nature of what we need to train people for into the future. There will still be those sorts of jobs and training programs, but to really develop people's broad capabilities, including innovation, entrepreneurialism-difficult things to describe in an educational curriculum, if you like. Nonetheless, the nature of the qualifications should be giving people the capability to adapt more than to be, if you like, trained for a specific task and a specific operation, and probably potentially more generic underpinning skills rather than being able to build a straight line or bolt two bits of pipe together. It is being able to, first of all, have a pretty good understanding of technology in the broad. STEM-science, technology, engineering and maths skills-clearly is an issue and that runs across all the educational spectrum, so from schools through to universities. It is emerging work, but there is, I think, a reasonable understanding that the nature of the products-the training packages and the qualifications—are going to have to be a bit different from what they are today.

Mr J. NORBERGER: A lot of universities, as you might be aware, are actually beginning to offer undergraduate courses in entrepreneurialism, which is a bit of a change, whereas the VET sector, I think you quite rightly said, trains people to become employees, not necessarily become selfsufficient. Even through our own travels we have come across people who have great ideas but they just have no idea how to put a business plan together or about the different structures of companies. It is a different type of training. You have incubators and accelerators and then there is a gap and then an undergraduate degree or a master degree. There is this void in between where someone might want to start up their own small business or whatnot and it does not fit within an accelerator– incubator model. They are not going to do an undergraduate degree. It would be interesting to see how that sector, specifically, responds to helping people become self-sufficient. That does not work in every area and trades will be trades, but it may in other areas, as opposed to just churning out worker bees.

Mr Walker: That is a good point, and certainly that is in the thinking. It is still sort of a formative process at this stage. Let us look at the qualification structures and take a trade or trade-related area where there is the certificate III in X. If you were to become a businessperson or put your own business down or want to go into the more entrepreneurial space, you could imagine a certificate IV or a diploma in that same broad field as incorporating some of those entrepreneurial skills, and obviously business management skills and those sorts of things. In part, that happens now. You would expect that structure to be more transparent and obvious into the future.

Mr F.M. LOGAN: You mentioned STEM. TAFE is not in that area, really, apart from the technical skills, of delivering pure STEM courses. The information coming out from studies so far is showing that year 12 students going into local universities are having lower and lower levels of STEM capacity—particularly boys as opposed to girls—and are many times incapable of completing first year undergraduate course work in some STEM-related qualifications like chemistry and biology and stuff like that. That is at university. What will TAFE be doing about that if there is a role for TAFE to play in that? What about the situation you have at the moment where you have apprentices who are coming to do applied learning in a trade structure and their current mathematical skills and English skills are not up to speed? That is an issue.

Mr Walker: Yes, that is a common criticism, and of course it is more of a problem now than it was because the nature of automotive, for example, is a fundamentally different beast than it was 10 or 15 years ago.

Mr P.C. TINLEY: You have to be part computer scientist, do you not?

Mr Walker: We actually do have a couple of products that try to address some of those concerns. In our training model, we have a thing called—CAVSS is the course, but it is essentially a supplementary, co-taught course that enables another teacher to come in to give them that extra maths, in that instance, and the extra English if that is required, as part of the program. But it is still ultimately channelled towards that occupation. So, yes, it builds their generic skills, but it is still in applied English and maths in that instance. We do that for that very reason.

Mr P.C. TINLEY: Just to follow on from that sort of learning, so much of innovation now is talking about this thing called an ecosystem. It is basically a system of systems or a network of networks, if you like, about how we create an innovative economy. Nobody can describe what that actually looks like because nobody really knows, which is fine, but we intuitively know that creativity is at its best when there are those interlocking formal and informal collaborations. Does the department get involved—or would you see it as being a potential role if you do not get involved now—in the industry's capacity to innovate; I mean, not just the individualised skills that support the future workforce, but the capacity and capability of the enterprises to actually absorb and grow those skills?

Mr Walker: I would have to say that that is not part of what we do and, really, I am not hearing that that is what government wants us to do. If I could offer a parallel commentary on that, the issue of whether TAFE in particular, or VET more broadly, has a role in R&D is on and off the table over the journey, in fact going back to the AMTC then. It is in our act, I think, somewhere, or it makes a reference to it, and there were some attempts, particularly at East Perth, actually, to do a bit of that, but at any one time there will be a view that that is a role for the universities, for example, or that we do not have the resources to be able to really do that. My understanding—it is really just a personal view—is that the bulk of the innovation comes off the shop floor.

Mr P.C. TINLEY: Yes; that is kind of my point.

Mr Walker: So it is actually the tradespeople, by and large, which is actually where the innovation occurs in the first instance, and it then gets taken up through various other tiers if you like. So it sort of happens anyway.

[10.40 am]

Mr P.C. TINLEY: But the point about entrepreneurship that has been raised here is that often the culture within an enterprise does not actually understand that the person on the shop floor might be the first person to talk to, not the last, and they have got tonnes of ideas. I know that from personal business experience myself. That is something that can be pointed; you cannot learn that stuff necessarily in a straight transactional skills base, but you can create the circumstances where they look at it; is a capacity issue.

The CHAIR: Can you tell us about channels of communication between yourselves and the Department of Education, and also the Department of Commerce?

Mr Walker: I will get Gary to respond to the commerce one. The Department of Education, we are connecting on a regular basis, but specifically around VET in schools. In fact, it consumes a lot of our time. We will produce reports that may reflect upon STEM, for example, in schools, but that is about as far as we go. We do not necessarily reach much further than that. But it is focused almost solely on the VET in schools.

The CHAIR: When you were all part of one department, was that collaboration more formalised, or was it basically similar structures sitting in silos, just under one name?

Mr Walker: Again, outside of the commonality of VET in schools, I would have to say they were more discrete entities within the whole.

The CHAIR: So, in reality, it did not change very much?

Mr Walker: No.

The CHAIR: And Commerce?

Mr Fitzgerald: It is more of a collaborative arrangement between the two agencies on specific issues. Commerce, we deal with them. There are two functions that we relate to. One is around the industrial relations aspects and we just provide advice from time to time around state wage cases and things like that. Also, we attempt to get an understanding of what they are doing in the workforce development space, including advice that they provide to employers and other stakeholders around the industrial relations rules, the resources, and the support mechanisms. The other part of Commerce relates to industry development. We are keen to keep in touch with what is happening in that particular space, so we use them as a bit of a conduit of understanding where government is focusing some attention—for instance, the work around marine and defence and those sorts of things, which Commerce has been pretty active in for some time. We also provide them, from time to time, when requested, with data around workforce training —

Mr Walker: Apprenticeships and traineeships, that sort of thing.

The CHAIR: Your submission suggests that you work quite closely with industry. Would it be fair to say that you are probably unique within the government with that sort of almost direct contact with industry; and what do you pick up—is there a formal mechanism for you to feed that back into government?

Mr Walker: If I could just say, and it is a phrase my current boss used when she was describing why she liked the training and workforce development portfolio, because it is a—I would not say unique, but it is certainly one of the rare mixes of social and economic services, so it has got that blend of industry. Our workforce development processes, to directly answer your question, are quite a sophisticated facilitation of inputs from industry and government. Our alliances, our workforce development plans and our Skilling WA document have formal advisory arrangements with all the

major government departments and most of the peak industry groups, plus our training councils. That is part of the role of Workforce Development at a state level.

The CHAIR: I just have one more question. It has been the expectation in the term of this Parliament, and of this committee, really, that we would have between four and seven floating liquefied natural gas processing plants off the Western Australian coast. But obviously, as you would know, Woodside has delayed the Browse joint venture. Has that already had an impact on your future planning in your department?

Mr Walker: As you would probably be aware, we have quite a unique facility down in Henderson, which is the oil and gas training facility. At the moment—I think it is Shell now—the floating LNG came up, I think Shell engaged them almost instantly. They are already developing potential training programs and responses for their industry as it emerges. That will not change. If it goes a little cold, it is because industry, as you say, has sort of withdrawn from some areas. I am not sure precisely where they are with the Shell collaboration but, if it recharges, we will recharge and respond accordingly. There is quite an up-close partnering arrangement there.

The CHAIR: So you have not, as of yet, put in large-ish expansion plans because you were expecting to go to seven of these things and now it looks like we will only have one?

Mr Walker: No, the asset facility down there actually has some works going on at the moment. There is a bit of expansion. I will add one more thing in there. There is some engineering going on there because of the cross-skilling kind of arrangements with the operations. There is also a consortium of universities, led by Curtin or UWA—sorry, I cannot remember which one—who are looking to set up a complementary research and working plant as well somewhere in that area. Those collaborations, clearly, would be useful from all sides. So that is going on. I do not know where they are with that. I do not think they have any money at this stage.

The CHAIR: Okay, that is good to know. I would like to thank you for your evidence before the committee today. A transcript of this hearing will be forwarded to you for the correction of minor errors. Any such corrections must be made and the transcript returned within 10 days from the date of the letter attached to the transcript. If the transcript is not returned with this period, it will be deemed to be correct. New material cannot be added via these corrections and the sense of your evidence cannot be altered. Should you wish to provide additional information or elaborate on particular points, please include a supplementary submission for the committee's consideration when you return your corrected transcript of evidence.

There may be some more questions we think up for you. Is it okay if we just write to you with those questions?

Mr Walker: Yes, absolutely.

The CHAIR: Thank you very much for your time today.

Mr Walker: Thank you.

Hearing concluded at 10.47 am