C O R R E C T E D V E R S I O N

EDUCATION AND TRAINING COMMITTEE

Inquiry into effective strategies for teacher professional learning

Melbourne — 17 September 2007

Members

Mr M. Dixon (from 18 September 2007)	Dr A. Harkness
Mr N. Elasmar	Mr S. Herbert
Mr B. Finn (1 March – 18 September 2007)	Mr G. Howard
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Dr G. Calnin, director of policy and research, and

Dr H. Schnagl, board member, Association of Independent Schools of Victoria.

The ACTING CHAIR (Mr Elasmar) — Thank you for coming, and good afternoon. I declare this hearing of the Education and Training Committee open. The Education and Training Committee is an all-party joint investigatory committee of the Parliament of Victoria. It is hearing evidence today in relation to the inquiry into effective strategies for teacher professional learning. I wish to advise all present at this hearing that all evidence taken by the committee, including submissions, is subject to parliamentary privilege and granted immunity from judicial review pursuant to the Constitution Act and the Parliamentary Committees Act. Please give your name for Hansard, and after that allow us some time for questions.

The DEPUTY CHAIR — Will you allow me to take over now?

The ACTING CHAIR — Yes. Now Nick will be in charge.

The DEPUTY CHAIR — I welcome you both, Heather and Gerard. What we normally do is allow you 5 or 10 minutes, if you want. I know you have provided a submission, but in case you want add anything or highlight something — then we will ask you some questions. What was said earlier is that you can say whatever you want and no-one can sue you, no-one can say anything. So welcome. Who is first?

Dr SCHNAGL — I think I drew the short straw. I am going to probably put a little bit in context and just highlight a few points from the submission. I think we are all aware that the future depends on quality education for our young people, and, of course, quality learning is therefore the most important part of that, and quality learning depends on quality teaching — i.e., quality teachers. From my personal and professional point of view, teachers are the most important resource any school has, and we need to do everything we possibly can to enhance their quality and professionalism. So quality learning for teachers is a very high priority. We need to recognise their professional learning and expertise, and hence their professional learning should be at an adult and postgraduate level. It needs to be researched based, clearly underpinned by hard data in terms of new understandings, research into subject discipline matter — things like brain research and pedagogy into how students actually learn — and based on students welfare and pastoral care because the whole person is a critical part of the learner.

It is very important that teachers are not told, 'Here is a new package, teach this'. Professional learning for teachers needs to enhance their learning and their understanding of research data so that they can see the relevance for themselves. That is what is likely to lead to a change in their practice, which will, if it increases and enhances student learning, of course lead to further change.

I will give you a couple of examples. Subject disciplines: irrespective of whether we are talking about primary, secondary or even tertiary teachers here, subject knowledge is growing exponentially and therefore needs opportunities for new research to be shared with teachers. If you think about the median age of teachers — dare I admit, I am about there; a little bit older perhaps — they need to be helped to keep abreast of what is happening in areas. I can use my own example. Things I learnt about in university or which have even been developed subsequent to my own scientific training, particularly in the areas of genetic technology, are now school subjects, and science teachers who trained at a time I trained — if they had gone straight through, because I am much more of a mature-age teacher — really need professional learning to help them understand what the technology is and then how it relates to what they might be teaching in science. History has changed massively with the access to primary sources. I do not need to tell you, gentlemen, how politics and some of the issues that our globe faces have changed over the years, so they need to know where to find sources of new information. There is a massive explosion of information available, and I do not think all teachers know exactly where to find the information and therefore how to use it. So that is subject matter.

Pedagogy: if you think about the latest research, we are just entering an era where there is a massive growth in learning how a brain actually works, particularly with things like the MRI, which now enables people to see a human brain actually working instead of all the research having to be done, unfortunately, on dead specimens. Teachers, I think, need opportunities in professional learning to understand how to apply it. So they need, for example, to know how to translate that neurological research into how a brain a works and therefore how a student learns.

They also need things like empirical data research. We were a pilot school in the early numeracy research project with the Australian Catholic University. That actually made a huge difference to the practice of our primary teachers in the maths area. That is because they understood how it worked, they tried some bits of it, and that meant that when they evaluated the data on that they saw the impact on student learning, and certainly when they started it

showed that year 4 students in our school had mathematical understandings that were on average ahead of year 8, which is something that shocked them and certainly changed practice.

So how should teachers do professional learning? We all know that one-stop-shop professional learning does not work. It is most effective when it involves teams of teachers learning collaboratively, linked to their goals and linked to the school's goals, but teachers need to be able to take a risk in terms of trying something new, and they need to do that without fear or failure. So I think you will see in the report that a supportive environment is important. I think I have mentioned it needs to be research based. Teachers are very cynical when it comes to fads. It wears out their goodwill. They are professionals, and I think they have the right, even the responsibility, to see that data is going to be valuable. They are part of a community, and learning is most effective if the whole school community is learning, if it has a supportive culture, and if they have strong leadership for that learning. That leadership should set the vision and aim for continuous improvement, but that will also give them a climate of trust and high morale.

I think we want to equip teachers as reflective practitioners so that they know how to collect data, evaluate it and analyse it for themselves. The ideal to me is their working as partners in research. I think we could talk about their own needs and school needs. I think professional learning needs to be linked to content and how students learn it. I picked out a couple of examples. I am not going to give you them all, and Gerard is going to explain some more. One of the things in our own school is that staff do not attend a professional learning activity on their own. They go as part of a group — a minimum of two but often more — and that learning is more effective when they then are able to sit down and talk about it, try it, have someone else share it with them, even have colleagues coaching them, shadowing them. The best professional learning I ever did was a peer-assisted learning program where you are actually work shadowing a colleague, questioning them as to why they did certain things; it really was deep learning. I think it needs to be sustained. One that our staff are doing themselves is different staff members are presenting to their colleagues how they are using their interactive whiteboards. Once a week a different staff member presents and the whole staff are part of a team who are learning.

It is important also to ask them what their needs are as well as school-based needs, and of course to actually address the issues that they come up with — the difficulties their students come up with. If there is a particular area that I as a chemistry teacher would know students find particularly difficult, it is very valuable to sit with colleagues to hear different approaches as to how they address a particularly difficult area. I know that is a personal one. I think I will hand over to you — this is my personal bugbear, probably not the right word to use. I actually think there are many teachers who would love to enhance the breadth of subject areas they are able to teach. There used to be postgraduate diplomas in things like maths education, LOTE education, science education and history education which had both a mix of the subject matter and the pedagogy of how to teach it. Those programs do not exist for teachers to broaden their subject areas. Finally, on higher-order thinking skills, absolutely critical is teachers' own understanding of metacognition, but if students know how they learn, that helps enhance their own learning and therefore teaching. I think I have said enough.

Dr CALNIN — If I could perhaps just identify four challenges that I think come out of the body of research that Heather has alluded to and very practical examples that she has referred to. One I think is about what I call changing the paradigm of professional learning. There has been a culture in schools for some time that professional learning occurs outside of the school, that it is often at a conference or at a lecture or at a day that I attend somewhere off-site. It has sometimes been seen as a reward for good practice — I have been a good teacher all year and I get to go to the conference at the end of the year. Little of that has been effective in changing teachers' practice. I think it is about changing the culture for teachers to begin to understand that high-quality professional learning occurs on-site. It occurs in their own school. It occurs through conversation with their colleagues, the sort of collaborative learning with the researchers coming into the school rather than teachers going out. The cost of that style or that paradigm of professional learning is incredibly expensive. That is not to say there is not a place for conferences and all of those things, but when we talk about high-quality professional learning driven by teachers who understand how kids learn, then it needs to change.

The second challenge is around quality learning time for teachers. We have been a profession that has added on for a long time, not just in curriculum terms but in terms of all of the things that we try to do. In a school like Heather's, every day after school there would be teachers running drama, music, sport et cetera. We ask a lot of our teachers. We sometimes say to them, 'Between 4 o'clock and 6 o'clock you will do some professional learning'. How many of us are at our most creative at 4 o'clock in the afternoon? If we are thinking about changing practice, asking teachers to be reflective practitioners, 4 to 6 in the afternoon where they have to go quickly to collect

children and prepare dinner and do all the things that we do is not a model of effective learning. Shifting that is a really difficult challenge for schools because where do they find time, how do they restructure the day in such a way as to honour the learning of the teacher, not just the learning of the student? If we do want them to re-evaluate their thinking, we must provide them with good time. A commitment to time and resources is really important.

The third challenge is around that question of changing teachers' knowledge and beliefs. Heather is right that we have a responsibility to update them on content and update them about teaching strategies. These do not change quickly. Teachers do not just say, 'That is a good idea, I will now practise that'. We actually have to ask them to suspend their beliefs temporarily and ask them to try new things. But when we ask them to try new things, we have to support that. As Heather says, let us collect some data. How do you know it made a difference? How do you know that student learning has improved because of your actions, because of your change? It is only then that teachers will be persuaded that a change in strategy has been useful. Changing teachers' attitudes and beliefs is a complex process and something that takes time. We need to give them those skills of how do I collect data, how do I know what is useful data, how do I measure intervention? At AISV we run quite a lot of programs where we help teachers develop their skills in data collection, et cetera. We run professional learning and changes to teaching learning. One example, very briefly, is around literacy, direct instruction, which for many teachers is countercultural because it is scripted — it tells you what to do. That is not the way most teachers think about how to teach. We look at the research and see whether that can actually be replicated and then we help teachers with the strategy, but we need to collect data. That is the third challenge.

The last challenge is about building a culture of teachers as learners, which is very different from the model that I began with, as a dispenser of wisdom or at least of knowledge if not wisdom. How do we remind teachers and reward teachers for always being a participant in their own learning so that they are wanting to upgrade, that they want to be the best they can by ensuring that they have the best knowledge available, that they are researchers, they are learners, they are participants in the development of the profession? They are just four little things that I think might be important. I think I have said enough.

Mr ELASMAR — I personally agree with the four items you identified before. Are there enough conferences for the teachers? I agree it should be outside the school before they start, but are there enough conferences for them to allow the teachers to have professional learning or are there not because of the lack of resources or any other reasons?

Dr CALNIN — It is largely a lack of resources. It is a lack, it seems to me, of a whole school commitment to development. It is sometimes not seen as a priority. There are lots of things that they are trying to do. It is easy to dispense, 'There is a conference here, there is something here, why do you not go to that?'. How often do schools follow up on that and what happens with what they learn at a conference? As Heather says, if you go on your own, you come back and you have to pick up your emails and your classes and your roles and you have the swimming next week and the athletics the week after and reports to do, so you think, 'I have not got time to integrate that into my learning'. It is about the time that we give to the learning that we talk about valuing but our actions do not value it.

Dr SCHNAGL — If I might also add to that: many teachers feel very guilty taking time out from a school during a day to actually even go to a conference on that basis that they feel their first responsibility is to their students, and yet there is no sense that they have a dual responsibility. Yes, to their students but also to their own professional learning. If they do not have that they are not going to give their students the best possible learning. I think that is part of the paradigm shift that Gerard is referring to. Teachers need help to understand that their own learning is absolutely a precursor for high-quality student learning.

The DEPUTY CHAIR — Can I just follow up? How do you choose quality PD? Who decides what teachers should attend? Should it be up to the school? Should it be up to VITS? Who should be responsible for ensuring that the PD that a teacher attends is high quality and that teachers are going to gain something from it and come back and pass it on?

Dr CALNIN — That is a good question. There are a number of strands of professional learning that we have to consider in answering that question. Schools have, for example, an enormous regulatory burden within which they operate now. You have to be able to operate an EpiPen; you have to be able to do all sorts of things. There is professional learning required for that, which is pretty — —

Dr SCHNAGL — Mandatory reporting and all those sorts of things.

Dr CALNIN — It has to be covered, so there are a whole lot of days. But if we are talking about effective classroom practice, PD for that, then I think that is the fundamental question that we would want to address because we know that — and that article tells you what the key principles are — when teachers work together and talk about student work and talk about their practice that that is high-quality professional learning. John Hattie, who is a professor of education at Auckland university, says that teachers talk about teaching about 3 per cent of the time. We are very good about talking about kids; we are good at talking about the weekend and co-curriculum, but in terms of talking about teaching — and that is what this is — high-quality professional learning is generally in school with groups of teachers talking about good practice. Some of them might think, 'That was just a meeting', and you say, 'Yes, but that is where you were probably learning most, where you go away and practise something and then come back and talk about it again. Sometimes you need an external facilitator to help you do that, but it is best done on site.

They are the sorts of conditions creating the right time for the right groups of people to work within the school culture. Who determines that? There are some things that are more effective than others. We know that some types of professional learning are more effective. The school leader has to make that sort of judgement. Sometimes it is about 'What are the school's goals? How do we align those with the goals of the individual teacher?'. We do not subscribe to the view that the teacher should just make up his or her mind that 'Any professional learning that I want to do to is valid because that is my decision'. There has to be an alignment between the school's goals and what we know makes a difference. They are the sorts of questions that school leaders have to be asking about. Do you want do add to that?

Dr SCHNAGL — I might just add that sometimes things are not considered professional learning that are often the most valid professional learning, and that is, for example, peer shadowing a colleague: to go and spend a day as if I was head of science or a chemistry teacher, to spend a day with a colleague who is a chemistry teacher at another school, and actually spend the day watching what they do and how they teach. Often it may be easier to go and do it at another school. Your own school may only have one chemistry teacher; it may have seven chemistry teachers depending on the size of the school. But you hope it is an open situation in your own school so that people are constantly walking in and out of each other's classrooms and seeing how they learn. But to go and see it somewhere else is often not considered professional learning in the context that other people consider, say, a conference or a seminar, and yet it is highly valuable professional learning.

Also perhaps even two schools getting together and sharing. One example we have done recently is that we have had a couple of opportunities where we have shared some professional learning with another school; put two school staff together for a day with a focus and outside speakers. But the best learning was when the history department from our school was matched with the history department of their school, and for 2 hours they discussed how that speaker impacted, and of course it became much more ongoing because technology means that even though geographically the schools are not all that close six months later they are constantly still sharing things. Even though it was a one-off exercise in lots of ways, it is still deep learning because it is ongoing.

The DEPUTY CHAIR — How do you change the culture in a school? I know independent schools are different from government schools. I know a number of schools where most of the teachers have been teaching for 25 years and they just refuse to change their teaching methods. You get the young teachers who are coming out from university who are keen to try something new, yet after one or two or three years they then fall into the same boat as the older teachers. Principals are saying, 'Yes, it is there', but how do you change the culture? Can you give us some advice as to what is happening in independent schools? Are you changing the culture?

Dr CALNIN — It is interesting because sometimes school leaders in those environments will take actions because they want to see evidence of change. You do have to change those conditions of the school environment which are about the collaborative environment and culture that values learning, that you affirm that it is okay to take risks and that you can work with colleagues. If you do not set up those things where you might have people meeting together and sharing together and going into classrooms then you will not change the culture. The hard bit about leading in that way is trying to build opportunities for teams to work together, and you might have three or four teachers — a little sack of teachers around the school. 'Work with the living' is an adage that I believe in. You start with them. It is going to take time, but there will be a point at which even some of the old and hardened and cynical teachers have to participate in this. It is not going to happen by mandating it or by saying, 'Everyone will do

this' because that is not how it is done. Changing the culture takes time; that is the hard part for the leader because you are looking for results very quickly. But the results will not come if you rush to those sorts of conclusions.

Dr SCHNAGL — I would agree. You start small. I can give you a case study where we took a decision to put in seven interactive whiteboards in 2004 and I asked whether anyone was prepared to trial one. I got about four or five volunteers, so we put in five interactive whiteboards. As those five groups of people got very proficient I got other people bashing the door down saying, 'I must have; I must have; I must have' and it built a culture.

There are two things that go with this: one, starting small, but two, I think is effective professional learning for leaders as to how to create change. I did my masters on how to create change — and I think that was incredibly valuable — and how to help people cope with change; the different ways people cope with change in terms of how to help people laugh together because laughter is probably the most effective way to help people change. So it is perhaps professional learning for leaders about to really lead change. We are very lucky in Victoria; we have some absolute experts in how to lead change.

Mr FINN — I will ask just the one question, and it is one that my colleagues have heard before. But I make no apologies for asking it because I think if we can get an appropriate and proper answer to it, we are more than halfway to achieving what we are on about here. How can any child after 13 years of formal education leave school semi-literate and be unable to count as seems to be the case in far too many situations?

Dr SCHNAGL — I do not think they ever should; I would agree with you totally. I think if teachers are helped with professional learning to develop the skills to teach effectively — and that means the content, the understanding and changing practices based on individual students needs.

I have had students arrive at our school at year 5 and year 7 who are totally and utterly illiterate or innumerate, but I can guarantee you that by the time they left year 12 they are both numerate and literate. I do not guarantee they can do it in every language they speak, and I particularly talk of two indigenous students who have come in very much later into the school. We are teaching them how to read and write in English in year 11, and that is when we first met them. It is not easy.

The real advantage I think is the intervention with specific targeted teaching, and I think on Gerard's comments about what actually works with literacy and numeracy teaching to young people, we need to put resources into early childhood education as well, because they have to be ready to learn when they go to school.

Dr CALNIN — I do not think we should shy away from a culture of accountability.

Dr SCHNAGL — No.

Dr CALNIN — Building a culture of collaboration is not a soft option. It is not saying, 'Look, we do not value what you are doing' because we are saying that you need to collect data; you need to know how students are going in relation to reasonable benchmarks, and if they are not achieving then strategies need to be designed for that. The expert teacher will understand the differences in how students work. If they do not then we have a responsibility to ensure that they do participate, and if they are not prepared to do so then we have to take some actions around that. I do not think we can just say that this is a soft environment and that a child who is disadvantaged is disadvantaged for life because we know that is not the case. Intervention can make a difference.

Mr FINN — So you would not be at all impressed with the view of some — that you just let a child go through school come what may, and whatever they come up with at the end is somebody else's problem.

Dr CALNIN — No. I do not think that as a teacher many people would subscribe to that view that it is hands off.

Dr SCHNAGL — Every teacher I know of would very much want to work alongside those students to do everything possible to enhance their skills and have their skills grow so that they are effective. I go back to my first point: the future of our nation depends on high-quality learning for every individual.

Mr FINN — That being the case, the view that you have expressed that every teacher that you know of would be of that view — and most teachers indeed would be of that view — how does it happen then? I go back to my original question: if teachers are caring and enthusiastic and all the things that you say they are, how can students go through 13 years of education and come out semiliterate?

Dr CALNIN — I think that there are circumstances in which that happens. You can have all sorts of things. You can have teachers who believe in a set of ways of teaching that are invalid — they have been doing this for 20 or 30 years, and they are continuing along those practices, and certain students will not learn in that environment. You can have school cultures where it is okay to fail and where nothing happens as a consequence. With these things coupled it is easy to make excuses for kids if they fail, particularly if there are social and emotional dimensions to that. Sometimes they slip through, and it is not a good thing. Teachers do not want that to happen, but I can see in systems how it does happen, where kids have just fallen through the cracks. Unless you continue to be rigorous about that and maintaining standards for all, not just for some, then I think it will continue.

The DEPUTY CHAIR — When you send teachers to PD, whether it is in the school or outside the school, do you just send the leaders within the school, or do you spread it across the whole school? Do classroom teachers attend PD, or do you expect the leaders to go away and then come back?

Dr SCHNAGL — I can give you an in-school example. As you know, I am principal of Ivanhoe Girls Grammar, and we have a policy that every teacher is entitled to up to six days professional learning per year paid for by the school. We expect all teachers to participate in professional learning. We do some of that in-house by bringing people in or having our own staff who have built up particular expertise in any one area sharing that expertise in terms of their knowledge and understandings with the staff, but I think it is every teacher's right to expect to grow in their professional knowledge. I think that is part of being a profession. I suppose if I wear another hat, which I could be sitting here wearing — from the Victorian Institute of Teaching — you will know that as part of the renewal of registration every single teacher is required from 1 January next year to undertake 100 hours of professional learning minimum in the next five years. I would have set that benchmark higher personally.

The DEPUTY CHAIR — How do you evaluate whether the PD was successful or was good? When you send teachers away and they come back, how do evaluate — —

Dr SCHNAGL — For every person who attends professional development part of their responsibility in attending it — and that includes within the school — there is an evaluation form. Part of it is not only 'What did I learn?' but 'How has that changed my teaching? What support do I need to bring about the change?'. It actually asks teachers to help, and you have got to have a leadership team that is prepared to put in the time to see how these teachers need to be supported to do what they think they need to do from that, but recognising their professionalism and coordinating that. It might be that they come back and say, 'We need software. We need time. We need to create meeting time'. We will have teachers go on PD, and they will come back and say, 'What we really need more than anything else is an afternoon for all the maths teachers to work together on this', and then it is the school's job to provide that resource, to provide an afternoon where all the maths teachers are free to work in a consolidated block for 3 or 4 hours together — maybe on-site, maybe off-site, maybe with a facilitator — but so that they can really consolidate that and work together to talk about their professional learning. But also we build up the knowledge that that professional learning was really valuable or that professional learning run by that provider or that person was not valuable.

The DEPUTY CHAIR — With the 100 hours over five years, as a principal of a school do you feel that that is sufficient?

Dr SCHNAGL — As a principal of a school I would be very disappointed in any of our staff who were under 100 hours in five years. I did a benchmarking exercise of working it out, and most of our staff would be doing about 70 or 80 hours in a year, but I have got to remember we are a metropolitan school. Our highest priority is staff professional learning, so we put resources into that area and maybe fewer resources in another area. Our staff would probably be better off in the professional learning area than others. If I was sitting here as the principal of a school up at Shepparton, for example, I am having to spend time and resource sending staff to other places, so I think I have to be realistic about metropolitan versus country. I think it is much harder for rural schools to access good, quality PD. There is not much yet in the way of videoconferencing about professional learning, which I would think is a high priority. You know more about country schools.

Dr CALNIN — I think that is right. There are some severely disadvantaged communities. If you are in a three-teacher school or a 10-teacher school and you are away for a day or two, it places quite a considerable burden on the rest of the school community, and the cost is significant. What I am picking up from some of the things that Heather is saying is that it is complex within a school, but if there is no plan for professional learning for the whole school and no priorities set for the year, then it does become a random exercise of people going and coming and

there is no feedback or integration, no tracking of change. Schools have to embrace it as a cultural thing, so that they do think, 'We cannot do everything, so this year it might be a focus on ICT' or 'Next year we really need to focus on the year 5 group', or something like that. But without a plan and a commitment to resource adequately, and in making a plan you exclude things, then where does it sit? It just becomes a lot of money being thrown around without seeing results.

Mr HERBERT — From the research — setting aside the resources — have you got any statistical information about when the schools got substantial increases when the federal government challenged the funding formula, whether they are putting more money into professional development and whether there have been increased outcomes in terms of VCE scores, AIM scores — whatever you want to choose? Have you got any hard data on that kind of thing?

Dr CALNIN — None that I am aware. It is a reasonable expectation that if you are putting more money into professional learning you would hope to have improved outcomes. VCE of course is only one measure of those outcomes, so there might be other things that you are looking to achieve.

Mr HERBERT — So in terms of federal government and state government funding in schools is there no accountability criteria linked to student outcomes?

Dr CALNIN — The accountability of federal and state governments are around curriculum that you offer and around your financial reliability. You might like to answer — —

Dr SCHNAGL — In the current federal reporting accountability we are required to account for how many dollars we spend on professional learning, so that dollar information is published to every school community.

Mr HERBERT — Presumably the federal government or the department will have information about whether there has been an increase in money for professional development by school, by state and how much is spent?

Dr SCHNAGL — I cannot answer that because I would not know.

Mr HERBERT — But if each school has to report back — —

Dr SCHNAGL — We are required to publish it for our community, and so our school community certainly knows the amount of money we spent on professional learning in the last calendar year. This requirement was introduced in the current quadrennium; it was new this quadrennium.

Mr HERBERT — So you do not have to give that information back to the federal government?

Dr SCHNAGL — I am pretty sure we had to report it, but it has changed slightly in the conditions that we have to report it. I know ours has tripled. I can tell you our own budget has tripled in five years.

Mr HERBERT — I am very much aware of the excellent work that Ivanhoe Girls Grammar does.

Dr SCHNAGL — Thank you for that.

Dr CALNIN — I know I am cutting across you and I apologise for that, but can I say that one of the complexities is when schools are asked to quantify development, what do they include or what do they expect? And where is the quality dimension, which is your question, Nick? We understand that quantum is important, but how that money is used and marshalled is really critical. All the statistics in the world are not going to provide you with that. Your question is a really good one. It would be looking at some case studies of tracking where improvements have actually occurred in the culture and development of the staff.

Mr HERBERT — It might be worth our while communicating with the federal department to see what information they have, whether it be specific or on quantum, about what is happening in professional development.

Dr CALNIN — Can I give you one quick example? There is a whole lot of data around school effectiveness and there are five key dimensions of that. We have been doing a survey with our schools, Victorian independent schools, looking at staff response to those key questions and collecting data around professional learning, school leadership, goal congruence, values — those sorts of things. They are key pillars of good school

practice. What we do is invite schools to participate, all their staff to participate, in an online survey and then we feed it back to the schools and say, 'These are the things that are happening really well. These are the things we think you can improve. How do we go about designing interventions and strategies to help you?'. We then get benchmarks for the whole independent school sector. We are using that sort of data to keep changing what we offer for schools and helping schools on an individual basis.

The DEPUTY CHAIR — We will ask the federal and state governments the same questions — whether they have data for government schools as well. I thank you both very much. Eventually you will get in the mail a transcript of what you said, for changes, just to make sure it is correct, before it is on the web page.

Witnesses withdrew.

C O R R E C T E D V E R S I O N

EDUCATION AND TRAINING COMMITTEE

Inquiry into effective strategies for teacher professional learning

Melbourne — 17 September 2007

Members

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Witnesses

Ms A. Ryan, executive officer, and

Associate Professor J. Henry, committee member, Smart Geelong Region Local Learning and Employment Network.

The DEPUTY CHAIR — I welcome Smart Geelong Region Local Learning and Employment Network. We usually ask you to give a presentation for about 10 minutes and then we follow it up with some questions.

Assoc. Prof. HENRY — John Henry, from Deakin University, and I am also on the committee of management for the Geelong region LLEN. I am aware that we put in quite a long submission, so if you could bear with me I will give you a summary of that. To keep me on line I will refer directly to my summary document.

The general position on contemporary professional teacher learning outlined in our submission can be summarised as follows. The primary focus of our submission is professional learning strategies for teachers practising in the middle and post-compulsory years. Teaching as a profession needs to adjust to the demands for change driven by, firstly, cultural shifts within our society as well as shifts in national and global economies impacting on employment, secondly, shifts in the aspirations of students and their families, and thirdly, shifts in government policies — all resulting in shifts in the composition and characteristics of senior school student populations.

Teacher professional learning now needs to address ways for the profession to cope with these changes — external changes requiring demand-driven responses for change in the provision of education to young people in the middle and post-compulsory years of schooling. This is the crux of the pressure for change within the profession: change from being primarily a supply-oriented profession to being a demand-oriented profession responsive to external sources of complexity and uncertainty.

Effective strategies for teacher professional learning must support teachers, as schools undergo organisational change in the direction of becoming suppliers of educational services responsive to the demands of the modern Australian nation, now and into the future. Post-compulsory education is about helping young people to prepare for successful transitions to further education and training and meaningful employment. To achieve these outcomes the school sector needs to find and invent better ways to provide high-quality education and learning pathways for young people, leading to the range of post-school destinations on offer.

The challenge for schools is to expand teacher engagement in the innovative processes required to create improved learning experiences for young people and their families in the first instance, but articulating to tertiary providers of vocational education and training and higher education and to career-generating employment. This challenge must be met through strategies for teacher professional learning effective in these new circumstances — strategies that align the secondary school sector more closely with the growing demands of the global knowledge economy of which Australia is rapidly becoming a member. The school sector must consider new approaches to teaching and learning that prepare students not only for further study and work in contemporary organisations but also for the anticipated demands to upgrade their skills and knowledge continuously throughout their working lives — that is, demands to become lifelong learners. Development of these new approaches to teaching and learning within the school sector requires teachers to become knowledge workers themselves. The capabilities of knowledge workers are summarised on pages 5 and 6 of our submission.

A teaching profession with the attributes of knowledge workers would be capable of the continuous individual and organisational improvements necessary for themselves and their schools to respond to the complexity and uncertainty of externally driven demands on schools — that is, the shifting demands on preparing young people for productive and fulfilling lives as citizens into the future.

Innovation for the teaching profession under these circumstances still includes innovation at the level of classroom practice, but innovation now has a much broader footprint. Innovation for the teaching profession now involves significant changes to the way schools function as organisations for teaching and learning. Secondary schools are on the cusp of changing into new structures better able to support teachers and their students along the emerging pathways from middle years into post-compulsory years and onto further study and employment. These pathways and their destinations will be responsive to the changing context of the world of further study and employment for young people. Innovation at this broader level is dependent on the development of higher-order knowledge worker capabilities amongst members of the teaching profession. What is now required is teacher professional learning directed towards the development of the generic capabilities of knowledge workers interpreted back into the teaching profession for the 21st century. Effective teacher professional learning strategies are those that move the profession in this direction.

Our submission identifies the essence of professional learning for knowledge era teachers in the following terms. Knowledge era teachers will: be self-motivated in their learning, seeking out a variety of opportunities for exposure

to new ideas; appreciate applied learning for themselves; and establish relationships through professional and collegial networks that introduce them to new ways of understanding their professional work. Challenge, risk-taking and undertaking professional tasks outside one's comfort zone are characteristics of approaches to professional learning for these teachers, as are periods of consolidation and reflection. Knowledge-era teachers embrace the integration of professional work and professional learning. This insight shapes the relationship between professional learning and teachers' ongoing professional practice.

A vehicle for integrating teacher professional learning is a so-called extreme project team designing, through shared working and learning, new student learning arrangements that deliver satisfactory outcomes in an area identified as vitally important to the accomplishment of the school's mission. Professional learning is intrinsic to this project-team approach. Additional professional learning resources can be readily integrated with the emerging learning needs of the teachers in the project team in a timely fashion. These additional professional learning resources would, in reality, be drawn from the considerable range of conventional professional development strategies well known to us, particularly those associated with work-based learning, reflective practice and communities of practice.

Individual personal and professional aspirations need to be negotiated and balanced within the boundaries set by the developing needs of the school. A core element of knowledge work of professional learning is conversations. The key here is for self-reflective dialogue amongst trusted, honest and generous group members through which ideas can be received, assumptions interrogated and understandings refined to build new insights and understandings — insights and understandings that advance the project towards its goals.

We believe it is important to identify organisational factors that can facilitate knowledge-era teachers' professional learning. Our submission identified eight such organisational enablers that will facilitate this cutting-edge project-driven style of teacher professional learning in the secondary schools of the 21st century. These enablers are essentially opportunities for embedding teacher professional learning within the school as a developing knowledge-era organisation. An enabler check list for the knowledge era secondary school is included on pages 10 and 11 of our submission.

Teacher professional learning strategies for the future are those that promote knowledge worker capabilities amongst the teaching staff the schools. These strategies must be understood and accepted by school leaders as being interactive with school-wide organisational change. The enablers identified in our submission would, when taken together, provide a facilitatory organisational environment for these professional learning strategies to engage teachers in purposeful new action connected to organisational renewal.

To conclude, I will make direct reference to the terms of reference of the inquiry. On term of reference (a): teaching expertise in secondary schools in the knowledge era is now broader than classroom-oriented expertise. Teaching expertise is now premised on developing capabilities to engage with the external uncertainties in our contemporary society to produce learning arrangements that maximise students' learning through a range of pathways and transitions into further study and employment.

On term of reference (b): the eight enablers identified in our submission will facilitate the necessary new form of teacher professional learning in the secondary schools of the 21st century. These enablers create the supportive organisational environment in schools for teams of motivated teachers to work at the risky edge of innovative student learning arrangements. These are the anticipated learning arrangements needed to transform secondary schools into more responsive providers of high-quality and various learning for young people whose citizenship and livelihoods will enmesh with Australia's knowledge-era culture and economy.

On term of reference (c): the position advocated in our submission draws on recent research into professional development for teachers. The position reflects both national and international trends in teacher professional learning approaches and strategies.

Term of reference (d): the Geelong region LLEN's Post-Compulsory Change Project described and analysed in our submission is an example of best practice for delivering ongoing teacher professional learning into schools and their surrounding learning communities, and we would hope to be able to respond to questions about that project if the committee so wishes.

On term of reference (e): knowledge-era teacher professional learning can best proceed as learning the challenges of established teacher professional cultures when it is informed by ongoing cross-sectoral partnerships. The

position on teacher professional learning and its delivery advocated in our submission is unequivocally premised on cross-sectoral partnerships between secondary schools and the relevant stakeholders accessible through regional networks. Here the LLEN initiative of the Victorian government provides schools with a productive avenue for building these partnerships.

Finally, on term of reference (d): our submission has not specifically considered gender issues in the delivery of ongoing teacher professional learning.

Mr HERBERT — Thanks, John. They are fairly complex enablers, I note, in your paper. I am just trying to get my head around them. Just moving a little bit offside in terms of your submission, do you think that schools should set targets for achievement that any professional development program should work to? You have spoken a lot about how a school should go about organising its professional development; if we take the principle that it is mainly about improving outcomes for young people, do you think that the starting point should be the school targeting what it would like to see in terms of those outcomes, perhaps setting targets and then linking a professional development program to it?

Assoc. Prof. HENRY — We think it is very important to use targets, to use data, to use available evidence that is provided to schools on the profile of destinations that are currently the case for the schools, to then interrogate that data with the school community which goes beyond the teachers themselves, and then to put in place development strategies for the staff and for the school itself through the staff that then work towards what they think are the targets that have been negotiated through that process with their school community.

Mr HERBERT — Have you set targets for the PCCP at this point, what are they and what is the time frame for achieving them?

Ms RYAN — There are seven schools that have signed up to the project, and our starting point was the end point, I guess you could say. We started with data that showed those seven schools what happened to their kids once they left school, and we showed them five years of data around that. Essentially it showed kids who went to university, kids who went on to TAFE and kids who went out into the labour market. The first thing that we would say about that data is that the schools, when we presented them with their data for the last five years, looked at it as if for the very first time. They had never understood their data before, which makes setting targets really difficult for schools.

Mr HERBERT — It was MIPs data, was it?

Ms RYAN — No, it was the OnTrack data.

Assoc. Prof. HENRY — Copies are available.

Ms RYAN — It is simply that nobody has worked with schools to help them analyse what their data means, so that was our starting point. The question we asked was — and I will use just one school — 'If, for example, 35 per cent of your kids go to university, 35 per cent go to TAFE and the rest go into the labour market, is that the sort of profile you want for your school?'. That was the question that we asked them.

The schools were unclear about whether that in fact was the profile that they wanted, because they had not thought about it in those sorts of terms. The second question we asked them was, 'If this is the destination profile of your kids, let's go back and look at the MIPs plans, if you like, or the students' and the families' aspirations. Can you say that the kids and the families in your school are happy with that set of destination outcomes?'. They do not know the answer to that question either. But the third part of that equation is: if the students' and families' aspirations are this and the destinations you are actually getting are something different to that, then the question comes around to what sort of curriculum and resourcing needs to be in place to get a better match between what kids and families want and where in fact they actually end up. It is in that middle box that you start having the conversation about teacher professional learning. Does that make sense?

Mr HERBERT — Yes, absolutely. Perhaps just one last question. In terms of understanding the kids and the students in the schools — it sounds like a great project — what about businesses? I saw that one of your early kind of aims is to work with businesses. Have Geelong main spokespeople or main businesses put a viewpoint in terms of what they would like to see coming out of the schools and where they see emphasis should be on professional development in terms of the job market?

Ms RYAN — When we first started working with the businesses in Geelong we started a proposition with them that we had 19 per cent of our kids who were unemployed, our youth market. You would know in Geelong, in a regional centre, about the really big skill shortage issues. When Ford said it was closing down the other day, that exacerbated that problem.

The employers as businesspeople struggle and say, 'We have 19 per cent youth unemployment, and we have these massive skill shortages, where is the match between those things?'. Then we were saying, 'In our schools only 28 per cent of the kids are actually doing some kind of VET or preparation to go from school to work. We have an anomaly happening here, what are we going to do about it?'. When the business community actually understood that set of data and what it actually meant, their response was, 'What is our role in all of this? Surely we should be playing a role'.

They identified in Geelong that we have 10 000 businesses and only 900 of those are active. We have an employer group that has committed itself to doing something about that. By getting active, that means for kids at years 10, 11 and 12, giving the kids an opportunity to spend some time in the workplace to better link them to an employment outcome.

Mr HERBERT — Thank you.

Mr FINN — Just a quick one following on from Steve's questions: I firstly commend you on your submission, obviously a great deal of work has gone into it. But I also commend you on linking the two — learning and employment — because I think that is a crucial issue within itself. I would extend perhaps what you have just said and ask what the role of business and industry is in training and professional development of teachers overall. Do you think that if teachers are more aware of what employers need, then we are going to get better educational outcomes?

Ms RYAN — If you had asked us that question three years ago, I would have said that the teachers would not agree with what the employers would have to say, they would say that employers want one thing but education is not about that. Now they would not. Now schools have accepted the fact that their job is to help prepare kids for that school-to-work transition. We have got an employer group in Geelong that has been operating for three and a half years. The employers asked to have a panel of careers teachers come and talk to them — the first time that has ever happened, asking for the careers teachers to come.

We actually had a panel of careers teachers who talked about what they do and how they prepare kids to make that school-to-work transition. A couple of things happened. One was that the employers were surprised around what actually goes on in schools, where they did not think there was too much happening by way of preparing the kids. That is true in the main but it is not true of everywhere.

The second thing was when they heard what those teachers were actually doing in their schools, they wanted to be more involved with helping them do it. That is a big culture shift. Before, schools and employers saw themselves as two different universes.

Assoc. Prof. HENRY — But this is part of how you can, through projects such as the change project and other projects within the LLEN over the last three or four years — this is how you start to grow the connections between secondary schools and their broader community, of which the employers are a part. The big issue that we have had is that schools have been really essentially organisational entities unto themselves.

It has been very difficult for community members — employers and others — to be able to work their way into productive partnerships with teachers. There has, I think it is fair to say, been a resistance the other way as well. This is part of the changes that need to be worked through in the transformation of our secondary schools. Our secondary schools essentially have not changed much since the Second World War. If you take a real hard look at the curriculum and the abiding culture, it really has not changed dramatically since the 1950s.

This sounds pretty damning, but that is the deep level of the cultural shift that now is really required to accommodate the learning needs of the young people who are staying on now to year 12 — kids who before would have been out in the workforce. If you go back 15 or 20 years, a lot of the kids who are now staying on to year 12 in the past would not be there. They would be out in career-oriented employment. That career-oriented employment is not available to these young people now. The youth employment market has changed dramatically. They are staying on at school but they have other needs. They have other learning needs than the straight academic

curriculum that is the standard fare of secondary schools and for which schools are well-resourced to deliver in the main.

The big challenge for the schools in this shift is really getting a change in their resources — here I am talking about personnel — to be able to deliver the broader range of high-quality learning that is now required for the various destinations that young people will move into post-year 12. The key destinations are to keep kids in education and training. We have looked at some of the data that is available on the employment that young people go into after 13 years of education. In the most part it is casual work in hospitality and retail.

For the vast majority of those people it is not career-oriented employment. You would hope that the schools would have developed the attributes of lifelong learning so that those young people who go into those youth employment positions directly from year 12 would still see themselves as active learners and take up opportunities to return to education and training as young adults.

Mr FINN — Do you think a return of technical schools might help a lot of those kids that you speak of?

Assoc. Prof. HENRY — I can only talk from the technical school in Geelong. the Australian technical — are you talking about the Australian technical college?

Mr FINN — Overall, if the government was to have a change of policy — the state government or indeed if the federal government was to build more?

Assoc. Prof. HENRY — There need to be more resources in the development of technical schools, whether it is coming through the Australian technical colleges or through other initiatives at the state level or the commonwealth level. We have looked at the data for vocational education and training provision for the seven schools that are in this change project.

When we have analysed the data and put it back to the schools, we get the same response as Anne-Marie said before about the destinations data. It is as though they are seeing it for the first time. But what comes out of that data is how complex it is for secondary schools to manage and operate the VET in schools delivery. Whether it is through VET in schools in the VCAL or VET in schools through the VCE, it is a highly complex operation involving a whole range of RTOs, including other schools, TAFE, and other RTOs. But it is terribly underresourced with the school, and when you talk to the teachers about it and you say, 'Here's your VET data, how is this being resourced?', they tell you it is carried by one or two teachers. When you ask them, 'How well known would this information be amongst your colleagues in the school?' they would say they would not know about that. They are oblivious to it, and yet it is a major operation that the school is struggling to put into practice.

Ms RYAN — I would make a different comment as well to what John has just said. It is not so much promoting technical education as promoting education where the kids get an opportunity to apply what it is that they know, whatever the theoretical stuff is. A case in point there is that Powercor came to see us the other day and said it was increasingly disappointed with the calibre of kid that was turning up for apprenticeships in that industry.

When we got to the bottom of that it actually meant that the kids had maths and science subjects that did not apply to the setting of Powercor. What that means it that the teachers in schools are actually teaching kids theoretically where the kids cannot see the point of what it is they are doing. Then they go on to an employer where they think they want to work, and the employer says, 'Well, what you have been learning bears no resemblance to the maths and science we require in this workplace'.

So at a different level to the technical, it is really about whatever subject the kids are doing that they are interested in. It has to have a real-life application at the time that the kids are learning it, not some time down the track.

Assoc. Prof. HENRY — I was responding to your question about technical schools. I think it would be a mistake to return to the technical schools of the 1980s. Our society has moved on. The technical schools back then were not really well connected to industry.

Mr FINN — But do you think technical schools providing that sort of technical education with the right connections would be ideal for this day and age?

Assoc. Prof. HENRY — Yes, exactly the right connections out to the community, to employers and to industry. This form of education that we are proposing is really coming on stream one way or the other, but we are

in that transition phase of this much more connected networked secondary school,connected into its own community.

Mr HERBERT — Just to follow up on the question and on your comment about the maths and science. When we held our inquiry a couple of years ago into maths and science education what we found was that whilst there was a general desire to have more vocational studies happening in schools that in fact a lot of the kids who were doing that were students who were not particularly academically able and not mathematically gifted or adept, and that what was coming out was not meeting employers' expectations.

They often wanted a much higher level of mathematics, particularly in a lot of the hard skill shortages. I would not mind some comment on that because there is a real problem here, I think, that has not been properly realised, and that is that we often encourage students in the vocational areas; those who are not academically able, but a lot of the skill shortage areas require some sophisticated mathematical and scientific abilities to get a job and to succeed in that industry. I am just wondering whether there is an answer to that conundrum?

Ms RYAN — I do not know what the full answer is, but one part of the answer is the question of relevance. We found a lot of young people who schools would say are not particularly academically gifted. When they find themselves in settings where they want to be and they are interested in the industry and that range of things, that the actual maths and science that are required there makes more sense, and the kids rise to the occasion.

There is something about that. It is the same thing as kids at school who, kind of, terrorise people and become disengaged really quickly. When we put them in workplaces for some work experience they step up to the mark and surprise absolutely everybody. There is something about that.

Mr HERBERT — Is there not an issue of career counselling at the years 9 and 10 level particularly so that kids know what subjects they have to really go for if they want a vocational career, rather than dropping out of them?

Ms RYAN — There is a problem there too of the teachers not understanding the demands of industry, and being able to provide accurate career advice. I know John wants to say something about that, but I will give you one example. Three years ago in Geelong we ran a mini-teacher release-to-industry program because we wanted to get teachers out into industry to understand what goes on, even if just for a short while. We could not get them to go. They were too scared to go and they had to be forced out into industry — literally — by principals saying, 'This is what is going to happen'. When those people got out into industry and actually saw what was going on it completely shifted their entire way of thinking. They came back and the stuff they were doing back at school was done in a completely different way. There is something about that kind of culture of fear, when you step out of your comfort zone that we need to deal with.

Assoc. Prof. HENRY — I was going to comment on that. I would be looking at the form of maths teaching that was happening around those vocational and education initiatives. From my experience maths secondary school teachers are among the most conservative of teachers going. They understand maths in a particular way, and if they are allowed to teach within their comfort zone it does not matter what setting you put them in.

If they are working with young people who are, as you say, not academically orientated — and what we typically mean by that is that they are not text book orientated — then you would probably find they are still getting a form of text book maths education but they are not engaging with it. It is how you build applied learning projects that are of interest to the young people and can sustain high-quality learning. Then you bring the maths in around those.

Mr HALL — I am commenting as a former maths teacher at a secondary level.

Ms RYAN — Did we can them? No.

Assoc. Prof. HENRY — And how conservative are you?

Mr HERBERT — There are exceptions.

Mr HALL — First of all, I want to apologise because I missed the main part of your presentation. I had another parliamentary committee to go to. I am not sure if you have covered it, but you have covered it in part in some of the answers that have been given, and that is: this inquiry is all about professional learning for teachers.

What is the best way, the best professional learning we can give teachers so they can better understand those needs of industry which you have indicated is so important? Is it the release to industry programs, or is it other forms of professional learning?

Ms RYAN — It is where there is real project work that involves those pathways into industry where the teachers are actually working on something like that together with the employers.

Assoc. Prof. HENRY — It is through the project-based work that you bring in the whole range of resources as the people working on the project, including teachers and others, recognise there is a need for further work. What is a waste of money is to provide professional development outside or have one-day events or take teachers out of their environment and have them in the conventional professional development context, of which they are supposed to then make sense of that back in their workplace which has not changed.

It takes a highly energised teacher to be able to sustain the new work in an environment which is still stuck in the past. You need to have it embedded. It needs to be cutting-edge work that is developing new ways of teaching and engaging young people, and it has to hit up against the organisational culture of the school so that the school starts to shift. If you are not doing that, we are just wasting our time.

Ms RYAN — Yes. With this change project that we have operating in Geelong — and I hope no-one outside these four walls hears this — it is not costing a cent. The schools have put their hand up because they have an issue with their destination pathways and they want to do something about it. It is actually costing the schools money to participate in this project and to set up their project teams. You do not need money; you need a change of mindset and a compelling problem, like John is saying, and then some work going on to do something about it.

The second thing to do with employers is that when our employer reference group actually realised that by the time kids get to year 10 and then we start directing them into employment pathways it is too late. They worked with us to put together a submission to the Manufacturing Skills and Training Taskforce that Tim Piper is part of. I do not know whether you know Tim from the AI Group?

They put together a submission for Project 729 in manufacturing. It is to introduce young people and their parents to careers in the broad manufacturing sector at years 7, 8 and 9. The employers put up that submission and had it funded. Their whole idea is that we have to start earlier with exposing young people and parents to what the world of work looks like today, not channelling kids into pathways but opening them up to say, 'These are the plethora of opportunities', because the teachers do not do that.

We needed some other way, and there is industry getting behind a project like that and opening up their workplaces for kids at years 7, 8 and 9 to visit and their parents to be involved, and that range of things. The employers are putting up their hands. We have a database of 1000 employers who have all offered opportunities to open up these things to kids and parents. It is not costing anyone anything either; it is the employers opening up their places and us putting a database in place and making a match.

Mr HALL — Very good. Thank you.

The DEPUTY CHAIR — Thank you very much. You will get a transcript for you to revise, and you can make changes accordingly. Thank you very much for taking the time to come in.

Ms RYAN — Thank you, too.

Witnesses withdrew.

C O R R E C T E D V E R S I O N

EDUCATION AND TRAINING COMMITTEE

Inquiry into effective strategies for teacher professional learning

Melbourne — 17 September 2007

Members

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Mr N. Elasmar	Mr S. Herbert
Mr B. Finn (1 March – 18 September 2007)	Mr G. Howard
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Witness

Ms E. Freeman, senior lecturer, faculty of education, University of Melbourne.

The DEPUTY CHAIR — Welcome, Liz. You are from the Student Wellbeing Unit, Faculty of Education, University of Melbourne. Student wellbeing unit? That was not around when I was at Melbourne University?

Ms FREEMAN — It is a very small unit of two people, but it will expand.

The DEPUTY CHAIR — Welcome. We will allow 10 minutes for your presentation, then we will ask questions.

Ms FREEMAN — You have asked me to comment on teacher professional learning in relation to student welfare needs. I have comments to make on that directly plus comments that might be relevant to (j) and (g) in your terms of reference as well.

Just to give a bit of background — I am an ex-teacher and a psychologist, but I have been in the tertiary sector for a number of decades now. For those two decades that I have been at the University of Melbourne and another institute I have been working with experienced teachers who have been coming back to do further study around the area of student wellbeing. Those teachers have been in the 25-to-60 age range. They are coming back to do two years of part-time study, so my comments are coming from working with those people over two decades plus some research projects that have fed into our understanding of what teachers are looking for in this area and may be of interest.

What we found is that — and I guess this is implied by your inviting me here — student wellbeing is linked to educational outcomes; that you can focus on improving teachers skills in relation to content, literacy and numeracy, and those things are very important, but unless you address the areas of wellbeing as well, often you will not be able to address the barriers to learning. That is why we think student wellbeing is so important; it is linked to better learning outcomes, healthier social and emotional development, fewer risky behaviours by kids, more pro-social behaviour and so on. But I guess the fact that you invited me here shows that you recognise that, too.

What has become increasingly apparent to us is the complex challenges that schools face as a result of societal changes, and that impacts on the teacher's day-to-day role and sometimes puts them in situations that they do not feel confident or prepared to handle, and often pre-service training, because it is quite short, does not get a chance to really address these issues fully. So teachers can obviously find themselves dealing with things that we know about like bullying, conflict, drug abuse, suicide, homelessness, the challenges of cultural diversity and maintaining social harmony — I could just go on with the list of things that schools are now required to deal with. I guess it is in government policy at the national and state levels that schools are being expected to deal with these issues. We have got the National Safe Schools Framework; we have got the Victorian Framework for Student Services; and we have got the Victorian Essential Learning Standards, which say our kids have to come out socially and emotionally competent, able to manage themselves, socially and interpersonally aware, and able to make decisions responsibly. So there is a lot of pressure on schools and teachers to come up with those outcomes as well as the more traditional learning outcomes.

From our point of view every teacher has a role in student wellbeing, and student wellbeing is everyone's business. That means working at a preventive and health-promoting level as well as just reacting. We use the concept of upstream and downstream; you have to work at both levels. Often student welfare issues are dealt with downstream — just deal with the problems, and there are more and more of those to deal with. But we are trying to do that I guess with our teachers coming to study to focus on the preventive things that you can do at a whole-school level as well.

We think all teachers need it. Some teachers see that they need this area of study and other teachers do not see it as their role at all: 'I should just focus on teaching'. So you have those two groups: those who know they need some assistance in this area and seek it out by doing part-time study, and some who do not even see it as part of their role. Our research and other research, does show that teachers do lack confidence in this area. They have to learn skills on the job. They do not always know whether they are handling complex scenarios effectively.

They are dealing with parents who bring quite challenging issues to the school. They are dealing with angry parents. They are dealing with upset kids who often lack confidence. They ask, 'Am I doing this the right way?'. We do know you can actually make things worse, so we believe teachers need to be skilled so that they can be purposeful in assisting young people with their wellbeing.

We have identified two sets of skills: the skills to respond effectively and appropriately to individual students or parents or carers when there are concerns; and the second set of skills involves working at a whole-school level. To work at a whole-school level requires that teachers feel comfortable to be leaders — so we see all teachers as leaders — and they need to know a lot about the change process. A good idea is not enough; they have to know how they might build a health-promoting school environment with their colleagues, and that requires a particular set of knowledge and skills.

At the very practical level, we know that the teacher-student relationship is critical; that a significant strong relationship with an adult like a teacher is protective for young kids. So teachers need to know how to talk to a child who is having a personal or behavioural concern, how to talk to the parent of that child, what to do if they have a student in their classroom who has experienced a loss or a trauma, how to resolve conflict between students, and what to do if a young person expresses suicidal thoughts.

We might hope these things do not happen in schools or that teachers do not have to deal with them, but they do; they are very real issues for teachers. It might be expressed in an English essay or something; teachers will pick up areas of concern. While teachers are not counsellors, they do need to know how to handle these things in the first instance. Their questions include, 'What do I do?', 'How do I respond effectively now?', 'Where may I refer to?', 'What processes do we have in the school or with our wider community or other agencies that might relevant here?'.

We have had some research at the university, in the Youth Research Centre in the Faculty of Education, which says that even as young as grade 4 kids want teachers to notice if they are upset. In other words, they do not want to go to the teacher and say they are worried about such an such; they want the teacher to pick up on it. Whereas teachers sometimes feel reticent, a bit reluctant, and feel they would be intruding, students often want the teachers to make the first move. To do that teachers have to have some skills, and they have to be quite purposeful in their communication. They also have to know how to manage the impact of that on themselves when they are dealing with complex and sometimes disturbing issues.

There is a lot of evidence now about the types of environments that do promote student wellbeing and wellbeing for the whole school community: the notion of whole-school approaches; the notion of building connectedness and engagement in school and for all students; and the idea of building school-community partnerships, bringing in other agencies to support schools. There is a lot of research and literature supporting those types of approaches, and teachers need to know about those.

We have been running a course where teachers respond extremely positively. Our course experience questionnaires for the teachers who have been involved in the two-year part-time course are some of the strongest in the university. What we know is that with the particular program we are running we are meeting teacher needs.

What I thought might be of interest is that since 1999 we have been engaged in a project with the Catholic Education Commission of Victoria and the Catholic Education Office in Melbourne. They have sponsored more than 800 teachers to do our course. They have given them sponsorship funding, so their university fees are paid, and they have given them partial time release and expected teachers to contribute some of their own time also. They have seen this as part of a systemic strategy to promote a preventive approach to wellbeing in their schools. They got the money to do that through their submission following the Suicide Prevention Task Force report in 1997. They used that money for the front line, to support teachers in these roles. They targeted people like middle managers and year level coordinators in schools. We have had a lot of principals and deputy principals from primary schools coming in to do this particular program. Their aim is to build a systemic capacity, so it is actually a strategic professional learning approach. We see it as a joined-up approach, where the system is collaborating with the university to support these teachers.

The ways we run that course have shown us a lot about what professional learning works best in that context. There has been some research done on it, which has shown that the course has had an impact on individuals in terms of enhanced pastoral skills, increased confidence in handling the situations that previously people would have been concerned about, and enhanced leadership capacity — and there is a constant mention of professional renewal and challenge.

The one thing about this program is it is not just the one-off PD, that is very common in the system. It is a sustained, two-year, part-time program. The group of people who go through together, they develop a collegial

network in the group and they actually do strategic assessment tasks that ask them to reflect on what is going on back at their school. They have to carry out action research projects in their school, tailored to their school's needs. As I see it, we have a circle of joined-up practice with the university and the system — the schools and individuals — all working on a common target. It makes it a quite strategic investment. It is a large investment by the Catholic system in professional learning, and it is unusual in that regard.

People in the Catholic system have done this also in relation to literacy, with Dr John Munro in our faculty. That also has been extremely successful. The fact that they have sustained it since 1999 with our particular program I think is testament to the fact that they are finding it is building system capacity. I guess that is an answer to (j), the point about cross-sectoral links to support professional learning.

What we have found, though, about the type of learning that works best is, obviously, that content matches needs — that the university content and the needs out there are very closely linked. We are constantly reviewing what we are doing to help there. The course has key principles of adult learning underlying it. It is highly interactive and highly participatory. We recognise that people are coming in with a lot of experience and we try to add new frameworks and theory and practice to that. We know that there is an interplay between personal and professional in learning and teaching. Teaching is about emotional labour, in many ways, and you have to recognise the personal component in it.

We have intact groups of about 30 participants who go through together for two years. The people in the groups do actually support each other tremendously. There are the strategic assessment tasks that are practical, that have real implications. We also use peer consultancy within the groups, so people are paired and support each other through the program over the two years. They are some of the content factors.

We have found that one of the critical things is that there are factors to do with the sponsorship and the partial time release, the fact that the system provides some support; the accreditation, the fact that the teachers come out of this with what was a post-grad dip and is now a Master of Education, (Student Wellbeing); and that it is sustained. That seems to really give it some meat and some impact. It is unusual in that regard, I think, that sort of sustained work.

I have been involved in a number of other programs, too, related to student wellbeing. They may not have been accredited, but we have gone for the sustained approach. If you really want to make a difference and have teachers with knowledge and frameworks and skills to do things differently, to feel more confident and to be able to work strategically within their own schools, you have to put in the investment. Perhaps I should stop there.

The DEPUTY CHAIR — Thank you.

Mr HALL — Thank you very much, Liz, for the presentation. It sounds like an interesting program you have running there. You said that it was a two-year, part-time program. Does that equate to a certain number of hours per week? How is it actually structured?

Ms FREEMAN — It is actually not run on a weekly basis; we run it in a weekend, vacation or evening mode. In the evening mode it would be 3 hours a week over a semester, which would be about 10 weeks. The subjects are of different lengths, so 36 hours a semester would be the rough equivalent.

Mr HALL — Is there a strong demand for that program?

Ms FREEMAN — That program has operated since 1981. It started with 12 students. We have focused on this relationship with the Catholic system. They put out expressions of interest and they are oversubscribed every time. They might originally have been getting 300 applications for 100 places. Since we have moved to the masters program, the other night we had 90 people at our briefing for 60 places. So there are always more than we can service or the system can pay for. We also have interest from individuals — from the state system, from the independent system, from primary and secondary — who come in and pay for themselves. That demand has been impacted a little bit by the university fees, but it has been steady.

Mr HALL — What about the destination of that program? I think you mentioned that some administrators or year level coordinators would come in and actually do it.

Ms FREEMAN — We have had principals from the primary system in particular do it. They say, 'This is the thing that's helped me most with the challenges of being a principal. Of all the things I've ever done, this has

really made a difference to how I deal with that parent who's come in the door really furious, how I deal with conflict between staff as well as students'. They are very positive about it. They are not seeking to go elsewhere. The year level coordinators might be seeking to be promoted within the system, but we are focusing it on enhancing what teachers are doing now and what they might do in the future.

Mr HALL — Does that course give its graduates a qualification to enable them to fill a student welfare coordinator position?

Ms FREEMAN — Those positions are filled at the school level, with interviews done at the school level, so it is not required for those positions, although many people will use it to say, 'I've studied in this area; take my application more seriously'. In the Catholic system they have now said that people have to do our course. If they are applying for the new primary student wellbeing positions they have created, they have to have done it or do it within five years. So there is a difference across the systems there.

Mr HALL — You have said that all teachers do not need to be counsellors but they need to know a bit about that first stage of counselling and identifying when there is an issue that needs to be better explored.

Ms FREEMAN — Yes, that is right.

Mr HALL — As a former teacher, I fully agree with that and also with the fact that teacher education does not necessarily prepare people well to do that.

What sort of professional learning can you suggest, from your experience, would give teachers that initial ability to identify those issues that perhaps need some follow-up counselling?

Ms FREEMAN — I think the notion of — I will just come back to this issue — having enough time to really grapple with that and enough time for a group of teachers, whether it be school-based in a school or whether it be outside a school through a tertiary program or through some other program, to come together to develop a fairly trusting climate so they can actually confide the fact, 'I struggle with these situations'. Everyone tries to appear as though they are competent and can deal with everything, but to actually get people to say, 'I don't know what to say when so-and-so does such and such', you need a group that is going to be together for a while. I do not know if that fully answers your question, but you could do it in a range of ways.

We have had, for instance, a project in which we are still doing the analysis where we have had professional learning teams meeting in schools and focusing on the teacher-student relationship. They have had six meetings with a facilitator from outside, and they have been using those meetings to look at: how do I connect with every student and respond appropriately to every student? I guess there are a few models.

Mr HALL — All right. Thank you.

Mr FINN — Firstly, can I commend you on dealing with this issue, because from discussions I have had with teachers, which are pretty regular, it seems that this is an issue which is really pressing hard on a lot of teachers.

Ms FREEMAN — Yes.

Mr FINN — In your experience how is this added role of almost de facto parent in certain instances that teachers are expected to take on impacting upon their ability to teach?

Ms FREEMAN — I think when you have confidence about how to respond, it sort of frees you to keep focusing on the teaching. It is actually a liberation to know, 'I do not have to solve every problem'. Often teachers are caring, they are committed and they are dedicated, and when they see these things going on they are actually distracted by them and they feel they must provide the solution, so one of the things we are trying to do is to say, 'What you do is provide a listening ear, hear what the problem is, and then you look for what support might be provided, and it may not be by you — in fact often it won't be'. I think it is actually about helping teachers to understand their role boundaries, which means that teaching is their main focus, but they cannot ignore these things, which will act as barriers to learning. Again I do not know if that answers the question, but I think to actually do their job properly, teachers need these skills.

Mr FINN — I would agree with you. Given what you have said to us today, that it is only the Catholic system that has embraced this to any great degree, do you think that the state system and perhaps other independent schools have missed the boat, as it were, on this matter up to this point?

Ms FREEMAN — I think it comes down to initial priorities. I would have to say that literacy and numeracy — and we had the report last week in the newspapers about history and people teaching their content areas and knowing more about that; that is absolutely critical, and I would not detract from that for a minute — but it's not enough. I think the focus has been primarily on, 'We have got to make teachers more expert in content areas and in this, that and the other', neglecting this area of wellbeing.

Mr FINN — That is why I asked the question, because if teachers are in the classroom dealing with a whole range of social problems that the kids have, that obviously will interfere with their capacity to teach their core trade, as it were.

Ms FREEMAN — Yes. To know how to take a child out of a classroom and have a discipline interview with them effectively as opposed to counterproductively, just basic things like that seem to be really helpful and can give a teacher a sense of control and confidence in the fact that they can manage these situations and they need not be controlled by these situations. Could I just add that I guess the state system does run professional learning in these areas, but I am not conscious of there now being any sustained work on these areas — for instance, the student welfare coordinators in the state secondary system used to have 15 days of centrally organised training to prepare people in designated roles. The responsibility was then given out to the regions, and my view, without knowing fully, is that it is patchy now. There are things going on, but it is not a strategic approach.

Mr FINN — In an ideal world, what should the state system be doing?

Ms FREEMAN — I think they need to do small-scale pilot projects where student wellbeing is a focus — maybe in a region. They need to actually test out some models in a small way for scaling up if they prove to be successful, and they need to have a strategic approach which would look at the fundamental skills and knowledge that people need to work in this area. There needs to be an audit of that based on teacher-express needs and school needs that would lead into a targeted program that was sustained. I cannot say that strongly enough. You can have interesting one-off sessions with Michael Carr-Gregg — and I am not criticising him, they are very stimulating — but what do you do with that information and what skills do you need to use it?

One of the things that I am conscious of is that a lot of professional learning is about, 'I go off and I hear this, and I can think about it, that's up to me. I don't have to go and read a lot more about it; I don't have to write down anything about it. I could talk about it back at the school'. It seems to me teachers actually need to be reading the theory and they need to be writing about it and applying it and reflecting on that. There needs to be an active response by a teacher to professional learning. I am sure that would have come out in other submissions, that teachers need to engage beyond sitting and listening.

Mr ELASMAR — I have just one question following all of this. You spoke about leadership, and I do personally agree with leadership and setting a good example, but leadership could not be a qualification requirement of teachers. Is there any gap between the two, and how can we fix that gap?

Ms FREEMAN — The gap between teachers and leadership?

Mr ELASMAR — Yes.

Ms FREEMAN — I think there are core skills about working collaboratively, knowing about change and understanding how to get a group of people working around a common purpose. There are these core skills that every teacher should have. They may not be ready in their initial pre-service training, but at some point in a teacher's career they need that set of skills to be able to work in a leadership role, wherever it be in the school, whether it be with a professional learning team that they might be running or whether it be starting an initiative . For instance, say a school recognises that its transition program from grade 6 to secondary school is not working from either the grade 6 end or the year 7 end, and someone decides to take that up as a project. They need leadership skills — you need a leader — and every teacher should be able to do that, if it is an area that comes up under their umbrella. I do not know if that actually answers your question.

Mr ELASMAR — It does.

The DEPUTY CHAIR — Are any of the units that you do taken into account in teacher training programs, and if not, why not?

Ms FREEMAN — It is funny you should ask that. At Melbourne University we are now right in the middle of developing a two-year master of teaching program that will replace all the pre-service qualifications that we have had in the past as part of the new Melbourne model. Within that I am writing an elective at the moment called 'Promoting Student Wellbeing'. It is an elective. There is a little bit of content in another subject in the pre-service course, so I am trying to get it into the pre-service. I think it is patchy across all the pre-service training, because in a year you cannot do much. In a year, the agenda for people in pre-service is huge. Our model has got, in principle, an internship out in schools for a couple of days a week. There are a number of ways that go to trying to focus on the professional practice of teachers and the issues that they are meeting whilst they are placed in schools. I think that placement and the quality of it will depend on funding support from the range of governments.

The DEPUTY CHAIR — You spoke about the course being a few weeks. Do you also offer short courses — two weeks or two weekends?

Ms FREEMAN — We have not, but it is purely a resource issue. There is myself and one colleague, who is overseas. I have been running this area since 1986, and we have never had enough staff to do all the things that you could do, so we have focused on our main game. It does not mean there is not a need for that or a use for that, but we just do not have the resources. It is not an area that is seen as a priority amongst a lot of people. It is seen as the luxury, the periphery. We see it as central to the main game, but not everybody does.

Mr HALL — Is understanding student wellbeing and responding to it a skill better mastered by somebody with a bit of experience in teaching rather than by somebody who is inexperienced?

Ms FREEMAN — It is a relevant question, because you used to have to have three years experience before you came into our course. We have now reduced it to two, but I think sometimes people need to get out there and see what the issues are, so we have felt that a base of experience places people well when they come into the course, so we have seen that.

Mr HALL — The only other way you can get around that, I suppose, would be if there were a teacher education program which placed somebody in a school over a period of time as part of their dip. ed. or whatever program.

Ms FREEMAN — The new Master of Teaching is being finalised now, and if it comes to fruition as intended, because of the greater contact with schools right through the whole course and the fact that it is two years, there will be more scope to do that.

The DEPUTY CHAIR — Thank you very much, Liz. We appreciate your coming.

Ms FREEMAN — Thanks very much.

Witness withdrew.

C O R R E C T E D V E R S I O N

EDUCATION AND TRAINING COMMITTEE

Inquiry into effective strategies for teacher professional learning

Melbourne — 17 September 2007

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Mr A. Brandenburg, president, and

Ms L. O'Grady, ICTEV teacher of the year, ICT in Education Victoria.

The DEPUTY CHAIR — Welcome, Tony and Lauren. Thank you for making time to come and speak to the committee. We will allow you 10 minutes to say what you wish to say, and then we will follow it through with some questions, if that is okay. Before you speak, could you give your name and title?

Mr BRANDENBURG — I will introduce myself and Lauren and our association so our credentials are right. My name Tony Brandenburg. Although I have presented to this inquiry before — I presented in my other role working for Catholic Education — today I would like to present to you from a different perspective, and that is as president of a Victorian teachers association and to put forward the views of our association. The way that we decided as an association to do that was to invite Lauren O'Grady, who is the head of innovation and teaching at Caroline Springs. Lauren is our teacher of the year, so it seemed fitting that we ask Lauren to present for us as an association. That is the general gist of where we are at. Lauren is going to do most of the presentation. I am just going to the lead in for you.

ICTEV has 800-or-so members in Victoria — teacher members — and part of our job is obviously to provide professional development for them. In the last five years we have seen a significant change in what our members demand of us. Whereas three to four years ago it was very much skills based — we needed to learn how to use Word; we needed to learn how to use computers; in fact 12 months ago we needed to learn how to use iPods et cetera — the demand from our members is significantly changing. It is very much along the lines of: 'Provide for us professional development to help us understand the learning and teaching pedagogy that we need to use with information technology'.

It is that whole idea of integrating information technology into the classroom. They are asking us to talk about things like reflective practice — 'How as a teacher do I think about my own teaching? Give me ideas, give me thoughts, give me understandings about how I think about how I am teaching'. What ICTEV has tried to do over the last 12 months is to shift in what we do in the professional development that we provide and in recognition of the teachers that we give awards to. We have a journal called *Interface* that goes out to all the schools in Victoria. We are trying to move that into really encouraging people about teaching and learning — moving away from the hit-and-run stuff and really moving into the stronger, more intensive, long-term PD; that is where we are at. We are moving away from 'just in case' — you have heard the jargon before — to the 'just in time'. The teachers' needs are far more important for us.

We have a strategic partnership with the government as part of its strategic partnerships plan, so part of that is the provision of PD. We hold onto that, but the move towards professional learning is what our members are asking us for. We are finding that our teachers are far more interested in a day bus tour of good practice schools and talking with other teachers who are good practice teachers than they are in attending the 4–6 professional development or even the day professional development. There is a significant shift in the demands of the teachers. It is more recognising the collegiality of a group of teachers and building and developing on that. Although we are still keen on bringing in the experts — and we tend to share that with other associations, with the education department — there is also the expert-is-in-the-school-next-door attitude and providing teachers with those sorts of opportunities.

The bus tours have led us to think about study tours. I am fortunate enough as president of ICTEV to be on the national body, and the national body is now looking at international study tours based on the same sort of concept of not going to see good-practice schools, but going to talk to good-practice teachers. I think there is a difference there that is really important for us to notice.

That is the foundation. To introduce Lauren, we are really proud that we have a person of her calibre as our teacher of the year, and I will let her tell you about all the good things that are happening.

Ms O'GRADY — I am Lauren O'Grady, and I am head of innovation in middle years at Caroline Springs College. I have been employed as part of a government initiative as a Leading Schools Fund coach. My role is to work with teachers all day. I am providing professional learning in the classroom, and I think so far that has been a really important and powerful way to drive professional learning in the classroom, especially in a school such as ours, where we have an extremely high density of first-year graduates, being a new growth suburb.

We have about 250 teaching staff at Caroline Springs College, which makes us very large, but to get into classrooms and to work with teachers, part of my role is to make sure that every teacher and myself have an individual coaching plan, and we work together in making sure we have a partnership to drive teaching and learning in the classroom. That differs according to who it may be, and there are lots of different formats for that

professional learning. With some teachers there is team teaching. It is sometimes modelling. We work in open-space environments, so sometimes it is working out how to manage students in those sorts of environments, but as I do not have a teaching load myself, I am constantly timetabled in with teachers to work with them.

One of the new developments in the short time I have been in the role is the move to creating students as mentors for providing professional development. You are not always going to be able to hit every teacher, but if you drive it through the students in the classroom, it is very, very hard to say no to professional learning for students, because that is why you are there. So we are starting to train mentors in, I would call it, the SET program — students educating teachers — and a partnership of how to give appropriate feedback, and especially in ICT how to provide the tools. Because as teachers we do not always need to have the what and the how, but we do need to have the why, and we do need to provide the reasoning for why things are educational.

My professional development experiences that have been most successful in my career have been long term. I was part of the western metropolitan region pedagogy network, which was a long-term process. We were there for multiple weeks, and it was forming an action research. So that is the same model that I did as a leader with my teachers. We look at what are the possible barriers and how to work that through in the classroom adequately. It has to come from a fellow teacher. So I teach, I am in there, and I am modelling, and we go and visit other schools, but we always make sure it is in partnership.

If I go to professional development, sometimes students will come with us to professional development. It is new for some professional associations for us to bring a few year 7 or year 8 students along to teacher professional development, but that is how we are driving it through the school. Driving through students has been very successful. Professional associations have been open to our bringing students.

In a school as large as ours you have to make sure that it is fed back in in an appropriate way, because it is not sustainable for us to send seven or eight teachers out to professional development, even though that might be the percentage that would be at a small school. You might send two out at a small school, and on a percentage basis you would hit the same mark as you would with maybe 7 to 20 teachers at a large school. Being a multi-campus school, we allow time to then discuss, and I have a counterpart at another campus — another coach — so that we are constantly driving professional development together with our teachers.

Mr BRANDENBURG — If we are actually modelling what we believe in, we would also have a student sitting there too, wouldn't we?

Ms O'GRADY — Yes.

Mr BRANDENBURG — To talk to about the linkage between the professional associations: the teachers who are part of those and the students that they teach. In summary — and I am conscious you have a lot of people who come through here and say similar things — a professional association in Victoria is totally focused on the quality of the profession and the need to celebrate that in Victoria we are extremely lucky that we really do have good teachers and that our good teachers have over the years been part of an innovative program for IT. Not everybody has agreed with the way that all that innovation has been accessible in our schools, but I do not think we have done a terribly bad job. Our role as a teachers association is to celebrate that profession and to continue to provide what we would see as good-quality PD.

The DEPUTY CHAIR — Thank you very much.

Mr HALL — Thanks for the presentation and congratulations, Lauren, on your teacher of the year award. That is terrific; well done! In your role as a leading skills teacher, is that just based at Caroline Springs or is that within a cluster of schools?

Ms O'GRADY — We are actually a cluster of our own. Because of our student numbers we are part of an innovations and excellence cluster, but due to student numbers at the college we form a cluster within a cluster, if that makes sense. So I am just at Caroline Springs College.

Mr HALL — Do you work in a classroom with other IT teachers or are there general teachers right across the board at the school?

Ms O'GRADY — There are general teachers right across the board; there are not just ICT teachers. I spend the majority of my time teaching English, maths, science — those core subjects — and then we have an integrated inquiry component. If the kids are learning it, I am there somewhere at some stage.

Mr HALL — We had a presenter at our last public hearings leave us with a paper called *Digital Natives, Digital Immigrants*.

Ms O'GRADY — Marc Prensky.

Mr HALL — Yes. It was a very interesting document to read. We can certainly put ourselves in the immigrants category. How are teachers generally responding to that issue when kids have grown up with technology right throughout their whole lives and people like myself and others of my age profile are very much immigrants? I was interested in your comment about students educating teachers. In many cases I think they do play a role in either educating us directly or ensuring we get educated ourselves to bring us up to date. How are teachers generally coping with that difference between somebody who has grown up with technology and somebody who has not?

Ms O'GRADY — One of the interesting things we are finding — we have a high density of very young teachers — is that our younger teachers are struggling more than our older teachers to deal with it. If you look at the teachers who come to ICTEV professional development, they are teachers who are quite confident with their pedagogical understanding in the classroom — they understand the teaching and learning behind things. So they are now in a position to start bringing in ICT as an environment or as a tool into their classroom. With first-year teachers I can honestly say it is the last thing on their minds; they are coming into an environment that university has not — —

Mr HALL — Yes, they are surviving from day to day.

Ms O'GRADY — Yes, it is a survival mechanism, especially if you throw in open space and working in open learning environments, like we do. Five years ago you were working in a traditional classroom, where you had your four walls and no-one else could see you, so as a graduate you were allowed to make mistakes and nobody ever saw them. Now we are in open learning environments, and you are on show. You are on show from 8.30 to whenever you finish for the day. Your room is on show, and that is in these teachers' mindset.

Mr HALL — Sure.

Ms O'GRADY — So our more experienced teachers are starting to take on the technology, and they have a thirst for that knowledge, because they have the understanding as to why you would use ICT. That is using ICT purposefully.

Right across the state there are very impressive one-offs. I worked in the department last year as the interactive whiteboard trial consultant. For the trial that was on here I worked in innovations. We saw right across the state amazing one-offs. Every school we visited showed us how to mark the roll on an interactive whiteboard. Without failure, every school did, and they were very proud of that. But if you asked, 'What is the teaching and learning behind doing this?' that was where they really struggled to try to articulate what is the role of the coach in there — because you are not modelling ICT use all the time, but when it is necessary and appropriate.

The shift in presenting — as part of my role as ICT teacher of the year I present for ICTEV — is taking it that step further and asking, 'Okay, tomorrow, after we have left our conference, what will this look like in our classroom?' and showing via video or via different methods and having a conversation about what it will look like back at the school. There are lots of theoretical bases for knowledge, but for young teachers, if they cannot see what it looks like, it will never get back into the classroom. The first term this year I spent a lot of time out of the classroom, planning with teachers, but until they saw it, they really struggled. That was an interesting thing.

Mr BRANDENBURG — Can I just add to that?

The DEPUTY CHAIR — Sure.

Mr BRANDENBURG — The Prensky concept of digital natives also refers to schools and tools. At the moment the education department has a fellow out from the United States. I do not know whether it has been mentioned previously — Marco Torres.

Mr HALL — The name does not ring a bell.

Mr BRANDENBURG — Lauren would probably be better to tell you about this than me, but he refers to it as not a tool but an environment. There is that whole concept of moving on from the Prensky thinking that we are all digital natives and we need to learn all those skills to the concept that it is the environment that we are involved in, and it is the environment that we need to be able to deal with. I think that is really a very powerful move for our teachers.

Ms O'GRADY — As a tool. You are always going to have a one-off because you are using it for one-off purposes as a tool. But using a technology as a learning environment, you are starting to move forward and starting to look at appropriate uses.

I attended the day run by the department last week with Marco Torres, which was again an evolution of PD, where maybe three years ago it would have been a skill-based PD, but it was a full day with teachers surrounding a conversation on teaching and learning and how to use ICT in an environment. What that did — we took two other staff members — was spark conversations back at school. The light bulb moment started to happen and staff were saying, 'Now I see a need for why I would want to use this, because it is not just a one-off, it is not just a PowerPoint presentation for the sake of a PowerPoint presentation. There is a reason for why we would do it, and a reason beyond just student engagement', because I think that is used as an argument for using ICT or interactive whiteboards or video — it engages students.

For it to be of lasting worth it needs to do more than just engage students, there needs to be teaching and learning behind that. I think that there are lots of arguments for student engagement, but if there is not teaching and learning and rigour behind that, it will only engage students for so long. I think that is where the teaching and learning has to be core to any professional learning.

Mr HALL — It has to be more than a new toy.

Ms O'GRADY — Yes.

Mr HALL — I understand that.

Mr FINN — Thank you, Tony and Lauren. Lauren, congratulations on your award. You touched very briefly towards the end of your answer there on my question, and that is in the excitement and the enthusiasm for the new technology and keeping up with things that seem to change every 3 or 4 hours, and that in itself is a task, it seems to me we may run the risk of allowing the more traditional areas of literacy and numeracy to be sort of back-pedalled a little bit, if you know what I mean. Do you see that as a possibility? Has that been happening?

Ms O'GRADY — I think for a short time it could definitely be a possibility, but students will have a need to look at different texts. The change from core literacy to what I would call, to coin the term, multiliteracies and being able to read and get information from a wide variety of sources, is very evident in VELS. The department came and filmed at our school some annotated work samples of reading — so what did reading look like at each level at the start of this year?

Where students actually coped the least with this was with the multimodal — how to read information off a website. They are very adept at using technology, but to gain information off that technology was really, really hard for these students. If you asked them to read from a book and comprehend from a book the way the early years are set up, students were very good at gaining comprehension, but when they had to take it into a technological sense — students are not using technology at home for a purposeful learning environment. They are using it as a tool to communicate and network, which has learning potential.

As teachers we can see the learning potential for all of this, but unless it is actively taught, then students are not going to start to look at it. It is more how to use technology and making sure that as coaches and as leaders and as professional associations we always say: 'The core need is literacy and numeracy. What are the professional needs of our students?'. If we always go back to how does this link in and how does this improve student learning outcomes — and as a coach that is one of the core questions all the time, to the annoyance of some teachers, because it is quite a challenging question to ask. They have spent 3 hours creating this lesson that looks wonderful, and you challenge that and ask what the students have learnt out of it. Sometimes the answer is, 'Not much, but it

looked really good'. It is making sure that in all professional development we remember what, as teachers, our core business is, and our core business is always student learning.

The DEPUTY CHAIR — Can I ask, how do you overcome the problem that many schools have not got the resources, they have not got the interactive whiteboards? Teachers might find time or money to attend in-service on interactive whiteboards, but the school cannot afford to have interactive whiteboards in every classroom. Other schools can, and they do use them. How do you overcome that problem? A teacher might come to the PD for the day, go back to the school but really be unable to implement — —

Ms O'GRADY — We have been looking at our school at the moment at staff absence data — how many days and the impact illness, professional development and meetings have — because you are pulling teachers out of the classroom to attend these days. But it needs to be something for a purpose in schools.

I have come from a small school into a very large school. There are two different layers at Caroline Springs. If I want to attend professional development, there are quite stringent guidelines, and I have to tell the principal leadership team why I want to attend this and how it is going to improve the school. That is not the case in all schools. You can say, 'I am interested in interactive whiteboards. We are running a budget deficit and we are never going to get interactive whiteboards, but I am interested in this'. It has got no link to their practice. I think for staff to attend external professional development it has to link back into their current practice at the moment at their school.

The DEPUTY CHAIR — But does that not disadvantage some schools? Other schools will have those interactive whiteboards and those students are learning. At the other school, which cannot afford those interactive whiteboards, the students are not learning.

Ms O'GRADY — I think that the benefit — —

The DEPUTY CHAIR — I just chose an example of the interactive whiteboards. It could be laptops, it could be — —

Ms O'GRADY — Yes. One of the benefits of attending a conference-type presentation is that there are multiple entry points for many teachers. How I got involved with ICTEV is I went to their conference. Their conference is on a Saturday. I started going as a student teacher because I think the cost was $20 or $30 when I was a student teacher, it was very minimal, but I could learn about a multitude of things. I could go and learn about a few things that related to where I was then, but I could also reach for the stars a bit and attend something on maybe interactive whiteboards opening the minds for teachers. But there is also funding out there. I got interactive whiteboards into my previous school by attending professional development. I saw an educational basis for it; we applied for and won a Commonwealth Bank e-learning grant and got them in our schools. That was because there was an inspiration. I could see a benefit for using those with our African students; I was at a high ESL school at my previous school.

The DEPUTY CHAIR — Can I ask, is the government putting enough resources into schools?

Mr BRANDENBURG — Resourcing is always going to be an issue, especially in IT, because what is around the corner? You used the example of interactive whiteboards, but interactive whiteboards are an excellent example because they are not cheap. The research at the moment shows they are having an impact on learning. There is a discrepancy between those people who can afford them and those people who cannot. I think that is the reality.

I also think that as teachers we always talk about the student, but just for 30 seconds let us talk about the teacher. There is quite a good argument, I would believe, for the idea that sometimes a teacher can do PD for themselves and not necessarily transfer it straight back into the classroom. The ex-principal in me sometimes thinks that sending the prep and 1 teacher off to do a 5 and 6 PD on literacy or numeracy or whatever is not a waste of time because the reality is that prep teacher might be my grade 6 teacher the following year or in three years time. I think that you ask a difficult question, in that resourcing is always going to be an issue.

The DEPUTY CHAIR — We have to make some recommendations and — —

Mr BRANDENBURG — More money would always be good.

The DEPUTY CHAIR — In terms of ICT — because you are ICT in Education Victoria — is the state government putting enough money into ICT in Victoria?

Ms O'GRADY — If I can talk about the trial and my role as a consultant in the trial, the Victorian government provided a trial of interactive whiteboards out of a rollout last year — it was almost the year before, and the end of it was last year. We then gave recommendations. The recommendations were that for schools that had a strong pedagogical basis and wanted them, it worked fantastically, but any extra resourcing would have been wonderful. I travelled through regional Victoria and I travelled through special schools, and our recommendation was to fully resource those schools as much as we could. Special schools fully embedded any technology we gave them and regional schools did as well, because when they start to embed that technology they do not have access to the professional learning opportunities that we necessarily do. We were looking at a cluster of schools — Castlemaine, Mildura and Terang — and for those teachers to meet up together was absolutely impossible except for plane flights. Those schools actively used those resources. In metropolitan schools where interactive whiteboards were just put into classrooms and the government provided them and the schools did not apply for them, as sad as it was, we visited schools where it had been in there for six months and the software was still taped to the back of the board because there was no professional learning for it. It was just technology thrown into the school, and I think that we need to resource it through professional learning and through staff as well as through technology, and there needs to be a balance for it to work effectively.

Mr BRANDENBURG — I agree. The answer to your question is: resourcing is an issue across governments in Australia. As a member of the board of the Australian body, Victoria is as well resourced as any other state, without a doubt. We have been fortunate in what we have received with ICT, but not to let that sit is that to develop good learning environments you need to continue to fund at the level or more than the level we are being funded at.

Mr ELASMAR — Congratulations, Lauren. I add my voice to those of my colleagues. Tony, probably the answer would be a new statement on what specific outcomes you would like to see from the committee's inquiry?

Mr BRANDENBURG — Obviously if you want to recommend more money, that is fine! I think it is a recognition of the subtle changes that are occurring in Victoria at the moment, and that is that whole understanding of contemporary professional learning for our teachers. We have moved from teaching them how to use Word and teaching them how to put podcasts onto iPods to talking about how to reflect on their own practice and how to reflect on their own learning. So the answer to your question from the ICTEV perspective is the ongoing and future development for teachers as learners.

Mr HALL — Tony, in terms of membership of your association, do you provide professional learning programs for just members of your association, or do you provide it more broadly.

Mr BRANDENBURG — No. We provide as broadly as we can. We are fortunate to have a strategic partnership with the government, so there is a certain amount of money that comes in. We could not rely on that, so we also charge for PD. We find that a balance of our PD allows us to cater for everyone. I work in Catholic education and Lauren is in the department. On our state council there are members of Melbourne uni and Monash and ACU, and there is the independent school sector. The political statement as far as our association is concerned is that we would hope to provide for all teachers in Victoria.

Mr HALL — What about the uptake of programs that your associations runs in terms of participation between government schools and non-government schools? Is there any significant difference and is there, in your view, equal opportunity for both of those sectors to participate?

Mr BRANDENBURG — The answer to the second question is yes, we believe that we provide an equal opportunity. Attendance at our conference is evenly split between all the different sectors. Attendance at PD is interesting. You will find that one of the sectors may be more interested in certain PD, because it is a focus. For instance, we ran a conference focusing on the middle years. At the time we were running it, it was a huge focus of the department, so you would have 150 teachers show, and out of those 150 some 100 or 110 could have been department people, because that was where the focus was at the time. Modelling a little bit on that, what we believe is that you provide professional development when it is needed. At one stage we provided professional development looking at what we called the Breakfast for Principals. It was looking at the principal as the lead

learner — the principal having an understanding of good pedagogy. At that time the department was working with their principals on that, so the majority of people were department people again.

The DEPUTY CHAIR — Thank you very much for your time.

Witnesses withdrew.

C O R R E C T E D V E R S I O N

EDUCATION AND TRAINING COMMITTEE

Inquiry into effective strategies for teacher professional learning

Melbourne — 17 September 2007

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Witnesses

Mr S. Pryor, executive officer, and

Ms E. Burns, president, Mathematical Association of Victoria.

The DEPUTY CHAIR — The committee welcomes Elizabeth Burns and Simon Pryor from the Mathematical Association of Victoria. We will allow you 10 minutes to make a presentation, and then we will ask some questions.

Mr PRYOR — Hopefully we will be very brief. We wrote to you essentially suggesting that there is quite a body of knowledge about professional learning and a clear direction in development that is being taken in Victoria where, rather than events, people are talking about programs and developing a closer focus to improving practice at a whole-school level and therefore rather than sending a teacher out and they disappear for a couple of days, instead trying to focus on collectively developing better practice within the school, so that means closer to work, et cetera.

What we were also hoping to stress is that there are some particular models that relate to maths, but we feel could be built upon into the future. That is largely because the work of the Education and Training Committee in recent times has also focused on the promotion of science and maths in schools and made a series of recommendations to do with a special accent on maths and science in schools and extra professional development for maths, so we felt that it was important that we stress the need for that again. We wanted to describe a particular model, which we have called PLAT — professional learning assistance teams — and to urge you to continue to suggest that the systems continue their involvement with the professional teacher associations as a critical part of professional learning, and perhaps hoping that the committee will stress to government that professional learning is a relatively expensive and elaborate process, and therefore we have got the models, but now we perhaps need further resources and support.

We have described three particular programs from the past, including the provision of model lessons, which we have taken and are working on right now as part of our professional learning assistance team structure. People have focused on providing good quality model lessons for teachers as a way of building on their own practice. You might be aware of something called Maths300, which is supported by the national Curriculum Corporation to this day, and has, across Australia, something like 17 000 subscribers. They are schools that make use of the extensive bank of model lessons as a way of working with teachers in their schools to model best practice.

We have described a couple of models supported by the curriculum branch in the past. Exploring Maths in Classrooms in the 1980s was particularly pertinent, and the content of that really could be picked up again by the department and used, because it really closely relates to the Victorian essential learning standards and could be brought back to life without too much effort. Maths in Schools was an effort by the MAV to link schools with tertiary expertise. Since the 1990s that has really been where a lot of expertise that teachers need to draw upon has been found — in the universities, rather than from curriculum coordinators or professional support within the department of education. Those resources have tended to disappear, especially in areas like maths and science, and the expertise will be found in universities, and we made a special effort to create that link. That is mirrored in the commonwealth's Australian School Innovation in Science, Technology and Mathematics project relating to science, technology and maths where they are encouraging schools to explore or to develop best practice amongst a group of teachers. We have actually had involvement in a couple of those projects as the third partner — schools, universities and the professional association — one in particular taking place in Broadmeadows, where we also tried to link industry, not necessarily with too much success.

Something that you would be aware of, Nicholas, because of Angela's involvement, is the MAV conference, which is quite an extraordinary event.

The DEPUTY CHAIR — I was a board member of the MAV.

Ms BURNS — You were?

The DEPUTY CHAIR — I was, in the 1980s.

Mr PRYOR — You have now been totally swamped in reputation.

Ms BURNS — No-one remembers you!

The DEPUTY CHAIR — No.

Mr PRYOR — It is a conference that has run for 43 years now, and I do not think you could ever create it, if you said 'We want to do this for maths teachers', just at the click of a finger. It is something that has developed a tradition over 43 years. Some 2000 teachers in Victoria attend it every year, and it has become the kick-off event for schools and groups of teachers to engage in their planning for the future and to get a real taste of what current developments are. More importantly — the thing that I think is quite stunning about it — each year there are 360 or 370 presentations at this conference, and two-thirds of them are by classroom practitioners. When you talk to principals and ask them to find ways of getting teachers to share with each other, they will tell you that is one of the most difficult things in professional practice. Teachers are used to a classroom on their own and are quite often uncomfortable about sharing. The barriers are now being broken down, but the conference has spent 43 years doing that. It is quite remarkable — people willing to share that practice in that way.

We are concerned at this stage really, in a sense, about the leadership of the profession when it comes to professional learning. People are retiring, and there is no evidence that new leaders are emerging or that there are support structures for those leaders in terms of professional learning.

At the moment the gap is being filled by people who are consultants — people at universities or people who are quite able to support their own consultancy, people who have taken 54/11 or whatever and have a very good maths background. They are providing leadership, and they are able to work with clusters and networks and support schools, but those people are going to disappear, and there is a need to create those people who are confident enough about their own practice and confident enough about sharing their practice at a local level, and we feel that it ought to be at a local level. The picture we have in our mind is of a group of schools in a particular place somewhere in Victoria and a group of people who are willing to be the mentors and support for that group of schools — local universities, maybe a couple of local people who have recently retired and some maths coordinators in some of those schools who are able to provide the leadership and take responsibility for the professional learning of all their maths teachers.

You have to bear in mind that maths — and this has been well documented by your work in the past — faces two critical dilemmas. The first is that primary school teachers are not confident maths teachers — that is a well-documented fact — and many of the years 7 to 10 classes are being taught by teachers who do not necessarily have the sort of maths background that would be recommended. They have got some maths in their qualification, but maybe not a maths method, and they are being asked to teach years 7 to 10 — they are quite critical years; we know that, too — without much background necessarily in either the content or the pedagogy of maths teaching, so there is a need at a local level to provide them with access to some local leadership resources.

The PLAT model is our effort to try to create that as a professional association, but we feel that in order to make it work we have to do that in partnership with the systems. We feel that we can help identify and gather together people who are likely to be leaders at a local level, and we can provide them in fact with model lessons and so on and with materials that might enable them to be useful leaders in their area, but that work will have to be funded. Some of the work will be funded by the schools and some of it will be funded by regions, but it is three or four years worth of solid work that will really need to be supported and funded, we feel, if we are to address what is a looming and critical issue. I think that is generally it.

Ms BURNS — I think so.

The DEPUTY CHAIR — Thank you very much.

Mr HALL — As a former maths teacher, I will go first.

The DEPUTY CHAIR — And a good maths teacher!

Mr PRYOR — That is our problem.

Mr HALL — Yes. I was there in the 1970s and 1980s, though. The first thing is: generally what sorts of areas of subject content of professional learning do maths teachers today require?

Ms BURNS — It varies, I think, from place to place, and we try to be proactive as well as reactive. At the moment, for instance, there is a need for retraining teachers to teach specialist maths at the top end, so we are about to put a series of sessions together, because they feel that the current specialist maths teachers are a bit on the way out or of a certain age, so we respond to that. But then it is more perhaps about analysing data that comes out that

says specifically that students are not achieving where they should be. So I think a lot of work with the basic number operations and also with fractions is important on a really practical level, if you want to get down to that, but then upskilling particularly teachers who are a bit out of field for middle school maths, which is where they are at.

Mr HALL — Generally are maths teachers willing participants in professional learning?

Ms BURNS — Pretty good, I would say. As I said, our conference, which is a one-off, is actually about a displaying of people's research and presentation over the whole year and then seeding for next year and for groups of teachers to work, so I think it works very well. They are pretty good, yes.

Mr PRYOR — We have 200 private school teachers out at Burwood today, and a number of those people have committed to a range of follow-up sessions within their school.

Ms BURNS — You do find that in, say, the primary area they might not think of themselves as maths teachers; they think of themselves as classroom teachers. Promoting that they are actually very good maths teachers as well is something we need to look at.

Mr HALL — We had somebody before the committee earlier today who described maths teachers generally as textbook-based teachers and as not understanding the needs of industry, for example, all that well. How would you as an association respond to that claim?

Ms BURNS — I do not think we are here just to serve the needs of industry. This is perhaps my personal view, more than that of the maths association. I think maths has three major things: it is a set of tools that you can use to actually solve some problems; it an extraordinary history of ideas; and it is a wonderful art form to understand the world.

If you think of those three together, I think that is what good maths teaching would promote so, on the utilitarian aspect of actually doing something just to serve the needs of industry, if maths is taught well that should be almost automatic. If you used an English analogy, you would be saying, 'Well, they only need to read the newspaper or something; therefore we don't need to put Shakespeare, or the canon, into the English course'. If you go down that path in mathematics, it is an issue I have with numeracy.

Mr HALL — The comment was made in the context of an employer believing that actually the wrong maths and science is being taught.

Ms BURNS — He needs to come and have a look. I would not know what he is suggesting we do.

Mr PRYOR — There is an interesting discussion of that in the Senate report on the quality of school education that was released this week. In fact they devote a whole section to just mathematics, saying that they have had more submissions about mathematics than anything else. They discuss this very question of whether maths should be just instrumental and relate to just, say, industry practice, or it should be something else, and what is the best practice. I am not sure that I would necessarily agree with their finding, but it obviously a contemporary and interesting discussion to have.

We have been working with a group of schools in Broadmeadows in an ASISTM project. We tried to relate industry to the classroom practice, the proposition being that many of the kids in some of those schools were not going to go beyond year 10 maths but industry in that area could do quite a lot with kids with year 10 maths and would be rather happy to have some locals who had year 10 maths, because otherwise they are recruiting from outside the area.

We found that there were some links but the teachers, in working through this, also found that there were other ways that they needed to teach the maths. It is partly because maths has its own rich culture and beauty and those are things you can enjoy working on as well as just worrying about the way a particular cog might work, or whatever. It probably would be that there is a mix of both.

In terms of textbooks, I guess there are three responses. One is that the maths association itself encourages teachers to wherever possible work away from the textbook. We say that the textbook is there and useful but there is a whole range of other things that you can and ought to be doing in your class. That is one set of responses. The other set of responses is that there are textbooks and there are textbooks. Some textbooks are well written and encourage

the teachers to do other things and work in innovative ways and there are some that perhaps do not. Perhaps teachers need some guidance on how they pick their basic resource, if they are going to use one.

The third, which is a proposition you will find put by the Australian Mathematical Sciences Institute up at Melbourne University, is that there is a need in years 7–10 for good-quality textbooks, largely because part of the task of the textbook is to introduce the maths content to teachers who are somewhat lacking in that, and therefore you need a good basic resource to help the teacher as well as the student.

Mr HALL — I read the exam guide in the *Age* two weeks ago and noted that nowadays VCE maths methods requires a 40-minute or 1-hour examination.

Ms BURNS — Two — a 1-hour examination and a 2-hour examination.

Mr HALL — And the 2-hour examination is predominantly on problem solving, is it?

Ms BURNS — It is very much so, and has been for a long time, in context.

Mr HALL — So the emphasis on maths education needs to be, and I am sure it is, in terms of giving people the skills to be able to solve those problems?

Ms BURNS — Yes.

Mr HALL — I defend the profession whenever I can.

Ms BURNS — That is good. I do think we need to support industry but we need to think deeper than that. If you give the best possible maths education you can, then surely if you are well versed, you can apply that relatively easily.

Mr HALL — You develop the logic and the analytical skills.

Ms BURNS — That is right. You cannot think of all the applications. That is the whole argument about having pure maths. Boolean algebra was invented in 1810 or something. Now we would not have a digital computing world without it, but then it was asked, 'Well, why is this here?', so the pure mathematicians need to be nurtured, because they do bring a lot to the world.

The DEPUTY CHAIR — We hear that PD is important. Who should be responsible to ensure the quality of PD? Should it be VIT, the schools or the associations? Is quality a problem and if it is a problem, who should be responsible for it?

Mr PRYOR — One of the partial responses is that for the past couple of decades, because resources have been very tight, you would find that most professional learning for maths teachers in the state would have been provided by us or by universities. We, of course, would say that quality is not an issue in those terms.

The Victorian Institute of Teaching seems to have resolved this question for itself at least in the short term by saying that teachers themselves must demonstrate continuing practice and continuing professional learning and must be able to demonstrate that their professional learning is consistent with their practice and the needs of improving their practice. Anything could be consistent with that. Something that we might not think of as appropriate professional learning at face value might for a particular teacher actually be consistent with the need to improve their particular practice.

I think that probably ultimately it is the responsibility of the professional people themselves. Perhaps we can say that more confidently about the teaching profession now than we could have 20 years ago because, thankfully, government at federal and state level has put far greater accent on professionalising teaching. We are only a short way into the journey but that is a clear move and one that we as a professional teacher association would undoubtedly support.

We feel that we have a very strong role in supporting that, so we have been partners with our national body, the Australian Association of Mathematics Teachers, and we have a clear set of standards that we believe a good maths teacher should attain. We believe that those standards can be used to allow a teacher to exercise judgement on their

professional learning needs, to decide what can I do, what am I not so good at, where do I need to go? We believe that they can also be used as an assessment tool to describe somebody who is a highly accomplished maths teacher.

Ms BURNS — It is interesting that the standards are filtering through. For example, at all our conferences and professional development sessions, they have a target: at which particular standard are you focusing this? So it actually is becoming part of our language quite quickly.

The DEPUTY CHAIR — Do you assess your conference every year?

Ms BURNS — We have an evaluation. It is an evaluation by only the participants. We certainly read those evaluations and we spend a lot of time trying to be creative about getting people to give back the evaluations so that we can actually do something with them. Certainly if there is someone who is not up to standard we will not have them back.

Mr PRYOR — We do assess the sessions that are offered against the standards, before we accept them.

The DEPUTY CHAIR — You said earlier, Simon, that there are primary teachers who do not feel confident in teaching mathematics?

Mr PRYOR — Yes.

The DEPUTY CHAIR — And we have heard that before. What is the MAV doing to try to encourage them — to assist them — with the teaching of mathematics?

Ms BURNS — Today we had 200 of them at a session for teaching mathematics. We had some really good presenters.

The DEPUTY CHAIR — And they pay for this?

Ms BURNS — The school pays. Most professional development is paid for by the schools. If you think of professional development as also being ongoing, so doing your masters or something like that, it would be good to see some more funding for that, I think.

The DEPUTY CHAIR — Have you any data about when they go back to school? Do they feel confident or better?

Ms BURNS — Absolutely. Yes, they do.

Mr PRYOR — And we believe in follow-up. As an example, of the 200 that are attending this day, which is introducing some of the latest good practice — they are all practical sessions that are being run. It is not theory, but, 'This is actually how you might help kids understand fractions in your classroom' — we are following up with the schools.

In buying the sessions at this one day, the schools have also agreed, and we have made an offer, that one of our staff, Ian Lowe, who has an extraordinary record of achievement in Victorian schools, will then be spending afternoons at those schools helping those groups of teachers plan how they are going to capitalise on what they have been discovering at this day, and how they will know that they have improved their practice.

Mr HERBERT — Sorry I missed the presentation; I think we started a bit early. Simon, you mentioned textbooks?

Mr PRYOR — Yes.

Mr HERBERT — There are good ones and bad ones. Is there any record kept of what textbooks schools are using? Are there 50 secondary schools all using the same textbook? Do we have any idea about that?

Mr PRYOR — It all over the place.

Ms BURNS — You have to go to the publishers. Even in one particular school — my school, for instance — textbooks tend to be secondary, the primary-school type. I think we are using — I can name them I suppose — Heinemann and Maxwell — I think that is, Heinemann isn't it?

Mr PRYOR — Yes.

Ms BURNS — We have a Macmillan. We also have a Cambridge; and you change. For instance, we went to the Heinemann but we have actually decided that we think that particularly for years 11 and 12 that Central is better, which is a Cambridge book.

Mr HERBERT — There is no evaluation of which are the better ones and which are not? Does the department do anything? Do they recommend anything?

Mr PRYOR — No, the department does not play any role with that. Angela Kotsiras has just, in the last two weeks, been running an email list with — —

Ms BURNS — Independent schools.

Mr PRYOR — Independent schools, asking them what books they are offering.

Ms BURNS — There is a wide variety; it is all over the place.

Mr HERBERT — There is at least one impressive person in the family!

Ms BURNS — You find, for instance, as the requirements — and here I will defend textbooks and textbook writers — we had CSF and then it becomes VELS. For the teacher in the classroom, there is a real need for immediate resources. If you have been around the maths world for as long as I have, certainly when you look at the writers, you actually recognise them and you know them.

Most of those writers are people we know and would recommend. They have written for VCAA and do all sorts of stuff in Melbourne. There are very few out of left field. They are mostly highly regarded. I think they are getting very tight on their maths. AMSI has a criticism of some of them, and produces its own textbooks which have also come under criticism from people.

Mr HERBERT — There is no formal evaluation?

Ms BURNS — No, and I do not think there are any really bad textbooks out there. What is bad is the total reliance on the one textbook.

Mr HERBERT — That was really where I was leading to. I hope you have not covered it before I got here. It just seems that whilst — both from people who have testified here and from going round the schools and from my own experience — there are some terrific maths teachers and terrific science teachers, and I will stick to secondary; I will not go into the problems of primary, but it just seems to me there are also a lot of schools — a lot of classrooms — that are dull and unimaginative places with teachers who say, 'Go to page 1, page 2, page 3, page 4'. That seems to be very predominant in the maths and science areas, where it is not working. I do not want to generalise, I do not believe that is the case but when it is the case you can quite easily see it in maths and science. I am just wondering, is there any kind of reason why it just seems to be, or am I wrong and it is not more maths and science?

Mr PRYOR — I think you are right in part. I do not know that it is as widespread as storytelling allows you to believe. I have worked for the maths association for five years and I have been struck by the extraordinary dedication that the people who I have come to know through the maths association have for improving their practice. The dilemma is best resolved through leadership, and leadership at a local level.

When you see that stuff happening in your school, and that is where you are going to see it — we might, as visitors, walk past and have a brief impression, but it is going to be the other teachers and the leadership group in that school who know that is an issue. They should know that it can be changed with the right support from the professional teaching association and from universities and from others. They ought to feel confident enough about the resources and support available to them as a school to help their teachers change that practice. That is what worries us about the current situation.

We are concerned that that leadership group in a school might not feel that they have got the next step, the resources around them that they can call upon to help that group of schools. If they are not going to see it today, we

feel it is pretty sure that, the way things are going with experienced people leaving the system, they are not going to see it in a couple of years unless something fairly drastic is done about it today.

Mr HERBERT — Such as?

Mr PRYOR — Professional learning assistance teams could say — —

Mr HERBERT — I surmise the really keen, innovative teachers come to your conferences. It is the ones you do not see — —

Ms BURNS — But that is about getting them back into the school to inspire and actually put on notice perhaps some of the teachers who are not. That is where you need the leadership and you need the authority in the school, to actually change the practice in your school. I also think this is a lot of lack of confidence with people. I think if you do also think about maths and science certainly there is a lot of sequential learning in maths. If they have not got a good understanding of number, forget algebra. That perhaps has set up this model of, you know, 'page 22, left-hand side this afternoon' by its very nature in a way. But I think there are a lot of really good maths teachers out there doing a lot of really good stuff.

Mr HERBERT — I am not saying there are not, I am just saying — —

Ms BURNS — We thought we would leave you, I do not know if we are ready to go, but just to show these problems have been around, the maths association is 100 years old and last year we produced this book which we will give to your library. These are papers from the 1950s that were in the old journals and things that we have reproduced, so you can see these problems are not new.

The DEPUTY CHAIR — When is the conference this year?

Ms BURNS — December.

Mr PRYOR — The 6th and 7th of December.

Ms BURNS — Would you like to come? You could have an excursion to La Trobe.

Mr PRYOR — You would be welcome.

Ms BURNS — You would be welcome, you could catch up on — —

The DEPUTY CHAIR — Parliament is sitting then. Any other questions?

Thank you very much for giving up your time to come.

Mr PRYOR — Thank you for your time.

The DEPUTY CHAIR — Do you teach at Melbourne University?

Ms BURNS — No. I am in a school.

The DEPUTY CHAIR — Thank you very much.

Committee adjourned.