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EDUCATION AND TRAINING COMMITTEE

Inquiry into the education of gifted and talented students

Melbourne — 19 September 2011

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Associate Professor J. Munro, Exceptional Studies and Gifted Education, Graduate School of Education, University of Melbourne.

The CHAIR — Associate Professor Munro, thank you for joining us today. As you are aware, we are the Education and Training Committee and we are looking specifically at the area of gifted and talented students as well as at programs that exist currently and also at opportunities for developing programs and ways forward in this area. I will explain the process for you today. We have a series of questions that we will ask you. We will also give you an opportunity to make an opening comment if you wish. We are recording everything today, and you will have an opportunity to review the transcript once it is ready and to make changes if there any typographical errors. Your evidence today is protected by parliamentary privilege, which is the same privilege that a member of Parliament is afforded. Anything you say in the hearing will be covered by parliamentary privilege, but anything you say outside will not be covered by the same privilege. I will start by giving you an opportunity to make any opening remarks that you may wish to make.

Assoc. Prof. MUNRO — Thank you for inviting me to make a presentation. I think everyone is aware that the whole issue to do with gifted learning and gifted education provision is extremely complex. It is also multifaceted, and I think aspects of that have come through in how provision has been implemented in a range of ways.

I apologise for my report; it is very long. It was not intended to be that length, but I wanted to set up the framework through which I was going to be looking at provision in Victoria. A key aspect of the framework as I see it is that provision in the area of education really needs to be based on what we know about how students learn and the ways of facilitating that. If we miss the mark in terms of how students learn, then anything we do is, at best, firing arrows in the dark. Along those lines if teachers, if school principals and if the range of people involved in the provision of gifted education do not know what gifted knowing looks like and if they do not know what gifted thinking looks like, if they cannot — not necessarily put themselves in the head of a gifted child — think in terms of the whole gifted person learning and being involved in an education system, then I think the provision they put in place is not going to be as effective.

At the outset I really wanted to develop how I see gifted learning and gifted knowledge, and I wanted to really unpack that. Along those lines I am keen to present a model of gifted knowing and learning that is teaching friendly and that fits within a school context. My background is that I am a teacher and my PhD is in cognitive psychology, so I work in both areas. I have been working for a long time in both areas, and I wanted to look at provision in the context, principally, of a school and of what things look like in a classroom when I am working with gifted students, possibly in a classroom where there are students who are not gifted. We know we have various schools in Victoria that cater for gifted students, but we also have a lot of students who are not in gifted education. That was my perspective first of all.

I really wanted to push the notion that we need to be able to see gifted outcomes in a range of ways. We need to see it in the NAPLAN data, and as you know, we do not because the hardest items on the NAPLAN scale are answered successfully by approximately 30 per cent of the students, so we are certainly not getting down to the level of students who are engaged in learning. In Victoria we have the capacity for foreseeing gifted learning through the on-demand tests that are implemented through VCAR, but they are not used for that. It is rare to visit a school and to hear teachers talking about on-demand literacy or numeracy in terms of what it tells the school about gifted learning.

I was also keen to talk about how I see provision in the future. Let us take the model — the notion — that gifted students can display what we might call a creative expert knowledge or understanding of a topic they are learning. If I am teaching a year 7 group about the digestive system, I can imagine what it is that a higher level of knowledge of that topic would look like and I can imagine what a higher level still would look like. I am able to say, ‘What sort of questions might I expect someone who forms that level of understanding to have?’. I am then in a position, before I begin to teach the topic, of having a series of questions to identify those students who are coming in as gifted in various ways. I can also set up a series of web pages where there are questions for students who are already coming in with the relevant knowledge to work at. I have the capacity for those students to access information and to access mentors and so on.

I can also set up a situation where those students can feed their extended knowledge back into the classroom to inform everyone. I can set up a situation where gifted students’ knowledge is valued by their peers and where there is various currency for them to engage in learning at various stages.

A lot of my work in schools is in East Gippsland. We have schools spread over a wide area, with two or three students in each school. We have an ideal opportunity not only for students learning online in the way that I have described but also for groups of students to come together to be presented with a problem about the digestive system and to talk about it and to really develop a good knowledge, where the gifted students are sharing their ideas with other students.

In my writing I have referred to that as setting up virtual learning academies, because I believe that is where we can go now, where we can actually target these things. In my paper as well I talk about the critical importance of professional knowledge in this area. Not all teachers can see gifted knowledge. Not all teachers know what talent and knowledge looks like or can distinguish between a high achiever, a talented learner and a gifted learner. They do not have that knowledge.

I have talked about a model of professional learning that matches what we have put in place in terms of literacy in the northern metro region. The region is now achieving second in terms of literacy outcomes; four or five years ago it was ninth. Through our model of leaders in literacy learning we have been able to move knowledge into schools and really facilitate schools to change their practice. I believe we need a similar model in terms of gifted education. We need teachers who, in the context of their school, are able to lift the professional knowledge of their colleagues. We need a program, possibly through the Bastow institute, to help school leaders to understand at a school level what gifted learning looks like.

For a long time I was, and I guess I still am, a school reviewer. When a school does a review it has a set of priorities. I have yet to review a school where the provision of gifted education is a priority. It does not exist as a priority; people do not see it along those lines. In terms of professional learning as an output, I would see it as an ideal model for presentation, and I believe as well, given what we have with the ultranet, it would be very easy to facilitate not only student learning materials but also professional learning materials across a whole range of activities.

I also mentioned in my paper issues to do with the advocates for gifted education in Australia. I mentioned in the paper that I accessed our national body, which looks at teaching standards, to see to what extent reference to gifted and talented learning was being talked about, and I mentioned the outcomes in the paper.

The CHAIR — We might stop there, because all of your paper is included as part of the evidence. Perhaps we could get into a bit of a question and answer session.

Assoc. Prof. MUNRO — Sure.

The CHAIR — We can then just flesh some of it. I want to kick off. Your submission talks about the concept of the novice expert knower.

Assoc. Prof. MUNRO — Yes.

The CHAIR — And that it is a good foundation for gifted education policy and programs. Can you give the committee a brief outline of the concept of the novice expert knower and what makes this a good foundation for gifted education in Victoria?

Assoc. Prof. MUNRO — When we look at student learning — I am a teacher and I teach regularly; I was teaching for three days in schools in East Gippsland last week — I assume that most children will learn the topics I am teaching initially in particular contexts. They will understand it in particular situations. Then if I pursue the learning further, they will start to pull out common features, common trends, that they can move across to other situations. There are some children who, by dint of their capacity to learn, will move further than that. They will form big picture ideas of the topics. They will be able to argue, ‘Yes, that is correct, but if you do that, you will get something else. Yes, we see it in other ways’. In the area of cognitive psychology the novice formulaic big-picture expert knower is well established and there are clear criteria for describing how different levels of knowledge along that continuum are characterised. We have that knowledge, but we tend not to use it in education. In particular we tend not to use it in primary and secondary education.

When we look at how gifted students think there is a lot of evidence to support the fact that their knowledge is like that. Gifted students do not necessarily move through the pathway that an expert does. In all an expert might take 15 years; a gifted student can often get to that understanding of a particular topic in 15 or 20 minutes through linking together their ideas. They can tell me a whole lot about a topic that I may not have countenanced earlier through their capacity to make links and to cross boundaries.

When I was talking before about the digestive system in year 7, a regular class will understand about the oesophagus, about the stomach and about the intestines. With a gifted class — and I saw this recently — they wanted to know how much hydrochloric acid is released and whether it is managed by the autonomic nervous system; also, to what extent the amount of hydrochloric acid that has been released has changed without a change in dietary habits over the last 50 years. That is the sort of behaviour that if I know to look for and I know to foster and bring together, I am more able to run with it. But if I as a teacher say, 'Hold on. We are not talking about the release of hydrochloric acid; we want to move into the intestines', I am not going to see that knowledge.

Ms MILLER — You touched on the internet earlier in your opening piece, and your submission recommends that online assessment could be used for identification of giftedness. What are the advantages and disadvantages of using online testing for giftedness, and are you aware of any good online assessment tools currently in use?

Assoc. Prof. MUNRO — We need firstly to talk about the tools before we talk about the means of delivery, and if we are talking about having students show their knowledge, one of the key aspects of assessing the knowledge of gifted students is the notion of them taking us on a journey through what they do know about a topic. It is not a matter of giving them a series of tasks, such as a set of reading tasks, to establish their giftedness. All we are doing there is comparing their performance with that of other children. If we are talking about children whose knowledge is more open-ended in the sense that we do not know where it is going to go, we need additional tasks that allow them to do that. The sorts of tasks that I would be pushing would be open-ended problem-solving tasks or creative writing tasks where, as well as having the sorts of tasks where the questions are already set and we already have the measuring stick, I believe we need tasks that allow us to see what each child does know about a particular topic.

I was involved in setting up a gifted education program in Kenya for the Aga Khan Foundation, and given its particular context and the cultural situation in which we were placed we used diffuse problem solving and we were able to very efficiently, I believe, identify gifted students through how they went about solving problems that they had not experienced before.

Ms MILLER — Do you think all students in Victoria should be assessed or screened?

Assoc. Prof. MUNRO — I do not know what value we would gain from it. I think it would be good to know the problem-solving capacity of all students, but I would be looking at that sort of assessment as a second tier of assessment in the report. I suggest having a sequence of data-gathering procedures and looking at that.

Ms MILLER — The committee has been told that children from indigenous and CALD backgrounds are less likely to be identified as gifted. How can we increase identification in these groups, and what are the best methods to use in identifying giftedness in these students?

Assoc. Prof. MUNRO — One of the techniques that we found particularly useful in Kenya was what is called dynamic assessment, where we have students respond to a particular task — it could well be one of the problem-solving tasks — and then we ask the students to visualise the topic. We give them the opportunity to unpack the ideas, and we indicate to them other avenues that they might have for looking at the topic and see whether they want to add to what they said and see whether they want to explore the ideas in other ways. We found when we did this the knowledge that the students were able to show us actually increased greatly.

One key topic, and one key area of assessment — and this has been used already in Australia with indigenous students — is the dynamic assessment procedure. When you give someone a set of tasks, that is really a static assessment task. You are assessing where the students are against a particular set of criteria. But you can ask, 'If I actually cue the students to think differently, will they be able to tell me anything else? Will they be able to

show me additional knowledge that they have about the task?'. So what I am trying to do is to say, as in the case of indigenous students, it may well be that they did not understand the task to the same extent as the non-indigenous students. I guess that is why you are wanting to distinguish between the two. You are wanting to say there is something different about indigenous students as opposed to the non-indigenous.

Ms MILLER — What about the students in Kenya? How old were they, just out of curiosity?

Assoc. Prof. MUNRO — They were 12 to 13-year-olds.

Ms MILLER — Your submission also suggests that teachers can play an important role in identifying gifted children and recommends education to increase their ability to identify gifted students. What kind of education or training do teachers need to be able to identify giftedness, and what other supports or resources do teachers need to help them identify gifted students?

Assoc. Prof. MUNRO — No. 1, they need to know what gifted knowledge looks like and they need to be aware of the various ways in which it can be displayed in a classroom. So it is important that a teacher, as I said earlier, of year 7 who is planning to teach the digestive system actually has clear in their mind not the content but what student knowledge looks like for a regular year 7 and what it could look like for a child who is, say, mildly gifted in that area, a child who is moderately gifted and a child who is extremely gifted. If I as a teacher cannot see the knowledge of the students, any teaching I put in place is at best going to be lucky if it hits the mark.

One key issue is the teacher's understanding of what the gifted knowledge looks like, and as a teacher the things that really concern me are the content I am teaching and the children who are going to cause me grief in my next lesson, so I need to make sure that I am clear on what the knowledge looks like and how I am going to either differentiate it or rely on a program that has differentiated it for me. So one key thing is being able to know what the knowledge looks like.

A second key thing is knowing the particular ways in which gifted students learn, because the teaching I need to put in place needs to take on board how the students learn. It needs to scaffold their thinking in various ways. It needs to help them see themselves making progress, but the way I will do that with gifted students might be quite different from the way I will do it with non-gifted students, so I need to have a whole lot of pedagogic knowledge about how to build gifted students' knowledge.

A third thing I need to know is how to do that in the classroom. There are lots of teachers who can wax lyrical about teaching different students but do not necessarily do it in their teaching for a whole range of reasons. They can give you the reasons as to why they will not do it.

A fourth aspect of knowledge that I need to be targeting in terms of teacher knowledge of giftedness is the teacher's disposition towards doing it: their emotional commitment and their attitude towards being able to do that.

The fifth aspect of my knowledge as a teacher is how I modify my teaching, how I adjust it to match individual children or individual conditions or contexts in the school at that time. The way I might teach a group of students on a Friday afternoon will be different from how I teach them at 10 o'clock on a Monday morning. That aspect of my knowledge as a teacher is very important.

So if you are asking me how I would change teachers' knowledge, I am saying there are a number of aspects of knowledge on which I may need to pull levers, but if I pull levers on all of those, I believe I am going to have the teachers being able to do more. And what we need to bear in mind in any teaching context is not what I think and not what I feel; it is what I do. The thing that influences any child I teach is what I say, how I say it, the pausing I use and the gestures I use. That is the level of interaction, so the pedagogic actions that I take are critical.

The CHAIR — Just extending from that, looking at teachers across the board who may not specifically be teaching in the area of gifted and talented but who are working as teachers, the sorts of things that you are suggesting are completely different to what is currently being offered in the teaching arena. Would you suggest

that there needs to be a massive change? We have heard evidence so far that particularly teachers who are teaching at this sort of primary level would be lucky if they have had an hour or two within their undergraduate degree around the areas of gifted and talented training. How would you see the changes to ensure that we are able to get something across the board to assist at primary level and secondary level and to prepare teachers who are not specifically teaching in the area of gifted and talented but across the board?

Assoc. Prof. MUNRO — There are a few aspects about that. One is the knowledge pathway that the students are following. A teacher in grade 3, involved in either literacy or numeracy or students learning about mini beasts as part of SOS, needs to be aware of what a more advanced understanding of that topic is first of all. So that is a curriculum issue. We need to look at VELS or the national curriculum and ask to what extent it is developmental to the extent that a teacher can look at the topic and say, ‘That is where I anticipate some of my gifted students might be thinking. That is where some of my very gifted students might be thinking’. That is one aspect.

When I was writing the VELS English continuum I was very keen to make sure that there was some reference to gifted learning. As it was, there is not, but I have certainly written a developmental continuum.

The CHAIR — But that is taking the approach that they are looking at gifted and talented students to begin with. What about in terms of teacher ed to at least — —

Assoc. Prof. MUNRO — But I want to just mention that that was one thing. A second thing is that every teacher in a classroom is hopefully listening to what children say, and every teacher needs to have some way of linking the knowledge a child displays with what the teacher expected and with where that knowledge is. In addition to the curriculum, as I mentioned earlier, there needs to be the teacher knowledge, and there needs to be the teacher knowledge of how to link the knowledge children display with where that knowledge is and some sort of thinking, developmental — and this is the expert knowing — curriculum. You know, where would it be? Where is that obtained? You could start to look at it in a pre-service context, but I know from my work over the years working with schools and teachers that often it does not mean very much in the pre-service context.

There is the need for teachers to be able to retrain and to be able to have access to sabbatical leave or to opportunities to develop their knowledge outside of the classroom. A teacher’s knowledge of what goes on in a classroom is priceless — no other professional has that knowledge — but teachers need the opportunity to link that knowledge with where the research is going and where ideas in other areas are going so that they can come back to the classroom and then operate. I would hope that one outcome of the inquiry would be increased access to education for in-service teachers as well as pre-service teachers. Pre-service teachers need to have an appropriate pre-service knowledge of gifted education. I am more than happy to tell you what I think that should be. I think existing teachers in the service need a different sort of training. I would counsel strongly against expecting pre-service education to deal with everything. I think that is quite inappropriate. I am 65; my education when I had it from 1962 to 1964 did not set me up for teaching in classrooms of 2012 or 2011, and neither could it.

The CHAIR — What do you think the pre-service should be?

Assoc. Prof. MUNRO — It should first of all introduce the concept. There is no reason why I cannot show some videos to a pre-service class of some gifted students learning. There is no reason why I cannot take some topics and have them imagine or actually discuss what they might look like in a more elaborated way. There is no reason why I cannot talk about diffuse problem-solving as a way of gathering data, or creative writing as a way of writing. They are all possible, but to expect that that would be sufficient — and you are not saying that — would be quite unreasonable. It is really not understanding the nature of teaching.

Mr ELASMAR — Thank you, Doctor. Many of the submissions received by the committee suggest that there are negative perceptions associated with the terms ‘gifted’ and ‘talented’. Suggestions for alternative terms include ‘children of high intellectual potential’ and ‘high-ability students’. What terminology do you think we should use for gifted and talented students in Victoria?

Assoc. Prof. MUNRO — I would like to answer that by first of all saying: what does a classroom look like, and who are the high achievers? There are some children in a classroom who will learn the ideas I present

extremely rapidly. They will learn those ideas, they will internalise them and that is what they know. There is a second group of students who will learn the ideas at a high level again, but who will be able to think creatively about them and who will take the ideas further. There is a third group of students who come into the classroom already having thought about the ideas I am going to be teaching. I am going to teach a year 8 class on Pythagoras. There are some children who are already speculating about links between the sides in a triangle. They have not actually learnt the idea in a textbook way as it is written in the year 8 textbook, but they have already started to learn about those ideas.

Whatever titles we give them, we have got these three ways of high-achieving learning at least in the classroom. Whatever titles we want to put on them, I can tell you what I think they should be called. I think one group should be called the high-achieving group or the easily programmed group. They are the group of students who learn extremely efficiently with two or three examples from the content that is being presented. The second group, as I said, will learn in that way and they will be able to take it further, but they will be able to be creative in quite predictable ways and based on how we define 'talented'. If we define 'talent' as someone through education achieving creative outcomes, I would call that group talented. If we stick with the title 'gifted', I would call the third group gifted. I might well call them creatively gifted. They are more than being creative learners, because they are being creative about a better developed body of knowledge than their peers.

I find the term 'gifted' an interesting term. Some people interpret it as suggesting that these people have been given something, and I am not actually sure what they have been given. Brain studies show how, even from the very early years, the way in which some people think is different from the way in which other people think. It happens that particular areas of the cortex are simultaneously lit up when information is presented, so those people end up with a different understanding from the understanding that other people get when one area of the brain is lit up. There are those sorts of things. I am not sure. As I said, I think the term 'gifted' is to some extent quaint. It is interesting that not all cultures on this earth have the term 'gifted'. Some cultures have existed for millennia without invoking the term 'gifted'. They have known that some people learn better than others.

Ms MILLER — In your submission you suggest that virtual learning academies should be developed for gifted students. How would these virtual learning academies work, and are you aware of any successful models of virtual learning academies internationally or in Australia?

Assoc. Prof. MUNRO — A very good question. I do not know of any in Australia at all. It is a concept that I think would work really well. It was a concept that I was wanting to unpack a bit earlier. As I said, there would be two or three dual roles for them. One role would be to provide the opportunity for some students to be able to access information in order to form knowledge appropriate to where their learning is. The way I visualise it is as a series of web pages, each web page with a higher level still. There would be a question about a topic — again, it could be the digestive system — with high-level information, with questions for the students to answer and with scaffolding teaching. That would be one aspect of the virtual learning academy.

The second would be the opportunity for a group of students to come together regularly in real time and build a group knowledge about the problems that they are solving that would be coded on those particular tasks. I would also see these web pages of the virtual learning academy having built-in assessment placement questions. When you think about it, it is all quite simple actually. Once you do this with paper — I could easily do it with paper — it just means that in East Gippsland, when we are talking about Orbost Primary School being able to link with Swifts Creek Primary School and being able to link with Mallacoota, we have got a basis for actually fostering gifted learning in that area.

The CHAIR — Is that coupled with offline support as well, so online and offline?

Assoc. Prof. MUNRO — If the offline support were necessary, yes. We would also need teachers who are acting basically as learning coaches to facilitate it, but that is where I would see this person who is the middle leader of gifted education in the school actually providing the expertise for that. I think that would be a great way of gathering data and knowledge and feeding it back to the group. I am really keen for the group of students — the whole cohort — to learn, because when gifted students share ideas with their peers, while their peers would not have thought of those ideas, when they hear the gifted students talk about it, their knowledge is stimulated and they end up knowing more.

The CHAIR — I wanted to cover off the emotional welfare and needs of gifted children. Your submission suggests that gifted students have particular emotional needs and should have access to educational counselling. What kind of support do gifted children need? What sort of educational counselling do they need, and who should be providing this counselling?

Assoc. Prof. MUNRO — At one level it depends on the needs of the individual child. But if we take that for granted, though, I guess what I would be saying would be a global thing. I am not saying that every gifted child needs what I am going to be saying. One aspect is being able to understand your gifted learning. Some gifted students from a very young age when they have been interacting with their peers have been told, ‘No, you’re wrong; that’s silly’ and whatever, when in fact they were right. They often withdraw into themselves, they decide to interact less with their peers and so on.

I was talking with the principal of one of the schools in East Gippsland last week. We were talking about issues to do with giftedness, and she talked about a grade 4 boy in one of the classes in her school. This boy went to the paddle-steamer that is moored in Orbost when he was in grade 1 and drew this fantastic picture of it. He went once, but what he saw, what appeared in his drawing, was nothing like what appeared in other children’s drawings. That boy in grade 4 has totally withdrawn from being involved in learning altogether. He goes to school because he has to and as soon as he can get out of school he is going to leave. Children need to understand their gifted learning. In this case, when he was in grades 2 and 3 he was seen as being hyperactive, and now he has almost entered the alternative where he has withdrawn altogether. One issue to do with supporting students is to understand that they are learning and seeing things that are sometimes slightly different from how some of their peers are seeing them.

The second thing about gifted learning is that some gifted learners tend not to be easily programmed by others; they are much more self-programming. The way in which we learn all of our social interactional skills is by being programmed by the peer group. We do not have lessons in how to interact with peers in the way that we do for maths, reading and whatever. A lot of students who are gifted have difficulty interacting with peers to the same quality as their non-gifted peers do. We have a need in that sort of area.

The third aspect of gifted learning for some students is that particular aspects of their knowledge develop faster than others. We talk about asynchrony in the gifted student’s development. Some gifted students will really worry about events; they will worry about things going on in the world. They are worrying at an abstract level in terms of their abstract verbal understanding of the issue, but because they do not have the experiential knowledge to come into play to say ‘This will be all right. This is how it will be taken care of’, they tend to become worried. As a psychologist I have worked with some students who are gifted and who have really been thinking overly at a verbal abstract level. They have seen all the dominoes falling and become quite worried. Their self-talk has become quite negative when they really need just to be able to see an alternative point of view. This is because the human is composed of multiple interacting systems, and some children are much stronger verbally, say, than non-verbally or vice versa, and those things can lead to problems.

There are some students as well who are non-verbally gifted who often do not see in the context of the school their gifted knowledge being displayed. It is masked by their lower verbal reasoning, and sometimes that discrepancy is large enough for them to have learning difficulties. Those children as well need to learn coping strategies, but they need to be strategies that are focused on coping academically as well as coping emotionally.

The CHAIR — Extending on from that, your submission talks about students needing a gifted identity. How can schools, teachers and parents assist in helping students develop this gifted identity?

Assoc. Prof. MUNRO — The identity of each one of us is shaped in part by the feedback we have received from others. It is really important that each child who is gifted, as with each child who is not gifted, forms the most adaptive, functional sense of themselves that we can give them. One critical aspect is being aware of the feedback, what we give feedback for and how we scaffold and support as teachers. I believe as a teacher — not as a psychologist, as a teacher — that I can play a very important role in helping a gifted child, as I would hope a non-gifted child, form their identity. Part of their identity is how they relate and interact with others. I would see this as part of the professional development. But to me it is also part of knowing what gifted knowledge looks like. I am glad you asked, because I think this is a critical aspect of the whole work of gifted education.

We have many people in our schools as well as older students who are gifted who do not have a firm, substantial, solid, intact, robust identity in a whole range of situations.

Ms MILLER — Many submissions have suggested that programs for gifted students should start as early as possible, including at kindergarten and preschool age. Do you agree, and if so, what kinds of programs do you think are needed for gifted children prior to primary school?

Assoc. Prof. MUNRO — That is a complex question, Elizabeth: when do we start and what do we mean by programs? One of our former PhD students at the University of Melbourne was researching differences between the mother-child interactions of children whose older siblings were gifted and those whose older siblings were not gifted. This PhD student found that in the case of children who ultimately turned out to be gifted — because when they were two years old the mother used the Stanford Binet to assess them in terms of the gifted knowledge — the mother was interacting quite differently with her child. So to the extent people need to be aware of those things, they need to have in place opportunities for encouraging play, exploratory activities and situations where children are encouraged to build their knowledge, learn through analogy and link ideas across situations. That would be really important. When you say ‘programs’, I am not sure how — —

Ms MILLER — I suppose it is more identifying the age group. Obviously people have their own opinions as to how early these things should start. That was probably the first part of my question. Based on the answer to that question you could probably answer regarding the types of programs.

Assoc. Prof. MUNRO — In terms of this particular research, the researcher believed she had an idea of what to look for, and I believe she did. I believe that she could see differences in the interactions between the mother and the child at about 12 to 13 months in the sorts of activities that some children sought to engage in that others did not. In terms of a developmental play continuum they were higher. It was possible to see through early developmental play that some children were playing at a higher developmental level than others and that it happened that generally those children emerged three years later as achieving at a gifted level on the Stanford Binet. It was possible to see it then. Whether or not you would want to put in a program then I am not sure. Is that what you are asking? I do not know whether we should at the age of two or two and a half.

I believe that if it is possible we should allow the parent and the child to continue to interact or other people to interact with the child. I would think that would be sufficiently stimulating, because in the early years a healthy family can be the greatest foundation for learning. Where that was not available, if we had children who were gifted and who were not able to access those sorts of interactions in an ongoing way, we heard the earlier group talk about grandparents being involved in that, and that may well be an option. In terms of children at kindergarten and preschool I think it is critical that we have some idea of identifying where children are in terms of the models they are building of the world, how developed they are and how we develop them further. We need to keep in mind always, and I hope we would, that we should be talking about the total person.

Ms MILLER — Putting your psychology hat on, if you have, say, a primary or secondary school student of 12 or 13 or thereabouts who is as academically advanced as say a 16 or 17-year-old, what are your thoughts on putting a young child in an older environment? Academically they can cope but psychologically they cannot. What are your thoughts on that?

Assoc. Prof. MUNRO — There was a book I read as a young teacher called *The Dungeon Master*. It described the story of a 12-year-old boy in the United States in the 1970s, who was advising computer experts at the local United States Air Force base about how to handle computers, being sent to university in the United States at age 16 and then disappearing. It was obviously linked with *Dungeons and Dragons* and those sorts of things. It was not a story; it was an event that happened. It was very scary. The boy ultimately ended up committing suicide. That is one example.

I read all the Colangelo research, and I am told that acceleration is the way to go and has worked for so many people. Obviously we are talking about the extent of support, facility and continuity that is available for that 12-year-old going to a 17-year-old institution. We are talking about, broadly, the total person and how there needs to be the opportunity for additional scaffolding, additional things to be put in place, to support that 12-year-old to cope there. Why might the 12-year-old be going? If it is to get access to information about particular content areas, I would imagine these days we do not need to restrict that content to a lecture theatre in

a university. A carefully structured learning program, along the lines of the virtual learning academies, might be available to that student and still allow that student — if in fact, as you said, he is still a 12-year-old in terms of his emotional status — to continue to interact with 12-year-olds but still get maximum recognition for what he knows. He may well have some mentoring links with some professors at a university or other things, but I would think very carefully about this.

Ms MILLER — I would be interested to hear your view.

Assoc. Prof. MUNRO — *The Dungeon Master* was a powerful story for me.

Mr ELASMAR — In your submission you say that access to gifted education in primary schools in Victoria is valuable and depends on factors such as schools' priorities and teachers' professional knowledge about gifted education. What programs or services should be available for gifted children in Victoria in primary schools, and what do you think of the suggestion that a primary school program based on a SEAL model should be established?

Assoc. Prof. MUNRO — I have thought a fair bit about whether or not we should have gifted schools for primary level students. I must admit I am still to be convinced on the evidence. In the primary years most children operate on the guardian-child relationship. In the secondary years, broadly, the children operate on the peer group relationship. I believe the peer group learning in the secondary years in the SEAL model — and even more so in schools like Nossal High School — is a reasonable, sound model.

In terms of the primary years I would like to see in place the differentiated curriculum, possibly through the virtual learning academies — there is no reason why they could not operate just as well in a primary context as in the secondary context — but where the children are continuing to interact with like-minded peers so when they have a birthday party the children who come are basically chronological age children. The friendships would be there even though these same gifted children could be learning a long way ahead, and they would be valued and respected by their peers for the knowledge that they are acquiring and not be seen as geeks or as someone who is strange and out there and needs to go somewhere else.

I am wanting differentiated teaching as much as possible, I am wanting a value on the children's knowledge as much as possible and I am wanting them to build their own self-efficacy and self-concepts as much as possible. To some extent in the primary years, given that we are talking about children operating on the guardian-child relationship, that is how I think of it. That is how a primary classroom operates.

Mr ELASMAR — Do you think the SEAL program is a good model for educating gifted students, and what improvements, if any, would you recommend to the current SEAL program?

Assoc. Prof. MUNRO — No. 1, a key to the program is teacher knowledge. It is critical in the SEAL programs. I personally believe, since you have asked me, that the focus should not be on in year 7 teaching year 8 content. I believe it should be on teaching an extended understanding of the year 7 concepts, taking the ideas further so that we develop what I will call that expert knowledge at year 7. I believe that is appropriate.

As well as teacher knowledge I think there is a second-tier aspect to the SEAL programs, which is that the school leadership team in each SEAL school should be able to explain satisfactorily how they see gifted learning and gifted education provision in that school. It is very important that it be seen as a key part of the school. As much as any other group of students is learning for the school, I would want the SEAL program to be learning for the school, feeding knowledge back into the group knowledge of the students as a whole.

As I would see it, there are a few problems, and I have indicated these to people. To me one of the key problems is teacher knowledge, and included within that is access to appropriate facilities, because not every teacher who teaches a SEAL class has been given an education in understanding gifted knowledge. To me that is silly, because we do not have teachers teaching children who have learning difficulties who have not done a learning difficulties course.

Ms MILLER — Your submission says that parents and families of gifted children require assistance. You suggest the establishment of a family support advocacy facility. How would this facility work, what kinds of services could it provide and who should provide this facility?

Assoc. Prof. MUNRO — No. 1, I think the DEECD should. At some level it should be implemented through central provision. It could be provided on a regional basis. I know a lot of parents email me about problems to do with their gifted children. At this point there is nowhere where I can direct those issues. I can either send them back to DEECD or to the Catholic Education Office, but that is all I can do.

There are a lot of parents who believe that their own child's need is not being met. One key aspect of this is to have something like a gifted education ombudsman. I think this would really work. There would be someone who could work with the school and with the parents and come between the two in a practical, constructive, mediating way to help the school see what can be done within its current provision to meet the needs of these children and to help the parents see how they can work most effectively with the school. Again and again I see the situation where the parents say, 'The school is hopeless. The school is doing no good', and the school says, 'The parents are unreasonable. They think their child is wonderful. We're doing the best we can'. There is a real need for mediation so that in 5 minutes time the child knows more. I would be happy to wax eloquent on that for a while, but I believe there could be a role along the lines of a gifted education ombudsman who could act in this mediator role and could do it well.

The CHAIR — I would like to move on to twice-exceptional children. Your submission notes particular challenges in identifying and catering for this cohort. What are the specific needs of these children, and what kind of support and resources do twice-exceptional children need?

Assoc. Prof. MUNRO — The children I have worked with, researched most and been involved with teaching are children who have literacy or numeracy learning difficulties. These children obviously have great difficulty displaying their knowledge in literacy-type ways. In the primary years their gifted knowledge is often masked by their reading and writing difficulty. As they move through the primary years the demands on learning by both reading and writing increases, so they increasingly become alienated from the regular learning situation. In parallel with this their self-efficacy as learners and their feeling part of the school really suffers. They are unable to display their creativity. They know they know things, but they have real difficulty using what they know when they engage in literacy and also when they need to read and write.

The CHAIR — What sort of support would you then provide for them?

Assoc. Prof. MUNRO — Number 1 is literacy, which is an area I do a lot of work in. Literary support can target that. The way I see these children, which is perhaps selfish, is that they will be paying my superannuation. The gifted and creative students are the ones who are going to return to our culture outcomes that children who are easily programmed are unfortunately less likely to.

Well, that is good for my superannuation! When we get to the secondary level, particularly when we get to VCE, where we have been doing a fair bit of research as well, the word that comes to mind is that it becomes tragic, but it becomes more dire, because these students often withdraw altogether. Often a whole range of emotional self-efficacy issues arise. While these students have really creative ideas, often they have great difficulty writing an essay in order to display that knowledge.

One key aspect here that is really obvious is that we have students who are strong in the imagery area but are not gifted in verbal ways. Often these students have not learnt how to talk about their imagery knowledge in sentences, because when they do, they are then more able to write about it — little things like teachers throughout secondary school encouraging them to talk in sentences or groups of sentences so that they build in their minds a second form of their knowledge. They have the gifted knowledge, but it is in an imagery form. It is like Einstein, Faraday and every great scientist who has delivered an outcome in this world and has also been dyslexic. These days, because of the way things are going, these students have less opportunity to display that knowledge. I have worked with several students about whom the adjective in my mind is 'tragic'.

Ms MILLER — You talked about mentoring earlier in your delivery. How do you think mentors should work, and what do you think the benefits would be for these students?

Assoc. Prof. MUNRO — One of the key benefits of mentoring is obviously to provide directions for knowledge over the next 10 or 15 minutes or whatever. The second aspect of a mentor is for children to be aware of them — that someone else has gone down this path, that they have survived and survived well. These are the strategies that have been used, because often the mentor is a high-level creative thinker as well.

The CHAIR — Great. There are certainly no further questions from our end. Is there anything that we have not touched upon today? Obviously you have touched on your submission.

Assoc. Prof. MUNRO — No. The only point, and to me this is an issue, relates to the last point I raised in my report. Until we have in Australia people who are seen as leading education, until we have ACARA and the national curriculum talking about gifted education and gifted learning and catering for it and until we have a federal teacher standards body with one reference to gifted learning in papers on its website, I do not think the dialogue is going to go very far. Parents are aware of gifted students, many teachers are aware and students are aware, but until the leading educators in Australia begin to have a dialogue and actually move this onto their horizon, I do not think we are really going to get a driving force. If in fact valuable work comes out of this committee, it may well be that this committee will recommend that leading educators be encouraged to think about gifted learning, because I really believe that the future of our culture in some ways depends on it.

The CHAIR — That is a great place to finish. Thank you very much for presenting to us today.

Witness withdrew.