COMMONWEALTH OF AUSTRALIA

Official Committee Hansard

HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON EMPLOYMENT, EDUCATION AND WORKPLACE RELATIONS

Reference: Education of boys

THURSDAY, 5 OCTOBER 2000

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HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON EMPLOYMENT, EDUCATION AND WORKPLACE RELATIONS

Thursday, 5 October 2000

Members: Dr Nelson *(Chair)*, Mr Barresi, Mr Bartlett, Mrs Elson, Mr Emerson, Ms Gambaro, Ms Gillard, Mrs May, Mr Sawford and Mr Wilkie

Members in attendance: Mr Barresi, Mr Bartlett, Mr Emerson, Ms Gillard, Dr Nelson, and Mr Sawford

Terms of reference for the inquiry:

To inquire into and report on:

- the social, cultural and educational factors affecting the education of boys in Australian schools, particularly in relation to their literacy needs and socialisation skills in the early and middle years of schooling; and
- the strategies which schools have adopted to help address these factors, those strategies which have been successful and scope for their broader implementation or increased effectiveness.

WITNESSES

Committee met at 9.16 a.m.

ARTHUR, Dr Evan, Acting First Assistant Secretary, Schools Division, Department of Education, Training and Youth Affairs

HARDHAM, Ms Mylinh, Assistant Secretary, International, Analysis and Evaluation Division, Analysis and Equity Branch, Department of Education, Training and Youth Affairs

HORNE, Mr Robert, First Assistant Secretary, International, Analysis and Evaluation Division, Department of Education, Training and Youth Affairs

NEWMARCH, Ms Eileen, Director, International, Analysis and Evaluation Division, Analysis and Equity Branch, Equity Section, Department of Education, Training and Youth Affairs

SPARKES, Ms Lois, Executive Director, Schools Division, Quality Schooling Branch, Department of Education, Training and Youth Affairs

WHITNEY, Dr Peter, Acting First Assistant Secretary, Future Pathways Strategy Group, Department of Education, Training and Youth Affairs

CHAIR—I declare open the first public hearing for the inquiry into the education of boys and welcome representatives from the Department of Education, Training and Youth Affairs and also others who are in attendance, both those who are in support and those who are interested observers. I very much appreciate the department and senior officers from it for providing a submission and coming to speak to us this morning.

The purpose of this inquiry is to examine the social, cultural and educational factors affecting the education of boys in Australian schools, particularly in relation to their literacy needs and socialisation skills in the early and middle years of schooling. This is with a view to identifying successful educational strategies and ways to encourage their wider adoption. Particular concerns which have emerged from the submissions received include, but are not confined to, the gender and state by state divergences in early literacy attainment identified by testing against nationally agreed benchmarks, the gender and state by state variations in school retention rates and the tendency for some boys to adopt negative attitudes towards school and to disengage from learning.

I remind you that the proceedings here today are proceedings of the parliament and warrant the same respect as proceedings of the House itself. The deliberate misleading of the committee may be regarded as contempt of the parliament. The committee prefers that all evidence be given in public but if at any stage there is something that you wish to say in private you may ask to do so and the committee would consider that request. Would you please give us an outline, a precis, of the departmental submission and then we will ask some questions and discuss it.

Mr Horne—Thank you, Chairman. We very much appreciate the opportunity to speak with the committee today. I have with me a team which is carefully balanced for gender equity.

Mr SAWFORD—Unlike education.

Mr Horne—I have prepared an opening statement for this. It was a public concern about boys' school performance that prompted the minister to suggest this inquiry. The states and territories have primary responsibility for school education but the Commonwealth has an interest in the education of all students as it sets the national policy framework including educational achievement for all students, and coordinates policy in relation to young people in general.

In our submission we have tried to present the key national issues about the educational outcomes of boys and how some of these are being addressed. Most boys continue to achieve good educational outcomes. In particular they do as well as girls on tests of numeracy. I do want to stress that point because some of the public commentary about schools failing boys in general—as though they fail them in all things—does ignore it. However boys as a group perform less well than girls on tests of literacy. Boys' own performance against the benchmarks and the gender gap vary by state and territory. Boys from backgrounds of low socioeconomic status have particularly poor outcomes. Boys' poorer literacy skills tend to affect their overall school performance particularly in the later years. Fewer of them stay on to year 12 or complete it successfully. Early school leaving by boys is a cause for concern especially among boys from rural or poor backgrounds. Low SES boys from remote areas are the least likely to complete schooling.

It is important to note however that the gender gap in school retention rates in Australia opened up in the 1980s when rates improved for both boys and girls but more rapidly for girls. By 1990 the gap was between 11 and 12 percentage points—and that is where it remains today, so it has been roughly the same for a decade. But the boys' retention rate has still increased considerably. Now two-thirds of boys stay on to year 12—only 20 years ago it was one-third. Early school leaving may result from low achievement in the earlier years of school. If you look at the longitudinal survey of Australian youth, by year 9—which is when they test the students—most of them can make quite accurate predictions of when they will leave school. Leaving school early may in its turn reduce the prospect of a good or steady job. Girls who leave school early have poorer labour market outcomes than boys who leave early, perhaps because more of the boys go into apprenticeships.

Upon completing year 12 boys perform less well on average than girls. Some possible explanations for this are that the boys are more likely to group in a narrower range of high pay-off or traditional subjects where there is a higher risk of poor performance. The subjects I refer to are mathematics, physical sciences and technical subjects. I emphasise however that neither this nor the gender gap more generally is a uniquely Australian phenomenon. OECD data, for example, show that the difference here in the proportions of boys and girls who qualify at school to enter tertiary education is well below the mean difference for all OECD countries. Not long ago we had the Argentinian Minister for Education here. We asked him whether they have the same problem and he answered, 'Yes, we do.' And that is a report from the country that invented machismo.

Coming into tertiary education fewer males than females enrol in higher education and more males than females go on to other tertiary education—mainly the TAFE sector. Overall, girls' participation in tertiary education exceeds that of boys by about five percentage points. By the

time they reach their mid-20s males are more likely to be full-time employed or unemployed while females are more likely to be employed part time or not in the labour force. That is an important point made in recent research. We look at the performance of boys and girls in the education system; however in the labour market some of the advantages that the girls achieve in the education system may not come through. The boys may be doing as well or better in the labour market.

As to why girls do better than boys in education, a number of different explanations are advanced in the literature, both Australian and international. Physiological, psychological, sociological and pedagogic explanations all have their advocates, and the prescriptions vary as much as the diagnoses. The inquiry may find it useful to explore some of these and form its own view on whether further research could resolve the matter. Meanwhile, the Commonwealth has sought to tease out some areas in which there is some consensus for change.

In our submission, we suggest that the key areas for government intervention for boys would include addressing the literacy needs of boys, especially in the early years; support for the transition of students from primary to secondary schooling and then on to post-compulsory schooling; influencing the socialisation of boys to promote positive connections with the school, the community, their families and peers; and teacher training and development, including in understanding and addressing the different learning styles and needs of boys and girls.

Responsibility for implementation in these key areas for boys in schools lies primarily at the state or local level, but the Commonwealth is concerned, in cooperation with state governments, to set a broad policy framework. In particular, we believe that the best way to ensure high achievement is through a soundly based system that is outcome focused, provides good education and is supported by appropriate accountability and reporting arrangements. Much has been achieved in that area, notably under the national literacy and numeracy plan and the indigenous literacy and numeracy initiative, where funding recipients are required to prepare literacy and numeracy plans and to report on student achievements against literacy and numeracy benchmarks. Funding arrangements for these programs also recognise the greater needs of students with a language disadvantage and from low socioeconomic backgrounds. Collaborative work between the Commonwealth and the states and territories is continuing.

In terms of the transition from schools through tertiary education to work, the emphasis should be on helping young people to choose pathways which suit their needs and help them realise their potential. While in general young people are well advised to complete year 12, leaving before that age may not be detrimental if the student has a clear plan to combine further study or training with work and has help to achieve it. The actual proportion of boys participating in education at age 18 is the same as for girls, 64 per cent, although 14 per cent of the boys and only eight per cent of the girls participate part time. I emphasise that point because sometimes it is easy to get fixated on the school retention rate but, of course, students who leave school may pursue their studies in other ways. Those figures are for the age specific participation rate—the number of students of a particular age who are participating in education of any kind, whether it is in school or TAFE or wherever. Those figures do show that many of those boys who leave school early go into some other form of education, but it is often part time. Having said that, we would agree that too many of the boys leaving early still lack a clear orientation. The forthcoming report of the Prime Minister's Youth Pathways Action Plan Task

Force will canvass ways in which more young people can be helped to make a successful transition from school to work through tertiary education.

Boys' education enjoys a high priority in the department's program of research. The committee already has a copy of one report, which we recently released, on factors influencing the educational performance of males and females in school and the initial destination after leaving school. Two further research projects are being developed under the literacy and numeracy program. The main aim of the boys and literacy project is to identify key issues in terms of boys and their literacy development. I think tenders for that project closed earlier this week. At an earlier stage of development, there is a middle years project, which will focus on the needs of students in the middle years who are educationally disadvantaged in terms of their literacy and numeracy outcomes. Finally, the department is sponsoring a symposium on the education of boys, to be held in November. It will bring together expert analysis on issues relating to the pedagogy of boys' education, their attainment and labour market expectations.

CHAIR—Thank you very much. That was a comprehensive summary of a comprehensive submission. Could you expand a little bit more on the international comparison. A lot of the literature you read would lead you to believe, at least in Australia, that it is something that is unique to our country, but obviously it is not.

Mr Horne—No. Certainly, the OECD data which I was quoting relates to the proportion of students who gain at school the qualifications they need to go on to tertiary education. Unfortunately, the OECD compares men and women combined, with women. They were showing that for Australia those figures were something like 67 and 72 per cent, with the women having the advantage there over the men and women combined. So that was a gap of five percentage points. But if you looked at the OECD average, the gap was eight percentage points. That was the mean for the whole OECD area. That is an example and, going beyond that, there are a number of other countries concerned about this gap between boys and girls, and they are introducing measures to address it—the UK being one; the US, another.

Mr EMERSON—Because that eight per cent is an average, are there some countries with a very small or negative gap?

Mr Horne—I have the OECD table somewhere with me, but it would take a bit of time to find it. We could provide the table for you, because it is published.

Mr EMERSON—If there is no gap in some countries we might be able to learn something about it.

CHAIR—It is fairly important.

Mr BARTLETT—The national benchmarks show that girls outperform boys in literacy at year 3 level. Has there been any research done at earlier stages, say at age five or six, or even pre-literacy capabilities?

Dr Arthur—I am not aware of any large-scale data that would bear on that.

Ms Newmarch—There was, I believe, an ACER study which looked at some of that and found that there was not a lot of evidence earlier in the piece on the differences between boys and girls. We could get back to you with that reference which does look at an earlier study.

Mr BARTLETT—If you could.

Ms Newmarch—Yes.

Mr BARTLETT—If there is not much difference at age five or six, but there is considerable difference at age eight or nine, have views been expressed as to why that difference might be growing—are they largely neurophysiological developmental factors or are they more likely to be environmental factors? What are your opinions on that?

Dr Arthur—I cannot give an opinion on that growth at that period, because I am not sure of the data there. But, certainly—as Mr Horne indicated—there are any number of theories as to why the gap occurs with boys as they pass through the early years of schooling. There is not a lot of consensus amongst the various views on that. There are, indeed, schools of thought which would place heavy emphasis on neurophysiology, but there are schools of thought which place heavy emphasis on cultural and environmental factors. Broadly, I do not think there is a consensus of views about the causation of the data.

Mr BARTLETT—Would you be able to provide us with a summary of the main views as to the growth in difference?

Dr Arthur—Certainly. There is some summarisation of it in the submission provided to the committee. Indeed, some of the research reports that were provided will go to that. Also, I would expect that the research which we are just now tendering for, which is specifically targeted at the literacy development of boys, will, amongst other things, carry out literacy research as part of the process. So I would assume that we will have an enhanced ability to answer your question on that, but that research is a bit further along.

Mr BARTLETT—With respect to numeracy, I understand that at year 3 level the differences in numeracy are basically almost negligible compared with literacy. What about differences in numeracy at earlier ages? Is there any evidence about that?

Dr Arthur—I am not aware of any.

Ms Newmarch—No.

Mr Horne—If I could make one more comment on the question of developmental or physiological explanations as distinct from others: you must at the very least look for a combination of factors, because if it were simply a matter of child development or physiology, you would expect gaps to be fairly constant over time—there is something in the boy or the girl which means that you are going to get this gap. In fact, there is quite a lot of variation over time which does suggest that it is not simply a matter of developmental stages. At the same time, I would not want to dismiss developmental explanations entirely because it is not a matter simply of education systems either, because looking internationally, people with very different approaches still get a gap of this sort. So it may be a combination of things.

Dr Arthur—If you look at the benchmarking data, you do not find a smooth correlation between those states and territories with the age of the boys or girls and their achievements. You do find some correlation with years of schooling, which would suggest there are some factors there. With all of these correlations, when you are looking at data sets, looking across very broad things like Australia or states and territories, you will see correlations on factors such as boys/girls, and language background other than English. But if you take much more detailed data sets where you can look at variations between schools and between individual classes, you almost inevitably find that correlations attributable to different schools or different classes will be much greater than the other background variable correlations. These things are not deterministic.

Mr SAWFORD—I have got a series of questions. Before I ask those questions I would like to clarify something that Robert said in his introductory remarks. What do you mean when you say 'outcome focused'?

Dr Arthur—Specifically, what we mean by 'outcome focused' is that we are engaged in a process with the states and territories to take the national goals for schools which were agreed in Adelaide last year, which set out a broad set of expectations of the Australian community for Australian students, and which are written in terms of expectations for individual students. We are now engaged in a process to convert an effective amount of those goals into quite precise measures of achievement which we will be using in broad terms as a proxy for our success in delivering on the national goals. So within the literacy and numeracy area, which is the most advanced, we have an agreed set of the outcomes which we consider to be appropriate at year 3, year 5 and year 7 for literacy and for numeracy. They are quite detailed statements of the outcomes we expect for individual students in these fields of study.

We have also, in the case of literacy, got to the point where we have converted those verbal statements of what is to be expected into precise measures of what that means in terms of achievement on the various assessment instruments that exist in the states and territories throughout Australia. We are at that point for year 3 reading. We are very close to that point for writing and spelling, and for year 5 reading, and we are getting close to that point for numeracy. So we are going through a process of being able to convert the broad aspirational statements of the national goals to outcomes which have meaning and which can be measured—

Mr SAWFORD—I will stop you there, Evan. I feel more comfortable with that. An outcomes focus without a purpose and without a process is useless.

Dr Arthur—Quite. We are giving some substance to the words.

Mr SAWFORD—It is a phrase that is being used continuously now and I think it is misleading. I found the submission very useful in terms of not only the amount of information it brings up but also the amount of information it leaves out. The data that you brought in about New South Wales showed that the difference between girls and boys has changed markedly over the last 20 years. The difference in 1981 was 0.6 marks. It went up to 20 and it is around 12, 16 or 17 now. In the last 20 years some significant things have happened in education, other than what you have already mentioned. Firstly, there has been a tremendous drop in expenditure per capita for children in primary and junior secondary schools. Of course, that is largely a state

government responsibility, but it is necessarily something that the Commonwealth should not ignore.

Another factor has happened in the last 20 years: the introduction of the Carmel report by governments, both Commonwealth and states. The Carmel report was a watershed report but it got a couple of things wrong. One of the things it got wrong was that it failed to recognise the need for resourcing in primary schools. The second thing it did, which perhaps reinforces what happens internationally, is that we took on the international aim of setting up a single comprehensive secondary school. Prior to that, we did not recognise the value of the diversity that was there in public education in terms of single sex schools, agricultural schools, technical schools et cetera, and we finished up having that. A third factor was that in the last 20 years, prior to what happened before, each state had directorates of education for each particular sector—junior primary, primary, junior secondary, higher secondary, TAFE, et cetera. These were all amalgamated into a single factor. I do not see any reference to that and there is only a superficial reference to teacher training and the gender balance of teachers which have changed dramatically.

There are four things there: the fall in expenditure which, in real terms, has actually got to the school itself; the lack of diversity in public secondary education with a single comprehensive high school; the amalgamation of the sectors of education—some of those sectors had been forgotten for the last 20 years and had no voice in the bureaucracy to represent them and improve them; and the gender balance that has occurred in teacher training colleges and out in the field. Would you like to comment on those four?

Mr Horne—I will start on the question of New South Wales. I think you really would need to explore the reasons for that graph with the state if you plan to take evidence there. There is one particular thing that is noticeable from it: the difference between boys and girls there increased from 4.4 marks to 12.2 marks in a single year, 1992. That is a discontinuity that may reflect some change in assessment practice or something of that kind as much as anything else.

Mr SAWFORD—But, Robert, the difference is 0.6. You cannot deny the fact that something dramatic has happened in the last 20 years. I have suggested four possible reasons, which would be similar in every state by the way. I may be wrong, but to just let that go and say—

Mr Horne—No, we are not suggesting that. I would need to look at figures for expenditure per student but all the experience I have suggests that it is quite hard to trace convincing relationships between expenditure per student or class size and examination results. Many researchers have tried to do this. Most of the analyses do not come up with very close linkages there.

Mr SAWFORD—There is a reason for that, of course: the Commonwealth allows state governments not to provide the data. I want these four questions commented on but I have another question that follows that and, basically, I will foreshadow that question. When we refer to research in these areas in Australia—you mention some in your submission—it is an appalling indictment of this country in terms of its lack of research. The amounts of money in the one-off series of research that we do in this country is just appalling. But, anyway, that is another question. Would you please comment on the other three?

CHAIR—You might just run through those three issues raised by Rod.

Mr Horne—We talked a bit about expenditure. I think we probably cannot carry that much further in this hearing. You need data on expenditure per student and you probably need state by state data and so on.

CHAIR—Presumably that is information that the federal department does collect or has available to it.

Dr Arthur—Certainly we do have data on expenditure levels, broken down by sector and we do have data obviously on student numbers. So, yes, that data is available.

CHAIR—Whatever you have got in that regard, could you please send it to us?

Mr Horne—Yes.

CHAIR—We do appreciate that the amount of money spent does not necessarily equate to the outcome; nonetheless, we would like to see it.

Dr Arthur—I would just comment, agreeing with Robert, that it is certainly a challenge to try in any research project to work out causation even if you show that in such problems there are correlations between these things. You have mentioned those four factors. There will have been a large number of other changes in New South Wales schools over that particular time and the task of attempting to sort the relative influences of those things—

Mr SAWFORD—They are the biggest four.

Dr Arthur—We would obviously, as Robert suggested, pursue with New South Wales the detail of that.

CHAIR—We will.

Dr Arthur—I would just comment on the data and your suggestion that this is something which should be investigated. We certainly would agree that we need to do better in terms of making all Australian school systems accountable for the variations in outcomes. The approach that we are now taking starts in literacy and numeracy with the assumption that all students should achieve and that all education sectors should be accountable over time for delivering exactly that. The variations that you pointed out that we are addressing today in terms of boys and girls are part of that. There are other variations and the one that particularly concerns us at the moment is the massive variation in outcomes for indigenous students. A process whereby education authorities are required to explain year after year the existence of gaps, broken down by equity groups, and to commit to eliminating those gaps is indeed a process we are now engaged in. There is legislation currently in the House—it is probably in the Senate now—which provides administrative and legislative backing to that process.

Mr Horne—There are a couple of issues raised by Mr Sawford which I might comment on briefly.

CHAIR—Could you keep it succinct because a couple of our other colleagues need to ask questions.

Mr Horne—First, on the question of diversity in schools, I think one recent initiative which, from the Commonwealth's perspective, is important is the movement towards vocational education and training in schools and the broadening of that to enterprise and careers education as a means of engaging boys in something that they may perceive as more relevant than the more traditional fare in the later years of secondary schooling. So I would put quite an emphasis on that.

Second, on the question of the number of men in the teaching force, it is true that now over three-quarters of primary teachers are women and just over half of secondary teachers are women. And the proportion has grown, not dramatically in recent years but it has grown: 72 per cent of primary teachers were women in 1989; 10 years later it was 78 per cent. That is a significant growth, we would agree.

Question: would things have been different if there had been more men? That is quite hard to answer. Researchers who have actually looked at it have concluded that the teaching style and the quality of the teaching is more important than the gender of the teacher, that being able to strike up that rapport with a boy is not a property that belongs exclusively to male teachers. In a general sense, I believe many people would say, yes, they would like to see more men in teaching, but I do not think that is necessarily going to lead to a big narrowing in the gender gap. It would have other, wider benefits, I think.

Mr SAWFORD—In the last 20 years significant differences have occurred and that is one of the big differences that has occurred. To just wipe it off with that sentence is, I think, really a bit rich. That deserves a little bit more comment than that. Would you like to move on to the amalgamation of the education departments?

Mr Horne—I am not sure that we can say much. I suspect that that is a state issue on which we are not very well qualified to comment.

Dr Arthur—I am speaking against ourselves but we would not necessarily be convinced that changes amongst the internal organisations of bureaucrats have that direct an impact in classrooms.

CHAIR—Who knows?

Mrs ELSON—I would like to ask a question on that study into whether lack of male teachers could be the reason we have a problem with our boys in schools. You said before that research had been done. Was that within Australia, within your department?

Mr Horne—Yes, I believe it was. My colleagues could speak more about that.

Ms Newmarch—Can we get back to you with the reference for that? From memory, it was commissioned by the department.

Mr Horne—We will come back to you on that. I think the answer is yes, but we had better get the correct answer.

Ms Newmarch—We will get you a copy of the research.

Mrs ELSON—With regard to the reported benefits of the single sex classes in co-ed schools, has the department looked into that more thoroughly to see what the benefits are?

Mr Horne—We have seen some research on the question of single sex classes in co-educational schools, and certainly some positive results in that area have been reported. We would be very happy to see more experiment. The evaluation of the experiment has suggested that maybe the quality of the teaching is more important than the single sex organisation of the class. It is not an experiment that we want in anyway to dismiss, just simply to say that—

Mrs ELSON—But you are looking into it closely to report back?

Mr Horne—Yes.

Mrs ELSON—I have grave concerns, like Rod, about the trend in the last 20 years. As all of us here do, I go to our school awards nights and every year it surprises me how many more females are receiving the awards compared to males. In my area, the percentage of female teachers is about 92 per cent.

Going back a few years, a particular principal took some boys from a classroom that had had female teachers from year 1 through to year 6. The boys were classified as slow learners but they changed dramatically when they were under a male teacher for the next 12 months. That is why I was asking whether you had any factual reports of that happening within schools or of principals reporting any success back to the department. I think maybe we should look further into that encouragement aspect.

Mr Horne—We can certainly produce for you the research to which I was alluding. That would be the main thing we have at the moment.

CHAIR—Speaking from a medical background, the gender of a doctor is often very important to the patient and I suspect it is no less important in teaching.

Mr EMERSON—I have two questions. The first is general. Page 10 shows that year 12 retention rates have plateaued in the last few years. What is the departmental theory or research about the factors influencing year 12 retention rates generally?

Mr Horne—There have probably been two underlying dynamics in recent years. One that was certainly running through the 1970s and 1980s was a secular tendency for school retention to increase. More students saw their future as being bound up with staying on at school to year 12, getting that year 12 qualification and maybe going on to tertiary education as well. I think there has been that sort of driver.

The other thing that we think is very important is the state of the labour market. There was a peak in school retention around 1992. If young people see that there is no easy prospect of a job if they leave school, they will stay on. Since then, the labour market has got better and the retention rate has fallen back a bit—but of course it is still very much higher than it was, say, 20 years ago. One third of boys stayed on at school 20 years ago and two-thirds do so now—that is the measure of the difference: it is huge. But there was a slight falling back in the 1990s.

Mr EMERSON—Would you put any weight on what Rod said about overall levels of school funding being related in any way to year 12 retention rates? It seems to me that the increase basically from the late seventies through to the mid-nineties was dramatic. I cannot quite conceive of why people would wake up in the morning and say, 'My future's bound up in staying on to year 12.' I do not know why they suddenly got this realisation. Why did they not have that realisation in 1976 or 1978?

Dr Arthur—Some pretty fundamental changes in the labour market occurred in the same period, as well as some pretty fundamental changes in society's expectations about the life choices of children.

Mr Horne—A lot of countries experienced a similar effect: many OECD countries were the same.

Mr SAWFORD—And we had a government that set retention rates as a primary aim. When the government sets goals, they can be met.

Ms Hardham—The increase in retention rates was much greater in the 1970s when the retention rates were much lower; now they are much higher and the scope for further increase is smaller. If you look at participation in vocational education and training as well as year 12 retention, you will see that the level of participation is much higher than the retention rates suggests.

Dr Arthur—The second priority area to be addressed in terms of the current goal-setting process, after literacy and numeracy, is participation and retention. There is a process under way at the moment to get some improved definitions that will make sure that we are talking about exactly the same thing across Australia. All state, territory and Commonwealth ministers have agreed that setting appropriate performance measures for that is a priority.

Mr EMERSON—I wonder if I can request a little bit of work. It may already exist, but it follows on from the comments that have just been made. Can you do a correlation between the state of the labour market and year 12 retention rates over that relevant period just to see—I am sure there is a relationship; what I am unsure of is the strength of it—if it explains, say, 40 per cent of the variation. Then the real interest is what explains the 60 per cent.

The final question is about the work of Professor Peter Hill in Victoria. Professor Hill has produced graphs based on a lot of research which indicates that, in the case of Victoria, the performance of boys actually deteriorates during the middle years. We have had a chat to him and he said that basically a dollar spent in the early years is worth $2 spent in the middle years. In other words, it is very difficult to arrest that deterioration in the middle years and it is very

resource intensive. He traces that back to particularly the literacy problems in the early years. Does the department agree with that?

Dr Arthur—We would agree with that. We have certainly been deeply involved with Professor Hill in much of his work. He has also been involved in a major research project we commissioned in the Victorian Catholic system, which extended some of his work with the illiteracy project and a number of other areas there. So we are certainly across that. The most interesting things are coming out of that research. The really interesting thing about his research, of course, is that it is scaled. It is not just research in one or two schools; it is a system wide approach. One of the most interesting things that I think we find out of that is that it is the expectations you set yourself and it is measuring whether you are achieving those expectations—they are the crucial drivers. The variations shown by whether you are using particular kinds of literacy instruction methods, particular forms of school organisation are the crucial drivers. It is the expectation that all students can achieve and the discipline that is set by successive ways of intervention that achieve that which we find particularly powerful.

Mr BARTLETT—I want to return briefly to the question of gender of teachers. Have most other OECD countries experienced the same change in proportion between male and female teachers? If so, is there a correlation between that change in proportion and the degree of divergence in TES results for senior students, say, over the past two decades?

Mr Horne—The country with which I would be most familiar overseas is the UK. The UK certainly has and that is something that they feel they ought to be addressing. So there is some evidence there. I suspect it would be true of others because the relative attractions of teaching to men and women, and alternative occupations, have been driving systems that way.

Mr BARTLETT—So if those other countries are experiencing that, are they also experiencing the same degree of divergence between boys' and girls' results at TES level?

Mr Horne—Both those things, I suspect, are happening. How close the connection between the two is, I am not so sure.

Mr BARTLETT—Is it possible to do a bit of basic research on that?

Mr Horne—We could certainly give you—and we promised to do so earlier—some figures about the gap between boys' and girls' attainment across OECD countries. I am not sure how much we could get internationally quickly about the gender composition of the teaching force, but we could look at that. Trying to trace the connection between the two phenomena is a big ask.

Mr BARTLETT—Sure. But it would be interesting to see if there is any, at least, superficial impression of that relationship.

Mrs MAY—In your opening statement this morning you were talking about a choice of pathways for the future. I remember when I worked in the school system back in the 1980s there were certainly career counsellors there for year 12 people leaving school. Obviously with the types of jobs now and the skilled work force that we need, with those students leaving at a much younger age, would you see a need for that career counselling to come in a little earlier? Are

there any programs addressing that or advising these students? If you walk out in year 9 or year 10, what sorts of options are there out there for the sorts of skills you have gained through those very short years at school? Would you see a need for that?

Dr Whitney—I could comment on that on two fronts. The Commonwealth, with the states and territories, is working to improve significantly the general careers education that is available through schools, and that will partly address the issues you have raised. The issues have also been raised with the Youth Pathways Action Plan Taskforce that Robert mentioned in his introduction. That task force has yet to complete its report, so I cannot share with you what its recommendations will be, but it has received considerable evidence through its consultations that there is a great need for improved careers advice and certainly not just at the point where young people leave school, having completed year 12.

There is a need for a more comprehensive approach to the general choices that young people make about their transition, linked both to their completion of school—that is, the choices they make that will lead them to complete year 12—and their choices about post-school destinations. The task force has been looking for ways to recommend strategies that could be followed up that would take that more comprehensive approach so that there would be advice to young people not only about the options if they were choosing to leave school at year 10 or 11 but also, to some extent, the consequences and the trade-offs between early access to employment but more limited longer-term chances if their education and training has not been completed. That certainly is going to be one area where the task force will make recommendations. As I said, its report is not yet complete so I cannot be definitive about that.

Mrs MAY—You were talking about the number of school leavers and that a lot of those students will end up in apprenticeships. Do we have any idea of the numbers who do not just drop out and go nowhere? Do we know how many of those students are taking up apprenticeships?

Mr Horne—There is a good analysis done by the Australian Council for Educational Research which we can show you. It maps the pathways which various students take up until the age of 24, and shows which go down which routes and which may end up in the categories which would have been of most concern—unemployed, not in the labour force and so on. That is probably the most useful bit of work on that.

Mrs MAY—Could we have a copy of that?

Mr Horne—We can certainly provide one quite quickly.

Dr Arthur—It is cited in the submission.

Mr Horne—Yes, it is.

Mrs MAY—On the Full Service Schools program that is in your submission, was that to target only high risk boys?

Dr Arthur—No, that program was introduced in response to the 16- and 17-year-old measures of the youth allowance, so it was designed to target both students who might be

returning to school because of the requirements to be in education and training for accessing the youth allowance, but also students who were at risk. It was not intended to be gender specific; it was intended to address all students. In the nature of things, boys will have been more likely than not to have been the focus of programs developed under the program because of their high propensity to leave school early.

Mrs MAY—Is that program coming to an end?

Dr Arthur—Yes. It was a two-year program to do with a transition period to alert the states and territories to the kinds of programs that would be useful so that they could pick those up as part of their mainstream responsibility for education and training.

Mrs MAY—So, at the end of that period, you would see those schools picking up what they have identified over that period?

Dr Arthur—Yes. A fair amount of the funding provided was held back at the national level to disseminate the best practice. There was a web site created and there are a number of research projects, which are coming to a conclusion at the moment, which are intended precisely to take the good practice that emerged during the program and make that available to all Australian schools.

Mr BARRESI—Robert, I am sorry I had to leave during your submission, so I am not sure if these questions were asked. In your submission you talk about other gender related factors, and you say:

... there is little data to substantiate any linkages between the gender of the teacher and the skill acquisition of students.

However, then you go on to say:

In terms of different learning styles, traditional schooling tends to favour passive learning which may not suit certain boys who prefer interactive, experiential learning styles.

That leads me to think about whether there has been any analysis of the difference between the literacy and educational levels of boys in non-government schools versus government schools. One would assume that in the non-government schools there would be a lot more traditional type schooling systems being implemented. What work has been done in those areas?

Mr Horne—I am not aware of—

Dr Arthur—There is no large-scale data set that I am aware of. The national survey which was done a couple of years back did not have anything like a sufficiently large sample size to produce that. There will be data available in the future because it is a requirement now that non-government schools participate in full literacy and numeracy testing in years 3, 5 and 7. So there will be data available which will be a sufficiently large set so that you will be able to do those correlations. I would be doubtful whether it will go to answering that particular question because I think you may be under the misapprehension of the diversity that exists in the non-government sector. I think you are likely to find in the non-government sector probably as much diversity in teaching styles and approaches to education as you will find in the government

sector. It includes the Catholic system sector which indeed, as we know from a research project that we have commissioned in Victoria, does have a very wide number of teaching styles. The independent sector may include some quite traditional schools but it also includes a large number of other schools—for example, the Rudolf Steiner schools, which have unique educational philosophies. So the data set will be available but, as always, it is not going to be easy to take that data set and say, 'Okay, this kind of teaching style produces these results.' I would go back to the research of Peter Hill and say that it tends to be that the teaching style is less crucial than the commitment to success and the quality of the teaching that is involved.

Mr BARRESI—I am not sure whether there would be any work in this area at all—in fact, it is probably a hypothesis of mine—but I would imagine that the extracurricular studies or activities that boys and girls engage in may also explain the difference that may occur. Part of that is to do with a bit of gender stereotyping that takes place. My little girl is learning the violin. My little boy goes off and does Auskick. I am not saying that is going to result in a difference between a smart kid and a kid who is not as smart, but it is almost as if there is a supporting mental process through extracurricular activity that takes place which may simply enhance what they are going through in the formal education process. Have there been any studies into that?

Mr Horne—I think there has been some work done, for example, on boys', and girls' reading habits, which suggests that girls do at various ages read more widely. Of course, there is a cause and effect there. If you are not very secure in your reading skills, you will read less anyway. But the more you read, the better you get. I think in general terms we would agree that what you do outside the school is very important and may help to explain some of the difference.

Mr BARRESI—But there have not been any formal studies into that.

Mr Horne—Certainly, when I was speaking about reading habits, there was some work on that which we looked at. We will see whether it is substantial enough to warrant referring to. If it is, we will certainly make it available.

Dr Arthur—May I also enter a caution here in terms of what research can or cannot do. It is a very common tendency, so we need some more research on this and indeed we do. When you are dealing with—

Mr BARRESI—Longitudinal research.

Dr Arthur—Yes, but even in longitudinal research you are dealing with very complex questions of the development of the ability to do a research study which will say, 'Ah ha! That is the factor that is crucial.' In this area or in any kind of social research, it does not work that way.

Mr BARRESI—Robert, you mentioned right at the outset about a symposium in November. Can you send us some details on that?

Mr Horne—Yes.

Mr BARRESI—We should be aware of the outcomes of that symposium.

Mr Horne—It is 22 and 23 November.

Mr BARTLETT—Where is it being held?

Mr Horne—It is in Melbourne.

Mr EMERSON—At page 49 of your submission, table 10, on socioeconomic status, it shows that the retention rate of kids from higher socioeconomic status areas is 77 per cent and from low socioeconomic areas it is 56 per cent. To me that goes to the core of the problem that we are addressing in this inquiry but I relate it very quickly to a personal experience that I had visiting a couple of schools where I have walked down the path towards the classroom with the teacher and on two occasions, at two different schools, two different teachers said, 'Before we go in here you need to understand the kids here are not very bright.' I think the kids there are as bright as they would be anywhere in the country. You referred to Professor Hill's work on teacher expectations. Can we get a copy of that because I think that is vitally important? If teachers take the attitude that kids from poorer areas are just innately not very bright then they will make sure that those kids underachieve.

Dr Arthur—I completely agree with that.

Mr EMERSON—Any other work that the department has on that would be helpful.

Dr Arthur—Absolutely.

Mr SAWFORD—Do you have information in terms of non-government schools and the gender balance over the last 20 years?

Dr Arthur—The gender balance of—

Mr SAWFORD—The gender balance of staff in non-government schools over the last 20 years?

Dr Arthur—We would need to look into it.

Mr SAWFORD—In fact, because it would be a big project to ask for the whole lot, you might want to narrow that down to what was formerly known as category 1 schools. That gives you 62 or 67 or you could just do category 1, 2 and 3—the non-systemic schools in other words. The other information is available.

Dr Arthur—I will look into that for you.

CHAIR—The educational requirements that take postgraduate students into education seem to have declined over the last period of time. You require a lower tertiary education score to get into the teaching profession now than you might have done 20 years ago. I presume that, if that has an impact on the final product in terms of teacher quality, it does not in the end affect the difference between boys and girls but is that something about which we should be concerned or is that sort of issue irrelevant to this inquiry?

Dr Arthur—We are certainly concerned with the issue of the quality of the teaching force and a particular program is about to start to address that. We are also interested in the quality of teacher education. It is not an issue likely to have a simple response but, yes, it is an issue which we need to be looking at.

Mr SAWFORD—Some people would say it has deteriorated over the last 20 years significantly.

Dr Arthur—That has indeed been said.

Mr Horne—When I said there might be other benefits of having more male teachers, I had in mind that more competition for places in teacher training would enable people to raise the cut-off scores for entry.

CHAIR—Indeed. Thank you very much for your time. I think we will do what we often do in these inquiries. We get the department in as the first witnesses, if you like, but what we really need to do is invite you back when we finish our round of public hearings when we will certainly be much better informed and in a better position to know perhaps the sorts of questions we ought to be asking of you. But it is a very useful and comprehensive submission and thank you for your cooperation. We really appreciate it.

Mr Horne—Thank you, Mr Chairman.

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

That this committee authorises publication of the evidence given before it at a public hearing this day including publication on the electronic parliamentary database of the proof transcript.

Committee adjourned at 10.20 a.m.