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

EDUCATION AND TRAINING COMMITTEE

Inquiry into the approaches to homework in Victorian schools

Melbourne — 28 April 2014

Members

Mr C. Brooks
Mr P. Crisp
Mr N. Elasmar
Mrs J. Kronberg
Mrs A. Millar

Chair: Mrs J. Kronberg
Deputy Chair: Mr C. Brooks

Staff

Executive Officer: Mr M. Baker
Research Officer: Mr A. Walsh

Witnesses

Professor M. Horsley, and

Associate Professor R. Walker.

The CHAIR — Gentlemen, I extend a warm welcome to you to the Education and Training Committee's inquiry into the approaches to homework in Victorian schools. For the record, I am going to impart some formal information to you. It is important to appreciate that all evidence taken at this hearing is protected by parliamentary privilege. However, any comments you make outside of this hearing may not be afforded such privilege. Hansard is recording today's proceedings, and we will provide you with a proof of what has been recorded within about a week. You will have the opportunity to make corrections to any typographical errors, but you may not change the context of what you have said.

We invite you to make some opening statements, and we are very much looking forward to being immersed in the presentation that you have developed for our purposes today. Through the course of that presentation the committee may put questions to you, through me, and will formulate a number of questions to put to you during the course of the presentation or as we get into the second stage and are more acquainted with the sorts of points that you are going to make. We welcome you to Melbourne most warmly. It is good that you have made the trip down to be with us today. Thank you. I invite whoever is going to start this, Professor Horsley or Associate Professor Walker — —

Prof. HORSLEY — We are a team. We have prepared a half-hour presentation. Richard is going to do an overview of the research for 10 to 15 minutes, I am going to make a short statement of 10 to 15 minutes about the implications and then we will stop. We really want to develop a conversation, so if that is the way to go, we hope you are happy with that.

The CHAIR — Professor Walker, we invite you to start the process.

Overheads shown.

Assoc. Prof. WALKER — In the book that we wrote, I wrote about the homework research. It is important to understand the definition of homework as far as research is concerned. It is tasks assigned to students by schoolteachers that are meant to be carried out during non-school hours. That definition actually does not include study for exams and the like, because they are considered not to be tasks that are explicitly assigned to students. They study for tests, exams and so on independently, if you like, of homework tasks that are explicitly given to students. Understanding that is important to understanding the research that follows.

Mr ELASMAR — Sorry, on that — exams are extra?

Assoc. Prof. WALKER — Exactly. That is right.

Prof. HORSLEY — When we started homework centres — I lived in the Islands for many years, and I was under pressure from the Islander communities in Sydney to run homework centres to support Fijian, Tokelau, Cook Island, Maori, Tongan and Samoan children. We started off calling them homework centres, but as a result of the definition we broadened it out to 'learning centres', because the definition research is tied to that particular approach.

Assoc. Prof. WALKER — It is useful to have some understanding of the purposes of homework. Epstein and Van Voorhis identified these 10 different forms of — —

The CHAIR — The 10 Ps?

Assoc. Prof. WALKER — Yes, that is right — purposes of homework. The first three relate to teachers: practice — teachers want students to practice already learnt skills; to prepare for a new learning activity; to participate in some sort of activity or another. For various types of personal development, particularly self-directed learning skills. Teachers also want to encourage parents to be involved in their children's activities — so that is parent-child relations. Some sort of communication between parent and teacher is an optimal outcome of homework, so parent-teacher communications. There is also involvement with peers, peer interactions; various policies — they might be government policies or they might be school policies; public relations, which often relates to the image of the school, but it can also be the image

of the teacher; and punishment. Homework is not so often used as a form of punishment, but it certainly was at various points in time.

As I have shown you, there are 10 different purposes for homework, but in fact most of the research into homework has focused on these three core questions. Does homework actually enhance student learning and academic achievement? I guess that is one of the really critical issues. The second issue is: does homework help to develop skills of independent, self-directed learning in students? That is obviously a really important aspect of any learning in school, but it is going to be critically important for students doing homework because they are going to need self-directed learning skills. One of the questions is: how do students actually develop these self-directed learning skills that are going to be required for homework? Part of the purpose of schooling is to help develop self-directed learning skills in the classroom, but they also need self-directed learning skills at home. There has been a little bit of research more recently on motivation and homework that is quite interesting; there are a couple of interesting points that come out of that. Thirdly, is parental involvement in their children's homework beneficial for student achievement and for the development of independent learning skills?

Prof. HORSLEY — The big three.

Assoc. Prof. WALKER — The big three. I am going to show you some more meta-analysis findings. Meta-analysis takes a lot of research studies and distils them into a single figure that gives you some idea of the impact of research in that particular area.

The CHAIR — Cooper's work predates all of the technological reliance that we see in teaching, and I know that there have been other studies since, but there was a lot of reliance on his work of 1989. Have you got a comment on that?

Assoc. Prof. WALKER — The comment I would make is that if you look at John Hattie's series of meta-analyses, what that shows is that ICT does not have a strong impact on learning. I cannot remember Hattie's meta-analysis score, but essentially it shows that at the moment technology has not had a huge impact on learning and achievement outcomes. I know that sounds a little bit surprising, but it is the reality. It may well be that teachers are not using technology well. There may well be a whole range of different reasons as to why technology is not leading to the sorts of benefits that many of us might have expected.

Prof. HORSLEY — Hattie's conclusion has been — not confirmed, but a large number of studies, for example, in the US Department of Education, did a massive meta-evaluation of using computers in classrooms and achievement, and again Hattie's result is pretty much stock standard for those types of research.

The CHAIR — A fascinating topic in itself.

Assoc. Prof. WALKER — We are in teacher education. I think that in teacher education we have a long way to go to improve teachers' ability to use technology. I think we are in the very early stages of developing pedagogical understanding of how to use technology for learning.

The meta-analysis shows that when it comes to homework versus no homework there is no benefit for kids below grade 4, but for grades 4 to 5 the percentages, from Hattie essentially, showing what proportion of kids might benefit from homework are that in grades 4 to 6 we are only looking at about 9 per cent of kids benefiting from homework; in grades 7 to 9, about 22 per cent of kids are benefiting from homework; and in grades 10 to 12, about 45 per cent of kids are benefiting from homework. I take those figures as being probably the best available figures because there is quite a lot of other research that converges on those findings.

If we compare homework with in-class supervised study, there is a slight benefit for homework there, but that is probably not something that we are going to be so interested in.

Prof. HORSLEY — Another way to look at effect sizes on this — and this is John Hattie's mantra — is that if the kids go to school and they are learning at school, then over the year the increase in their

learning should be around 0.4, so anything that is less than 0.4 is not really having an impact on their learning.

Assoc. Prof. WALKER — But 0.4 is the — —

Prof. HORSLEY — The gold standard.

Assoc. Prof. WALKER — He refers to that as 'the zone of desired effects'. If it is below 0.4, it is positive, it is beneficial but it is not particularly significant.

Mr BROOKS — The obvious point there from the figures you have is that what you are saying and what John Hattie is potentially saying — I think he is one of the witnesses, so we can talk to him about that — is that on those figures homework in grades 4 to 6 and 7 to 9 is of no significant benefit.

Assoc. Prof. WALKER — If you are looking at achievement only, so at the moment that is what we are focusing on, but when we come to the other question of self-directed learning skills then we would have a different answer.

The CHAIR — We will let you proceed, I think, in this scene setting.

Assoc. Prof. WALKER — Sure. The point here is that there is more recent research by Cooper — more recent meta-analysis — where the effect sizes are larger. Obviously 0.6 is above 0.4, so that is into the zone of desired effects. The range of findings in that meta-analysis was from 0.39 to 0.97. The point here is that the difference is the way in which achievement was assessed. These larger effect findings occur when teachers develop their own tests to assess student learning. The other research used standardised tests of achievement, like NAPLAN and various other forms of standardised testing. If teachers use their own tests, then the effect is greater. But in standardised testing — which is a more rigorous type of analysis, if you want to put it that way — the benefits are much less.

But if we take the overall effect size, regardless of age or grade, we find that the meta-analysis score is 0.29, with probably about 21 per cent of kids benefiting overall, so from the point of view of achievement, it is not particularly significant.

Prof. HORSLEY — Which is surprising. When we present this at schools or with teachers, there is a crescendo of discussion. We can say that homework is a social practice, sort of like having a 21st or a wedding. It is embedded in the practices of the school, and generally things have gone on and on without a real conversation about what its impact or benefits may be.

Assoc. Prof. WALKER — There may be many reasons for this. The quality of homework is a really critical issue. My own view would be that a lot of the homework that is set in schools is not high quality. That is the critical issue. We need to have better-quality homework being set for students and probably students getting more feedback on their homework as well. They are the sort of things Mike will talk about.

Prof. HORSLEY — Yes.

The CHAIR — How much then is this a critique of teaching practice?

Assoc. Prof. WALKER — We are in teacher education. What I would have to say is that teachers get very little advice and information about homework in teacher education courses. I might give one lecture to one group of students. The curriculum is so large, and so many things have to be covered in teacher education courses that actually teaching about good-quality homework, how to set homework and how to provide effective feedback is something that probably does need to change in teacher education.

Prof. HORSLEY — We have thought about this a lot, and we will say something towards the end about possible ways of increasing the quality. But, yes, that is why we do not suggest we abandon homework. Many countries are moving down the track. We suggest it should be reformed — less will be more.

Assoc. Prof. WALKER — Yes, we think there is value in homework, but good-quality homework.

The CHAIR — Please proceed.

Assoc. Prof. WALKER — We have looked at experimental research relating to homework and achievement, so we are still talking about homework and achievement. There is correlational research. The correlational research just shows that there is a relationship. The experimental research shows that one thing causes another — that homework actually causes achievement outcomes. The correlational research replicates the experimental research, and essentially it shows that there are not very significant benefits from the point of view of achievement when it comes to homework. Once again, there is some benefit for secondary school students, but overall we would say there are pretty weak benefits. If you were making a decision about homework on this type of research, you would probably say, 'Why would we bother?'.

More recently the Germans have conducted a considerable body of research: Ulrike Trautwein. This is the best research on homework in the world. Since about 2006 they have conducted a number of major studies involving thousands of students. One of the problems with this research is that the findings are probably relevant to all round the world, but the German educational context is quite specific. They put a lot of emphasis on homework. I think the kids leave about lunchtime or early afternoon, and they spend the afternoon working on homework, so in fact homework plays a really significant role in the German educational system.

The CHAIR — What time do they start school?

Prof. HORSLEY — At 8 to 8.30, and they spend the morning at school. Often the children stay at school and do their homework. The school is still open. They do not all go home, but many go home. It is quite a different day. A lot of European countries have quite a different daily structure, so homework is just an expectation built into the day, or self-study or whatever. It is quite a different context from what we see in our country.

The CHAIR — In that context, are the students on campus, in supervised environments, or can they be free ranging?

Assoc. Prof. WALKER — They can be free ranging. One of our colleagues is a professor from Germany, and he used to do his homework at home and did not have support from his parents. He has done very well for himself. They were not well off, so he did not actually get much support during that whole thing, and that is one of our conclusions about homework — that some assistance is actually beneficial.

Prof. HORSLEY — Trautwein himself never built that into the actual study. For example, a lot of German students go to the library together and work collaboratively. Where you did your homework and how you did it would have had a pretty big impact on the results of his study, but that was not part of it. His study was so complicated, but that was not a component of it.

The CHAIR — When does this departure from supervised learning to self-directed learning —

Prof. HORSLEY — At lunchtime.

The CHAIR — actually cut in, though, in terms of level of schooling?

Assoc. Prof. WALKER — Secondary.

Prof. HORSLEY — It is secondary where it is most prominent, but there are some aspects of it in primary. I would have to refresh. I have lived in Germany, but I cannot remember what happened in primary school.

Assoc. Prof. WALKER — I think it is secondary, to the best of my knowledge, but my knowledge is limited.

The CHAIR — It is fascinating. Please proceed.

Assoc. Prof. WALKER — One thing we need to recognise is that homework is different in every subject area, so we cannot just talk about homework in general. Homework in English is different to homework in maths, which is different to homework in languages. Homework in languages might involve, for instance, learning vocabulary and grammatical structures. Homework in English involves writing essays. Homework in mathematics may involve solving problems, so homework is different in every subject area. That is a really important aspect of the Trautwein work that has been ignored in a lot of the other research.

This Trautwein model also is an improvement methodologically on the other research. It allows researchers to look at homework from the point of view or the level of the student, the class and the school, and that has been a really important development in this research. I will not go on about that, but methodologically this research is much better than the research that has been conducted previously. Most of it has been in the area of mathematics. Most of it has involved students self-reporting — that is, students providing information through questionnaires. Obviously they are stated on achievement outcomes — grade point average and so on — but it has also involved some teachers self-reporting, so teachers answer questionnaires about their homework, why they set it and that sort of thing.

If we move on and go back to Harris Cooper, he has argued that more time spent on homework is beneficial, and that is part of his reason for doing the correlational research. This German research now shows definitively that spending more time on homework leads to lower achievement, and that is supported by some research from around the world that shows that in countries where students do more homework they have lower levels of achievement. Mike, you might want to comment about that.

The CHAIR — Before you do, I need to get this aspect of it clear. When we are comparing Trautwein's research, we are talking about the German model. Then we move to a more generic approach, where people might not be on campus and in self-directed environments, the way they are in a clearly delineated way in the German model. How are we able to compare when people do their homework vis-a-vis the German model?

Prof. HORSLEY — The German context is different, but what Trautwein did that no-one else had done was ask students to identify the quality of their homework; students could make a self-report on the quality of their homework. He also developed a measure of what might be called their conscientiousness. In other words, he tried to unpack various aspects of the homework practice which may contribute to achievement from homework, and that had not been done before.

There is a simple correlation between time spent on homework and achievement. If you think of really great students when you were at school, often they did not do any homework because they did it at school or they just did it in a flash. In other words, beforehand there was some sort of correlation: if you do this amount of homework, then this will lead to an achievement result. In the first runs of PISA, the student survey, that was the mentality — 'Let's collect how much time students spend doing homework and measure their PISA performance'. After Trautwein's research PISA dropped that part of the survey because it was not seen as something that could be justified theoretically. What is the relationship between the time you spend on homework and your achievement? I do not think I have answered your question.

Assoc. Prof. WALKER — To unpack that statement a little further, because most of the Trautwein research relates to mathematics — this relates specifically to mathematics — in mathematics we can say definitively that spending more time on homework leads to lower levels of achievement. Why might that be? This is an aggregate type of analysis. There are some students — very bright students — who might do homework and do it very quickly, but there are also students who are not so capable and who spend a lot of time on homework because they have a lot of difficulty with it.

A critical issue here is the quality of the homework and how well it is related to the student's capabilities. If teachers are giving students homework that they can handle, then this result should not occur. There are a lot of factors involved in that, but to some extent it means that many students actually have a lot of

difficulty with the homework they are given and therefore it takes them a long time to do it and they may not even be successful at it, so the critical issues are the quality of the homework and how well targeted to the student's capabilities it is.

Prof. HORSLEY — Based on this LeTendre measured the amount of time a certain proportion of students reported they spent doing homework in the United States and that country's performance for those students on PISA. This came out in 2003 and 2006. The countries that had the lowest amount of reported homework in the PISA surveys, like Finland, came at the top of PISA, and the countries where students reported more time doing homework came towards the end of PISA. The contrast was between Finland and Lebanon, where I think one-quarter of the students said they were spending 4 hours a night on homework. In Finland a very small amount of homework related to what was happening in class. That also confirmed the finding that Trautwein had made internationally.

Mr BROOKS — What about the Asian nations that spend a lot of time out of hours tutoring homework?

Assoc. Prof. WALKER — Tutoring is not included. What we would say is that from other research there is huge variability. I know we have the view that Asian students do a lot of homework — and that is probably true — but there is also huge variability in Asian countries and cities as to how much homework students actually do. Some research which looked at Beijing and several other Asian capitals basically showed a huge range of variability in the amount of homework kids did in those cities.

Mr ELASMAR — Is that based only on the student, and not the help of parents or teachers?

Assoc. Prof. WALKER — Yes, that is right, it is.

Prof. HORSLEY — Some parents set their kids more homework, so it is highly likely that other factors are coming into play rather than time spent on homework and achievement.

The CHAIR — I would like to introduce a line of inquiry, and that is that when we are talking about achievement we can see people who in their own self-paced inquiry, away from the pressures and competitiveness within the classroom or their own feelings of self, are asking questions and so on. Is there a way of measuring what people have been able to do in quiet self-paced environments, where they have been able to actually come to grips with something to catch up and to feel more confident therefore when they have laboured over something for a good period of time? They then go back feeling perhaps more confident, and that becomes the building blocks of a better approach or a better understanding.

Assoc. Prof. WALKER — There is no research on that specifically. To my mind, once again the critical issue there is the quality of the homework and how well targeted it is for the student. The competitive environment of the classroom is one factor, but students also need to have a particular view of the learning process. If students see learning as involving competition, then it does not matter where they are. Even if they are at home in a quiet environment, they are still going to be involved in competition with someone else.

From my point of view as an educational psychologist, what we need to be doing is encouraging students to be focusing on their own improvement, comparing themselves with their earlier achievement gains. That is the critical issue. Competition is actually not too beneficial when it comes to real student learning and understanding, so we have to try and move away from those competitive pressures. Some degree of competition may be helpful, but it is very clear — and there are considerable bodies of research that show — that competition undermines a sense of self, undermines interest and leads to low perceptions of capability, so students end up having low self-esteem and so on because of who they compare themselves with.

Prof. HORSLEY — Your question also implies that learning is just individual, but often new learning requires the assistance of others, collaboration or working together in a team. In other words, sometimes mastery requires cooperative work.

Assoc. Prof. WALKER — This is one of the things that we have brought to this area because of the theoretical orientation that we have. The emphasis on assistance in learning and in relation to homework is something that we have brought to the homework area. It was not really being discussed previously in the research literature.

The CHAIR — To that end, would the assistance come in some form of oversight in a homework club environment or another kind of learning environment removed from the school and the school campus, or on the school campus but in a different setting?

Assoc. Prof. WALKER — It could, yes. It is particularly an equity issue for some students who need assistance but do not necessarily get it and whose parents cannot provide it.

The CHAIR — Yes, we understand that fully.

Prof. HORSLEY — An example would be that with communities I created learning centres that were tied to the culture of the particular groups, so the centre acted as a bridge. It was not just for homework and learning; it was also a bridge between the community and the school, which are separate parts of the cultural continuum, to act as a third space that is culturally much more similar to the community but in operation much closer to the school. They can be a good amalgamation. We believe that homework centres can be very important in providing assistance. They have to be developed in such a way, though, that that assistance is promoted and encouraged. More on that later, I think.

The CHAIR — Yes. These are delicious topics, I must say.

Assoc. Prof. WALKER — The top homework finding about homework research and lower achievement suggests that there are quite a lot of students who are not being successful in their homework. Is critical that students, as in all learning, have an expectation that they can succeed. Obviously, if they do not have an expectation that they can succeed, they are going to do badly. That relates to how well targeted the homework is, again so that students can be successful but also so that students value their homework. I think it is pretty clear that many students do not value their homework because they do not see it as being of high quality. They often do not get feedback from teachers on their homework, so they may not value it in the way that we think they should. This is not a blanket statement, but it is often the case.

Prof. HORSLEY — We undertook research which showed that teachers told us they gave feedback on all homework or marked it, and then their kids said this was not true — so there is the matter of perceptions as well.

Assoc. Prof. WALKER — I have been an English teacher, and as a teacher it is easy enough at the end of the class to say, 'This is your homework', but then after the students should have done the homework, how do you as a teacher find some way of actually making sure that the students did it? Providing every student with targeted feedback about their homework is very difficult for teachers, so it often falls between the cracks. Teachers give students homework and they ask the students to put their hand up if they have done it. That is probably as far as it goes in many cases. Unless the teacher takes a significant part of the lesson to provide feedback and so on, it is difficult for teachers to find a way of building that into a lesson. It is not easy.

The CHAIR — Yes, I can imagine, with the day being as crowded as it is already with the curriculum.

Assoc. Prof. WALKER — That is right, and in a secondary school you might have 40 minutes. How much of that time are you going to devote to the homework that the students have done? It is not easy for them.

Mike mentioned student conscientiousness. That has been shown by the Trautwein research to be a really important factor. Obviously that goes with the two previous things — that students value homework and, if they are successful and if they are conscientious people, that they will do their homework — but how do we make all students conscientious?

There is also some evidence from the German research, and this relates once again to mathematics. This is probably the most common type of homework — that is, drill and practice. You give a student a worksheet where they do something they have already done before. It is some sort of repetition of what has already been learnt, so basically it is practice — drill and practice. That has been shown to lead to lower achievement outcomes, so too has teacher homework control. That is where teachers make a huge emphasis on attempting to control what students do at home in relation to their homework activities. As we will see in a minute, some degree of choice and autonomy for students is actually quite important. If teachers are too controlling and if parents are too controlling, that has a negative effect on student learning in general but also on homework outcomes.

The CHAIR — Is there a measure in terms of how interventionist parents are in this whole quest of students achieving better grades and so on and so forth — that is, that a lot of homework would be supervised, authored or intervened in by parents?

Assoc. Prof. WALKER — We were talking about that before we arrived — parents being involved in doing their student's homework for them, which happens in many situations.

Prof. HORSLEY — The question would be: how does that lead to a student's self-regulation skills? The answer would be probably that it does not or that it has a negative impact on the development of those skills. Those skills take a really long time to develop, and to the extent that paid tutors do homework or parents tend to do it for the students, the students are not developing the necessary self-directed skills that are required in their long-term learning.

The CHAIR — Do you have a view that there should be dialogue between the parent cohort of a school community and the school in terms of somebody setting out to provide an information kit or information sessions on their roles at this critical point?

Assoc. Prof. WALKER — We thought that this book would provide a resource for teachers, parents and students basically to start a conversation in the school. What we consider to be the best outcome is that a school community will come to some sort of agreement about what is an appropriate amount of homework for a student to do and what types of homework. In an effective school, we would want to see parents, teachers and students involved in some sort of dialogue and then coming up with something that is essentially a consensus position in relation to homework. That can happen with primary school students too. Primary school students are involved in the development of discipline policies and so on. They can also be involved to some extent in the development of homework policies.

Prof. HORSLEY — We know that that consensus will be hard-won, because amongst the teachers there will be a big variation in the value they place on homework.

Assoc. Prof. WALKER — Yes.

Prof. HORSLEY — What they consider is its importance, what they consider is its contribution to learning. That will also be true of the parents. We have studied this in schools. Generally the students have a more sophisticated and nuanced approach to this and probably will reach consensus more, but that consensus will be very hard-won, after a lot of conversation.

The CHAIR — When we are talking about consensus and the views on the value of homework amongst the teaching cohort are we comparing teachers of mathematics with teachers of mathematics, teachers of the sciences, teachers of the humanities, of the languages, of physical education? Are we comparing it across the board or within the particular subject disciplines?

Assoc. Prof. WALKER — That is a good question, because they are different cultures, and different teachers have different views and expectations and ways of teaching, so it is actually very difficult to speak generally about those differing cultures.

Prof. HORSLEY — One of our recommendations is that there should be a disciplinary component to that consensus — that mathematics, teachers, parents, community have to come together to talk about what

would be the most appropriate in terms of mathematics, and the same for science. We already know from research that homework is very different in different disciplines. We already know that some teachers think that homework contributes a lot to learning. We also know that many teachers, even of mathematics, intuitively understand that time spent on homework and achievement is not a high correlation. So what you get, even within the disciplines, is a variation in thinking about the value of homework and its importance in learning, and that is sometimes more extreme between different disciplines as well. Many English teachers really do not believe that a lot of the homework that they set — you had better not put this down — really does not contribute to learning, except specific tasks that are widely agreed on. In a primary school the school will have a homework policy that all teachers must follow, but many teachers intuitively — I do not think they will be able to articulate it — probably believe at their core that a lot of this homework is not really effective in terms of achievement. We have not got to question 2 of our critical questions yet.

Mr ELASMAR — Is there understanding between teachers how much they should provide? You teach English, for example; someone else teaches mathematics; is there an understanding of how much work they should provide to the students every day or every week, or does everyone come with a different — —

Assoc. Prof. WALKER — That would be very sensible. Some schools do have homework policies, but some do not. In some schools one teacher might set a lot more homework than another teacher, even though they are in the same subject area.

Prof. HORSLEY — It depends on the social practice of homework. For example, in many primary schools in Queensland homework consists of a work sheet that is given out on Monday and then collected on Friday, so it is completely disconnected from what happens in the school. Some teachers want to have a bigger work sheet, some teachers want to have a smaller work sheet, but maybe a school policy will determine, 'This is the way that homework works in this school'. Sometimes schools have very, very different homework practices and homework policies, so it is really difficult to nail that down. We have got PhD students studying this now.

Assoc. Prof. WALKER — Moving on to the last point there about homework quality, Mike has just mentioned work sheets. Sometimes they can be high quality, but often they just involve purely practice. What the research shows pretty clearly is that high-quality homework involves some degree of challenge but is not too demanding. It does not take a lot of thought to figure that out, I do not think. Low-quality homework is poorly selected and poorly prepared. Often homework is just an add-on for teachers. They get to the end of a lesson and they say, 'Well, do this and do this'. One of the things that we have suggested in this book — and good teachers do this, so it is not a suggestion that would come from out of the blue — is that teachers need to plan homework activities as part of their curriculum development. As they are writing their lesson plan for the next six weeks they have to build in homework activities and show how those homework activities relate to the learning activities of the class and how they will provide feedback to the students and so on.

Mr BROOKS — Does that not occur largely at the moment?

Assoc. Prof. WALKER — It does occur to some extent, but how much it occurs I could not say. You are probably right; it is probably not much.

The CHAIR — I am not sure how we could possibly measure this, but does homework come about because of what has not been accomplished, achieved or progressed through the actual class time itself?

Assoc. Prof. WALKER — There is no doubt that is, to some extent, what happens.

The CHAIR — So it is almost a panic gesture on behalf of the teacher: there has been a bad day for a whole range of reasons — it could go to the centre of discipline, the teacher's own lesson preparation or a whole range of incidents that can interrupt the flow — so this is something that is seen to supplement what was not achieved in that lesson.

Assoc. Prof. WALKER — I do not think teachers would do that routinely. If they did not get through a lesson, then they would just finish what they were doing in the next lesson, but I have no doubt that to some extent some homework tasks are just intuitive or quickly made decisions at the end of a class, rather than well thought through.

Prof. HORSLEY — If we go back to the purposes, there are a lot of different purposes and it is very complex. Teachers may do that, but they also may plan very high-quality homework tasks. In other words, we often assume the teacher is the same in every lesson, in every class, in every week across the year, but it is not like that. Teachers show great variation with different kids, so maybe they do that sometimes, but I think we would agree that they do not do it routinely.

Assoc. Prof. WALKER — We are still on question 1: parental involvement and achievement. This relates to parental involvement in general. You can see that the effect size there is 0.52, and that is pretty high. What this shows is that, if parents are involved in their kid's schooling in some way or another, then that is very beneficial. It is the parental aspirations and expectations that are most important. This is not relating to homework; this is just parental involvement in general. But we can differentiate between parental involvement at school, and that has been shown to be almost entirely beneficial — if parents go out of their way to be involved in their child's school activities, that is beneficial — and parental involvement at home, which can be both beneficial and detrimental, and this is what you were referring to before.

If parents provide some degree of autonomy for their children when they are doing their homework, that is definitely beneficial if parents focus on student improvement, rather than comparisons with other students in the class, and if they focus on the child's development of understanding, once again rather than how well other students are doing, or even on outcomes. The parent should focus on the child's understanding, rather than the fact that the child might have done very well or not very well, because the understanding is more important than the actual outcome.

If the parent focuses on the process of learning, then that is beneficial, but if parents focus on the outcomes of learning, if they focus on stable aspects of the child, like their ability, and they view ability as being something that cannot be changed, then that is not beneficial for the child. If there is a focus on comparison with other students — and once again this is really competition — and if parents are controlling in the way that they interact with their children in relation to homework, that is also detrimental.

These are quite important findings for parents to realise. If they are going to help their children, there are certain things that they can do that are really quite beneficial and other things that will really have quite significant negative effects.

The CHAIR — There would be the internal competitive pressures across the siblings, and those could be driven by parents setting up terrible conditions.

Assoc. Prof. WALKER — That is true, but if parents focus on the improvement of each child so they are competing with themselves, that will be beneficial, but if they put big emphasis on competition among siblings, then that may have detrimental effects.

Prof. HORSLEY — The Trautwein research showed that overcontrolling parents had a negative impact on the achievement from homework. His study extended to the parents, and that was one of his findings which raised alarm bells and has been followed up very closely.

The CHAIR — In the research how do you get to define whether the parents are controlling or not?

Assoc. Prof. WALKER — There are different ways of doing it. You can ask the parents to answer a questionnaire, or you can ask the child to answer a questionnaire that indicates, 'Does your parent do such and such a thing?'.

Prof. HORSLEY — 'The first thing when I come home — do my parents say, "Have you done your homework?". Do they mark it?'.

Assoc. Prof. WALKER — Whether that is overcontrolling — —

Mr BROOKS — I am guilty of that one myself!

Assoc. Prof. WALKER — I would not call that overcontrolling. Overcontrolling is obviously going well beyond that. Now we are coming to this question of homework and self-directed learning skills, and there is definitely a relationship between homework and self-directed learning skills, but because it is correlational research we cannot say what causes what. It may well be that kids with self-directed learning skills do their homework. We do not know what causes what. Correlational research tells us that there is a relationship, but it does not actually tell us what causes what.

The interesting research is this experimental research that shows that, when parents provide support and assistance — scaffolding — for their children, that helps the children develop self-directed learning skills. If parents help the child find a place to work, manage their time, set priorities, set goals and manage their emotions too — because doing homework can involve frustration for both parents and students, they have to learn how to manage their emotions — and if children get support doing this, this will help them develop self-directed learning skills. They should also be developing self-directed learning skills in the classroom setting, but this should help those skills generalise to the home environment. This is also a reason why we think some provision of assistance through homework centres, learning centres and so on can help students develop these skills, which are actually required for homework. We cannot necessarily assume that students will have the self-directed learning skills to do homework unless they get assistance with developing those skills.

Prof. HORSLEY — Rather than do the content of the homework, for example. There is a big contrast here.

Assoc. Prof. WALKER — My area is motivation in particular. There has been some interesting research on homework and motivation in recent years. The theories of motivation emphasise three things. One is perception of competence — you will not be motivated unless you have a perception that you are competent at doing something. You will not be motivated unless you feel you have some autonomy — not complete autonomy, but you need to have some degree of autonomy. This is true for all of us. It does not matter whether we are talking about school environments, work environments or home environments; these things all apply to every type of environment we might want to think about. Everyone needs to perceive that they have some degree of competence and that they have some autonomy, some choice and some control over what they do, and they need to have a sense of relatedness to other people — interaction with other people. If homework can achieve these needs, then it will be beneficial.

A recent study showed that when students were given some degree of choice — the issue here is not too much choice, necessarily, but some degree of choice — it led to higher levels of interest, higher perceived competence and better scores on tests. This goes hand in hand with the sorts of things we were talking about before about control by teachers and control by parents. Students do need some degree of autonomy in their learning environments, in class and at home.

The CHAIR — Please proceed.

Assoc. Prof. WALKER — We are about ready to move over to Mike.

Prof. HORSLEY — We have a belief about how learning occurs — a theoretical frame — and it is basically sociocultural in origin. We have already spoken about some of the things that we believe are important in learning, such as autonomy. If we apply our approach, we have used that to analyse all the research, to make sense out of it and to see where the gaps in that research are and where we need to focus on improving and reforming homework. That is a list of some of the critical comments based on our approach.

We have already talked about the first one: that different cultures and communities value homework and homework practices in different ways. Getting a consensus and a conversation will probably improve the practice of homework. We would think that developing this consensus reflects the reality that in regards to

homework there are different views and values, and that is why there is so much conflict and why internationally there is so much interest in homework and so many changes and movements in homework policies. We cannot deny that difference. The thing is to talk them out.

The second thing is that we have already spoken about the importance of different disciplines and how most of the homework research has not considered different disciplinary approaches about homework and how different disciplines approach this enculturation.

It is more important for me now to focus on items 3 and 4. Sociocultural approaches to learning contrast very strongly between things that the students can do and do understand now and that are in their current knowledge, but that they need to drill and practice to fully consolidate, and new learning. New learning is going to require a challenge. New learning is going to require scaffolding and assistance. New learning is going to require collaboration and cooperation. New learning will have to be more highly planned by teachers. It is new learning that leads to learning achievement and development. Practice and drill will not necessarily help students achieve. If the task is already within their current knowledge, they are not going to show that they are going to be achieving more. It is new learning which aids in achievement. That is a big thing in our approach to learning.

There is a pretty big contrast between drill and practice, which is consolidating your current knowledge, and new learning, which requires cognitive growth — learning new things, mastering new skills, understanding new concepts and that sort of thing. That is all through the book. It is the basis of some of the later chapters. How can teachers be involved in the planning of this new learning through homework, what will it require and what are the conditions under which homework practice and homework setting can lead to this new learning?

We also think that the focus on time spent on homework and achievement has distracted from the critical questions about the quality of homework. We should be thinking about the quality of homework and how it contributes to learning rather than relatively facile discussions about time. We believe that internationally there is starting to be a movement away from very simplistic correlations between time spent on homework and achievement. If you think about it logically, nothing could be sillier than comparing the amount of time you do something and achievement based on that time.

We also believe that assessment and feedback are critical in new growth tasks. Assessment and feedback help you understand how you are going in that task and what you do and do not understand. Assessment and feedback help you externalise the new knowledge and make it part of your new understanding, and they lead to mastery. Like any learning task, if there is no assessment and feedback, then it is really going to be difficult to learn and internalise the new knowledge and understanding, have cognitive growth and achievement and development. We believe that assessment and feedback are absolutely core for homework tasks, so to the extent that homework practice does not include that then that is going to be a problem for the quality of homework and the quality of homework practice.

Finally, scaffolding — the support of more expert others, help, guidance — is going to be critical. Again, we believe that assistance is something that should be at the core of the planning and also raises huge equity issues. To the extent that some students have a lot of assistance and some people do not, for us that is a pretty big equity issue. There may be some communities that require special assistance, and this will take the form of a third space or a bridge between the school and the community. We have been working a lot in that area over a very long period of time.

In our vision of quality homework, the quality of homework will have to include tasks which do have this autonomy and some student choice. This will also motivate students. We see autonomy, choice and motivation as very closely linked and related to the development of these self-recognition skills. In a nutshell, that is our theoretical position which we have used to analyse all the research, find the gaps and figure out how we can reform homework. That was a bit turgid; I am not at my best at the moment. Would you like to add anything extra?

Assoc. Prof. WALKER — I will make a brief comment. There are different theories of learning, and those theories of learning cannot help us very much in answering questions about homework, like what types of homework should students get. In fact this theoretical approach that we have used as the basis of this book sees learning as being social in nature. There are some theories of learning that see learning as being individual in nature, but this approach sees learning as being social in nature and emphasises the fact that we learn from other people. Obviously from birth we learn from other people, and we learn because they provide these supportive, scaffolded environments for us to learn in. That is how all learning occurs, and that is how it occurs in schools as well, but these theories of individual learning do not give so much emphasis to that.

This approach allows us to make suggestions about the type of homework that will be most beneficial and allows us to say, for instance, that practice has some value of course but that homework activities should also involve some degree of new learning. That is a pretty critical pedagogical question for a teacher, as to how much new learning is going to be involved, and it may also be an issue where we would find that teachers in different subject areas might differ. Mathematics teachers might differ from English teachers, for instance. Nevertheless, from a learning point of view and a motivational point of view, students need to have some degree of interest and motivation in what they are doing, otherwise they are not going to value the tasks, so some new learning is important as well as some practice.

The CHAIR — I think we probably appreciate the challenge of the new learning in terms of it needing the feedback so that that can be underpinned. In terms of the competition across the subject teachers, that would be within the school's policy. But it would be interesting from my point of view to know, if we have a whole range of subject teachers who are pretty keen on handing out homework, what happens to the child who might end up with a parcel of homework — let us say 10 or 15 minutes across a number of subjects — and with quite a burden because there is a commitment to homework, a zealousness, just a phenomenon, where there is an alignment for that particular year.

Prof. HORSLEY — Many schools have homework policies, and probably the management of that homework policy would include some sort of overview of the general requirements that are occurring in the school amongst different disciplines. The question here is very interesting. There seems to be a big difference between primary and secondary, and then in secondary there is a difference among the disciplines. There is also some disciplinary difference in primary schools where the children are asked to do different things based on the key learning area or the discipline that they are studying. Some schools have developed this overview, and so they are looking at it from the child's point of view in relation to the amount of time.

One of the issues that we would raise is whether all of those tasks by all those different subject areas are drill and practice, the reason being that we know there are a lot of tasks like that, but focusing a large amount of time on drill and practice is not going to lead to achievement. Drill and practice has been studied a lot, and Hattie can give you some effect size about drill and practice. The best way to do drill and practice is in very short amounts, say 5 minutes, spaced over a long period of time. To the extent of the school's total homework ethic, it forces students to do drill and practice for a very long time in very large time chunks. This will be against what the research says — even for drill and practice. I have responded by just giving you some hypothetical situations.

I guess it is part of school policy to overview the total amount of homework and its purpose, its nature and its character from the point of view of the child. What we are arguing in reforming homework is that it is going to be really difficult to plan homework in a different way, it is going to be really difficult to set tasks that have this autonomy, challenge and balance, drill and practice and new learning, and it is going to be very difficult to figure out an assessment framework which will contribute to the student's learning. The practical implication of that is that there should be a lot less homework, and that should be of much higher quality.

Assoc. Prof. WALKER — That is the short message.

The CHAIR — Is there a shortcoming on behalf of teacher training? Is there a requirement implied in this for professional development of teachers to have a new approach to homework, and then all the implications on the curriculum as well?

Assoc. Prof. WALKER — As far as initial teacher training is concerned, as I said, we do not really to very much at all. Mike is better placed to talk about it.

Prof. HORSLEY — I think we could conclude that homework has not featured in teacher education, whereas things are changing in schools, so there is more emphasis on self-directed learning, for example. There is more emphasis on pedagogy as related to building a student's research capacity, ability to find things out and understanding. The school is changing and pedagogy is changing, but homework is more like a social practice that is left over from a previous era. It has not really been subjected to this sort of thinking that we now doing about it, and as a result the differences amongst teachers, and parents especially, are still very extant. Now is the time for this conversation.

Assoc. Prof. WALKER — Most of the homework research has been atheoretical, and homework has not really been considered, as Mike said, in any really thoughtful way. I think Harris Cooper wrote a book in about 1974 that is very good. We would have to say our book really makes a significant contribution to thinking about homework in a sensible way.

The CHAIR — How are we going with the presentation?

Prof. HORSLEY — I will just show two more slides. Taking our approach and what the research says, these are the sorts of things we want to discuss with teachers. What are the purposes of the homework you are setting? What is the balance? What is the balance between drill and practice — of which we only want a small amount — and the new learning tasks? How are we going to plan that homework curriculum? When you plan your unit of work or your lesson plan or you whole scheme of work, where is the homework going to fit in? Do you need to talk to other teachers about that? We do not really think that homework is planned in this way at the moment. How is the homework going to be planned, and perhaps we could think of a homework curriculum as part of a teacher's approach? This will probably mean less homework but of a higher quality.

When you are planning your balance between drill and practice and new learning, how are we going to make the new learning task interesting? How are we going to provide support for that? Is the teacher going to scaffold it in class, or is there going to be some special support mechanism, or are the librarians going to be involved? In other words, that is thinking about support in a much more systematic way than asking mum and dad. In mathematics, once you get past grades 5 and 6, in secondary school it is highly unlikely that parents can provide any real knowledge support. We do not want them to do that; we want them to focus on self-directed skills and capacities. But these are things that teachers should be thinking about in terms of assistance. We have a whole section on what high-quality homework tasks should look like and some of the questions that teachers should be considering as they are approaching those sorts of high-quality homework tasks.

The CHAIR — You made a point about the role of teacher-librarians. Have you done any thinking about how their role may change to support a sort of transition, pre-off-campus scaffolding?

Assoc. Prof. HORSLEY — Teacher-librarians and people involved in libraries help students with homework all the time. It is just a practical thing. The students come and say, 'Have you got anything on this?' and 'How can I approach that?' They are a terrific form of assistance. Often if teachers in a whole grade are setting some tasks, they will often speak to the teacher-librarians and ask them to put aside resources and be supportive of the students. Assistance can come in many forms, but often it has to be planned and organised, and that is not really happening as part of planning and homework curriculum. Is that the answer to your question?

The CHAIR — I think so, yes.

Prof. HORSLEY — And of course developing quality homework requires considering feedback and remediation that might be required and how it is going to be assessed. In the book we make specific recommendations about assessing groups, assessing individuals, that relate to our theory that we think could be of much use to teachers in how they consider and conceive the sort of assessment that will be conducive to autonomy and challenge.

Finally there is equity, which is a critical issue in all of this. If some students have assistance and some do not, teachers have to consider that as part of planning a homework curriculum. The book has implications for teachers, for parents and for policy-makers — similar sets of questions. We believe that should be the basis of the conversation about homework.

Mr BROOKS — In relation to equity, the last point, that is obviously an issue that policy-makers, legislators and academics consider, but at the teacher level that you are talking about what does a teacher do about equity, say, in a class, where they recognise that maybe a number of students do not have the support? What steps do they take? Do they adjust the homework, or do they try to put measures in place?

Prof. HORSLEY — Probably all of those. The thing is that you do not teach year 8 mathematics just on your own. There are three other teachers of year 8 mathematics, so equity issues should be considered as part of a homework curriculum. This often involves teachers of year 8 planning which topic and when and what resources are going to be used and then asking, 'How is the homework and how can we provide support for certain students? What assistance do we have available? What homework standards are around?'

I ran homework centres for 10 years, three nights a week, from 6 to 8. I was a bachelor at the time. We would visit all the schools in the local area and go on community radio, so many teachers became aware. Often teachers dropped in and saw the centre, and I co-opted them to spend a few nights. That is the sort of thinking. It has to be bigger than your class, obviously. Maybe a new strategic agenda is developed bringing this to the attention of the school leadership. Some of these equity issues just get hidden away with newspaper headlines about some students who get high-level tutoring, and people do their tasks and stuff like that. It is a big issue.

Assoc. Prof. WALKER — It is actually difficult for teachers to try to meet those individual needs, and if homework is not considered important, then teachers do not really have much incentive for trying to put a lot of time and energy into meeting those needs. If homework is going to be considered important in the curriculum, then I think teachers need to be given assistance in ensuring that they can meet individual student needs.

Prof. HORSLEY — I will not go through all the other slides. Just one thing about it is this: is it better to help your child with their homework or actually do something in the school? This is the first question we might ask parents. Some parents think that by really giving the content support to their children their achievement is going to be — what the research says is that they would be better off going and doing something at the school. Then the students build an expectation about school and value school more. I will not go through that one. We have an online one as well, but I have got a handout copy of this for you.

I just thought we would give our conclusions. I should have put teacher education as point 9, but I forgot that. Richard reminded me this morning. Practice and new learning is a critical distinction that we make, and it is core to the development of the quality homework task — that is, getting the right balance and then making sure the tasks have all the features which will allow homework to meet conditions to promote learning. I think that is a core task. That is a core conclusion for us.

Assistance with homework is going to be the key to learning and development for new learning tasks. We really think that homework study centres have a lot to offer not just in providing scaffolding but sometimes bridging the school and the community and offering a third space. Normally those homework centres have to have a culture related to the culture of the home.

We see equity as something that should be promoted. In our book we have evaluated a few homework policies, and we make distinctions about some that we think are promoting equity and some which are not.

We are moving away from the idea of spending 15 minutes a night on homework to actually thinking about what are the tasks that promote self-regulation and motivate and support that and the associated parental behaviour that promotes self-regulation and motivation rather than assistance with content. That is quite a different approach.

Assoc. Prof. WALKER — Just a quick comment. There is absolutely no research advice on how much time students should spend on homework. We have got no guidance from research at all on the amount of time that students should spend on homework. That is a decision that has to be made by the school community. Teachers, parents and students together have to make some sort of decision about what is a reasonable amount of time to be spent on homework. There is no guidance from the research.

Mr BROOKS — I am sure I read that some jurisdictions have policies for their homework that indicated a guideline. There is no research to back that up?

Assoc. Prof. WALKER — There is no research basis for that at all. It is just someone's good idea of 10 minutes here — there is no research basis.

Prof. HORSLEY — When you see policies with time allocations in them, there is no justification in any way of thinking for that.

The quality of homework that we have spoken about and increasing that and making less homework is the practical implication. Quality includes thinking about formative and summative assessment and teacher curriculum planning. We think homework planning is critical. I left out that we should probably refocus teacher education on considering homework. Generally the relationship between school and community is not a feature of teacher education at any rate, and homework gets into that — the focus of teacher education is survival in the classroom and conducting and interpreting the curriculum and providing student-centred pedagogy and stuff like that. I do not think we have moved enough into homework and other aspects of school community relations. That is it in a nutshell. I am happy to talk more or answer any questions.

The CHAIR — We might at this point have a break. We will resume the hearing at 11 o'clock. We will give everybody a 10-minute break at this point.

Hearing suspended.

The CHAIR — We were just having some quiet conversations about differences with the Finnish system, but we are going back on the record. Clearly in that five-year masters course they do in teacher training in Finland there is adequate provision in that course for self-directed learning, homework planning and developing a feedback loop. Is that the case?

Assoc. Prof. WALKER — Mike knows more about Finland than I do.

Prof. HORSLEY — It is the fact that after you train, then you have to do a masters degree. It is not an action-based masters degree; it is the hard masters degree with knowledge of statistics and research design. In other words, all Finnish teachers have a masters degree. In other words, they have a pretty good idea of what the research says about various areas, which means it is very difficult to tell Finnish teachers what to do. They would be able to speak about homework — maybe not as well us, but — —

The CHAIR — Yes, an entire cohort of experts — another challenge.

Prof. HORSLEY — One thing we could say about Finland — and you could read the book by Pasi Sahlberg — is that Finnish education is pretty much invariant or unchanged for a very long period of time. You will get some sort of major change every 20 or 25 years. Recently there was some curriculum movement. In contrast to other nations that respond to PISA policy changes, that has not been the case in Finland at all. In fact they are bit nonplussed — why would you want to change all these policies when things are going well?

Their system features the highest ability and very little change. There is high teacher autonomy, more teacher time for planning in relation to homework and a different way of approaching homework generally, nationally. It is very hard to translate the Finnish context to Australia or any other country. People who think you can do that easily are deluded, because Finland is just so different. I mean, the kids are inside for three and a half months for a start. School is a lot shorter, with a much greater emphasis on self-directed learning. Teaching is incredibly traditional. I am saying all these things as generalisations, but I guess most Finnish teachers would agree with what I am saying. We have a research partnership with a number of Finnish institutions, some of which are looking at homework.

The CHAIR — They have a very big summer break as well.

Prof. HORSLEY — Absolutely.

The CHAIR — Everybody comes back with their batteries recharged with a big commitment to the interface with the environment, physical pursuits and so on. They are much more physical when they can be and I suppose much more studious when they have those severe winters and the darkness. In terms of getting to the point that we did with the presentation of Associate Professor Walker and Professor Horsley, I want to open up for particular questions from committee members at this point from whomever has a burning question. We should move on that.

Mr ELASMAR — I am happy to start. I have only one area to ask you about. First of all, thank you for the presentation. It is good. It is the activities outside the school. Some parents encourage their children to play sport and do music and drama. Different school students play differently from other students. My son, for example, used to play basketball, football, tennis and music, and this takes a lot of time. My daughter used to play the same things, but she has more drama issues at school and then comes home and does this. Have we done any research on this? Do schools, on balance, understand how much a student should be involved in outside school? This is my whole question.

Assoc. Prof. WALKER — There is some research on after-school activities. Generally speaking, what you would have to say is that involvement in after-school activities is good for kids. Basically I think what you have to say is that if children can develop a sense of competence in different areas of their lives — sport, drama, whatever — that is only going to be beneficial for them. The more things you are capable of doing, the better it is for you. You are going to have higher self-esteem, you are going to be more confident and you are going to be prepared to take on more challenging activities in various aspects of your life. The answer, to my mind, is that involvement in after-school activities is good. But then the question is — —

Mr ELASMAR — What happens to homework?

Assoc. Prof. WALKER — I would say that if we are considering after-school activities in relation to homework, then I would be promoting after-school activities and homework maybe to a lesser extent. But the real issue is after-school activities as opposed to school activities. You do not want to see a child and their parents ignoring school activities and not developing the same sorts of competence and skills in school. You want a balanced child who is becoming competent and capable in a lot of different areas of their life, including academics.

Mr ELASMAR — If I could follow it up, do schools understand they need a balance?

Assoc. Prof. WALKER — I think most teachers are pretty practical, reasonable people, and I think they do consider that. Essentially teachers would see themselves as attempting to make decisions in the best interests of their students, and that means most teachers would recognise that it is important for students to actually have a life out of school. That involves those after-school activities and competencies that we are talking about.

Prof. HORSLEY — I have forgotten what I was going to say, sorry.

Mr ELASMAR — You can come back to it later.

Prof. HORSLEY — I had a really important thing to say.

Assoc. Prof. WALKER — You can come back to it.

Prof. HORSLEY — I can come back. Harris Cooper does not just research homework; he conducted a number of large studies which looked at different after-school activities. He tried to consider which were the most useful for learning achievement, I think. Work was the one that was negative. Obviously if students are spending a lot of time after-school working, then that had a negative impact on achievement.

Assoc. Prof. WALKER — That is right.

Prof. HORSLEY — This is what I was going to say: some parents place a very high value on homework and some schools advertise themselves as setting large amounts of homework. In this context we see homework as an accountability measure for the quality of the school or as a proxy for the quality of the school. Based on our research and our review of research, we would say that is a very negative development. If parents think a kid in year 8 has to do 3 hours of homework a night and the school is enforcing that, what then is happening to all those after-school activities where you develop competencies and skills? We would see that as a very, very negative development, because what our research says and what the [inaudible] says is that that is not based on a consideration of achievement or learning from the homework; it is based on other purposes for having that much homework.

Assoc. Prof. WALKER — Out-of-school work for money, at a certain point, is detrimental to school activities. I cannot remember the figures now, but Herb Marsh, who used to be at Sydney University, did some research on this. There is a little window. Some work for money after school is helpful for students; it actually develops them in various ways, but beyond that point — and I cannot remember how many hours it is — it is actually quite detrimental. For students who are doing a lot of work for money out of school, it has a core effect.

Prof. HORSLEY — Another thing I forgot is that a lot of schools now have what is called homework, but it is not really homework. It is sort of like activity grids which have homework in them but then have all these other things — cooking the family dinner, playing sport, listening to music with dad. A lot of schools have gone down the track of trying to encourage, broaden — —

Assoc. Prof. WALKER — Broaden the conception of homework.

Prof. HORSLEY — Yes. So there are quite a lot of consultants who go around to schools — Michael Carr-Gregg, Lillico and all this. They go around and talk about these sorts of grids. Some of the schools that have high homework as part of their purpose have moved in that direction because of the conflict that often large amounts of homework generate in the home and the reaction from parents, who say it is destroying family life.

The CHAIR — So would there be the alternative to that, the opposite to that, where you have families that are driven for children to achieve — and this might be under a variety of cultural influences as well — and you have to actually inform them of the value of that activity grid that you are mentioning? Is there a communication that goes out from the school to say, 'You do not have to overdo this either', sort of managing the cultural differences that are putting the students under a lot of pressure?

Prof. HORSLEY — I am not sure what your question is asking, actually.

Assoc. Prof. WALKER — Okay. We have some selective schools that have a high proportion of Asian students. Do those selective schools actually try to encourage parents to see that there is something beyond achievement in a selective school?

The CHAIR — Yes.

Assoc. Prof. WALKER — I do not know the answer to that.

Prof. HORSLEY — I can tell you that I have been to some of those schools and had a conversation with those parents and they have been pretty unimpressed. Some of them have accepted the research, but some of them are still very much wedded to the fact that the school has not set enough homework and they are going to, as parents, set more. To the extent that it is drill and practice, it is not really going to maximise their achievement, but those students are highly conscientious, they are very driven and they have pretty high expectations, and so those other factors come into play and perhaps explain the reasons for success. But often parents do listen to what I have to say from that particular background.

There is a researcher at the University of Western Sydney, Megan Watkins. For want of better terms — and her research uses these words — she has studied Pacific Islander kids and how they do their homework and where they do it and what they say about it and all this. Chinese kids in the same schools and Anglo kids: these are her words. She contrasts the practices at home and the variations in those communities and what that may mean for achievement from homework. We talk about that particular piece of research in our study.

Assoc. Prof. WALKER — It is a very interesting question you raise. I do not know of any situations where schools actually try to change parental attitudes on this sort of issue.

Prof. HORSLEY — Some schools have tried. I know because I have gone to the school and done my trick.

The CHAIR — Whose role is it if the student is struggling? Because it is not just a question of — and this is one of the terms I picked up here — parental line of sight or providing a quiet environment and reasonable conditions for homework to be conducted in. There may be problems to do with language difficulties on behalf of the parents or even illiteracy on behalf the parents, and there is the factor of hidden illiteracy as well, amongst even English-speaking cohorts, where that gets to be a problem; they are more or less hidden problems. How do we actually get the school community to have the understanding that there would be a lot of eye contact avoided, excuses made, perhaps students viewed in an invidious light, a negative light, because there are other conditions that they are more or less covering up for at home?

I think this goes to the heart of who might have to go to work because of the financial circumstances of the family. There would be endless excuses as to why homework cannot be delivered upon because someone is literally suffering across a range of family circumstances they do not want to talk about.

Prof. HORSLEY — I might just give you a practical example of what you are talking about. The way a Samoan, Tongan or Fijian family works is that the children do all the housework. That is true back in Samoa, but it is also true when the migration occurs here. Some cultural patterns exist. What does that mean? It means that the girl in year 11 will have to look after the younger siblings if the parents are not home and then prepare the meal. In other words, just the general structure of the home would mean that the girl or the boy — boys also do it –probably would not have time to do homework. This is just an example of what you were talking about, and I will talk about how we respond to that. The cultural script is basically that the eldest child is in charge of the household, the money, looking after the younger children, cooking and maybe even making sure that some of the younger children do their homework, but they would not be able to do that themselves.

We advertised to the community. We said, 'Okay, you cannot help the children because your language is not sophisticated, you do not know the curriculum, you do not know the subject'. Many of the people who come here are not necessarily successes in their own school system, so our response is, 'You can show the importance of education to your child by bringing them to this particular centre between 6.00 and 8.00 p.m., and they will get assistance from experts. Often the whole family comes. Then we were able to provide assistance to those particular children.

Many of those children who would not have achieved much beforehand went on to, say, get university places. Why? Because the family valued their education but there had to be a break in the cultural script for them to achieve and to get the support they needed. In this case it is about who you are in the sibling range. That is a specific example of what you are talking about, and that is one of the reasons why we developed

incentives to overcome that problem. Also, to speak more about education to the kids and demystify assessment and the curriculum for them as well. Often we would talk to the parents about those sorts of things as well.

Assoc. Prof. WALKER — In that particular school that Mike is talking about there was a close relationship between the Polynesian community and the school, so the teachers in that school would have had some understanding of the nature of the community and how things operated in the community because of that interaction. But often in schools you would find that teachers acquire that knowledge from other teachers just through interaction in the staff common room.

One of the things we have written about in this book is that in the US there is a very interesting research project. Luis Moll had teachers go out into the community to better understand the communities the teachers are actually working in to collect information about what the parents actually know beyond school knowledge. Funds of Knowledge is what this was referred to as. Teachers essentially become ethnographers. They go into the community; they try to get a better understanding of the community, the resources and the knowledge that parents have that are different from traditional mainstream Anglo-Saxon resources and knowledge. Then they use that for curriculum planning activities, and they could use that for ensuring that homework has more meaning for these kids and for these communities.

We have written about that in the book and think that is quite useful. It is obviously something that teachers are doing out in the community to get a better understanding. They are not paid to do that. These teachers were doing it as part of a research degree but there is obviously a lot of value in teachers understanding their communities much better.

The CHAIR — I have just a brief question. Who funded the homework/learning centres?

Prof. HORSLEY — That is a very good question. I decided that we would not seek any funding and that we would use the resources of the schools that I worked in, the teacher education programs that I worked in, the universities and the communities. It was free on community radio. Schools like Canterbury Girls, Dunheved, Macquarie TAFE made rooms available. All the security guards at all those places were from our community, in case of any problems opening doors or accessing rooms. All we required really was a whole bunch of volunteers — people in teacher education, teachers — —

Assoc. Prof. WALKER — Students.

Prof. HORSLEY — Student teachers in education and teachers interested in learning how these communities worked and getting closer to the children. Also we gave talks about the community for teachers who do PD at these centres, but the community was responsible for bringing the children. We had nothing to do with that. All I did was get there and have tutors and supporters. So it was not a matter of funding; it was a matter of community development and organisation.

The CHAIR — I have to congratulate you on that. It sounds like a wonderful model.

Prof. HORSLEY — I was a bit worried about funding in New South Wales and various things.

Mr CRISP — When you are working with these centres and the community groups or cohorts that you are talking about, are there any difficulties with technological inequality and also when you are in those CALD and other communities? This is close to my heart; I have a significant Islander community in my electorate.

Prof. HORSLEY — Talofa lava!

Mr CRISP — Yes, but for those who have language disabilities or even disabilities, how does that work in the centres?

Prof. HORSLEY — In terms of technology, we always had computers and technology support for the centres, but we would not let the kids in there unless it was highly directed and required searching, like

working on homework. In other words, you have to have a whole series of protocols or the kids will just get onto Polyfest and look at pictures of the try someone scored in Tonga versus Samoa and all of this. So it was highly directed.

Learning to search on the internet to answer homework questions is a real skill, so there were always one or two tutors in the computer room. We never opened the computer room at the same time as we opened the centre. They can only go in there after three-quarters of an hour when they had formulated what they needed to find out. In the book there is a whole series of protocols for using technology, because technology can be a huge distraction when you have homework and assessment tasks to do. We have all of these tutors here to help you. What replaces thinking is getting on the web and surfing around. I do not know if that is the answer to your question though. Is that the answer to your question?

Mr CRISP — Partially, but a lot more enlightening than the question.

Prof. HORSLEY — The Pacific Islander community's communication pattern is completely different from a European one. Children do not ask questions because that is very challenging in a Pacific community, and there is a different relationship between parents and children. Of course the kids are here so they have to act on the script here as well. Most of the kids have a bicultural sort of script that they adapt from whatever inference they have the time.

We had to train our tutors to actually communicate in different ways in terms of asking 'How are you going?', 'What task do you have to do?', sitting in different ways and communicating with the kids in different ways. And then it was training the children to ask for help, because it is not a natural Islander thing to ask for help; someone tells you, basically. All that was part of the culturally responsive components of it.

I have worked in the islands for many, many years. I currently work in Fiji for the Australian government as well, so I have a long history with the Islander community. I stopped in 2010. I have been working in Fiji in the last three or four years, so I have not had time — well I am too old — to do three nights a week in the centres.

Mr CRISP — Thank you. I would just perhaps take you somewhere else: we have come up with the term 'flip learning' that pops up in some of the submissions. Do you want to offer us some thoughts on that issue?

Prof. HORSLEY — Okay. Flip learning — we could have done this by flip learning, couldn't we! We could have sent you a video; you could have watched it, then later we could have come together and you could have asked questions. Richard will respond initially, and then I will have a crack.

Assoc. Prof. WALKER — Okay. The book — Salman Khan's book — came out during the time we were writing this book, and I think Mike sent him a copy of the homework book. I do not know whether you got around to doing that. The whole flip learning idea is a good idea, but in many ways it has been happening in education for a long period of time, one way or another. It is an old idea that has been reinvented, and I suppose it has been reinvented because of YouTube. You can have a YouTube video that explains how to solve a mathematics problem, which might take 5 minutes, and you watch the video and then the class is based around the fact that you watched the video, whereas in an earlier era the class might have been based around the fact that you had read something from the textbook. It is not necessarily a new idea.

It seems to be being taken up more in engineering and science faculties than in humanities, because in humanities you are talking about having read a novel or having read a political science treatise or something. You have to do that hard work at home when you are studying at university. It is very difficult to encapsulate that in a video. Essentially flip learning nowadays is based on teaching something through video and then having classroom discussion around it. I think it is more relevant to the science areas than to the humanities. What do you think?

Prof. HORSLEY — What is your level of mathematical knowledge?

Mr CRISP — A double tertiary qualification in engineering.

Prof. HORSLEY — I see. I have picked the wrong example. What is your level of mathematics knowledge?

Mr BROOKS — Oh, boy. Both hands and — —

Prof. HORSLEY — You have to explain to your 13 or 14-year-old daughter how to solve quadratic equations, so you are going to do the flip classroom thing. You are going to open the Salman Khan video and watch how to solve a quadratic equation, and then you are going to figure out how it works and you are going to teach your daughter. I know people are talking about it at schools, and there are a few experiments. I tell you what: that will be a class that is probably pretty homogeneous, or it will be an advanced group. Yes, for certain circumstances those sort of things will be useful — without a teacher presentation you can watch a video over and over again — but that will not apply to the mainstream of students. Some things can be very useful because you can watch them over and over again, but given my example, it is highly unlikely that the flip classroom will lead you forward in quadratic equations.

Assoc. Prof. WALKER — This is probably contentious because I had an argument with one of my colleagues about this last week. He was saying, 'This is going to revolutionise university education', and I said, 'Well, I think it is a passing fad, but it might have some relevance into the future'.

Prof. HORSLEY — I have a friend who is a maths teacher, and instead of making the YouTube of explaining how to do it, he made a drama where the kids acted out what the curves look like with the equation and the sliders. He called it the graph dance. It has this sort of rap music. It goes 'y = 2 + x' and all the kids are standing around like this, then 'y = 2 + 4' and they move their arms out, and then 'y = 1–2 + 6' and all the kids move to the left. In other words, they internalise through the dance what the equations look like from the shape of the graph. That would be better than a flip classroom. It was fantastic and fun, and every class can do it. Choose your own music. It is contested, but — —

Mr CRISP — Thank you for that. It is a fashionable term.

Assoc. Prof. WALKER — I think it will have some relevance into the future, largely because of YouTube and technology, but it still remains to be seen how widespread that usage will be.

Prof. HORSLEY — Any complex new learning task will require some sort of assistance, basically. Watching it over and over might not be the sort of assistance that is required.

The CHAIR — Are you still — —

Mr CRISP — No, I will talk privately afterwards. That is probably better for going into the depth that I wanted to. Go ahead, Colin.

Mr BROOKS — I was going to go back to the issue of the homework study centres, because it is an interesting concept and you can give us some detail. I wanted to explore in more detail how many homework centres there are. Did you establish other ones?

Prof. HORSLEY — They ceased in 2010. In 2009 I hung up my shingle, but they were at three very depressed locations in Sydney: Dunheved, St Mary's, Macquarie TAFE — where there were huge riots — and Canterbury-Bankstown. These were also three areas where there were a lot of people from Samoan, Fijian and Tongan and, to a lesser extent, Maori communities. There was a special Tongan education centre opened up in a primary school at Brookvale because a lot of Tongans moved there to play football for Manly, and all that sort of stuff. Many different schools have their variations of these things. It was not just these three centres; it was quite a lot. A couple of schools introduced Maori language on a Saturday because of the way community languages work in New South Wales. Mine was just one of them.

Mr BROOKS — They did not have an underpinning policy from the New South Wales department of education or the government?

Assoc. Prof. WALKER — No.

Mr BROOKS — It was just something that was done organically by each school community or in your case across a number of schools.

Prof. HORSLEY — I spoke to them about it, and the Premier allocated $400 000 for the communities. We went to the board of studies and we wanted Samoan in the HSC. We got a pretty negative reaction. There was some grumbling, and then not long after that there was a package and that allowed them to run some big community-building events. It was part of a bigger movement but there was no singing and dancing in those 2 hours. It was all, 'Get your homework out'.

Mr BROOKS — Just from your own knowledge, what were the other centres that might have been operating or still operating in Indigenous communities or remote rural communities?

Prof. HORSLEY — In terms of homework support? Wow! In relation to community libraries, I get a lot of phone calls from librarians saying, 'There is a mother here. Her son is in year 12, and he has gone away for two weeks and she is trying to do his assignment. What do you think we should do?'. 'Tell her to ring him up and tell him to do it himself!'.

Librarians will contact us because they get a lot of questions from parents and students, so your community library has a role to play in homework. Sometimes those community libraries set up study centres. It is an incredibly complex level of support that is often organic. It has just grown.

Assoc. Prof. WALKER — It happens where people see a need. I am thinking of Bill Crews and the Exodus Foundation in Sydney. I think they might do study centres. I think Youth Off the Streets might have some study centres out in western Sydney. I am not sure about that, but I think they do.

Prof. HORSLEY — Yes, there are 101 organisations.

Assoc. Prof. WALKER — It is organisations like that that see a need.

Prof. HORSLEY — Because they are Polynesian communities that are church based, a couple of churches opened ones. I went along and helped them, and I said, 'Look, this is what you have got to do, and it has got to be done in this way'. Because that is a church-based community, once a church gets to a certain size, then it breaks into two churches to service more of the community, and often they will compete because the structure of islander communities is to set up boy and girl groups, and that is what happens. That is what happens in the villages, and that is what the churches replicate. There can be 101 centres and all sorts of levels of support from different community groups.

What happened after some publications from our centres was that the New South Wales department of education set up homework centres mostly directly after school in quite a bunch of schools in some regions. I have not seen any research on that. I was asked to talk about what I thought were the pros and cons of what they were doing. The big con for these communities is the students staying at the school to get the assistance, which some students would access but many students would not. They wanted to go to football training or go home and do their chores. That is why we ran ours at night from 6.00 p.m. to 8.00 p.m., because it was related to the culture of the group.

Homework centres can come in all sorts of different colours and shapes with varying degrees of community support. Since we published the book, we have been contacted by some Victorian ones. Where is Tim from?

Assoc. Prof. WALKER — I cannot remember the organisation.

Prof. HORSLEY — He is from some big community organisation, and he wants us to speak to all their people because they want to set up a whole bunch of homework centres.

Assoc. Prof. WALKER — That is true. I had forgotten about that.

The CHAIR — Has there been a formal evaluation of them, individually or in a conceptual sense so there can be some formalisation of the benefits of it?

Prof. HORSLEY — I am not sure. I can track it down.

Prof. HORSLEY — I will get some people to have a look. I can ring people who would know and get back to you.

The CHAIR — How much about these centres has relied on you being familiar with the culture and clearly you being the champion to actually get it going?

Prof. HORSLEY — I was the champion, and I was sort of like the spider in the centre of the web. But I did not attend all the time. In other words, there were some islander teachers who had come through our teacher education who could also run them. Moff and Kipi and other people at the university could stand in for me for, like, a month or two. It is good to have distributed leadership with those things. But they had a cultural core related to the community, so the communities were sort of self-generating after a while. The expertise is the thing. Homework centres are often set up with students or volunteers. You have to know about quadratics. You have to have content-specific knowledge at a high level in the homework centre, otherwise there is no point.

The CHAIR — Has there been experience with retired teachers who have volunteered?

Prof. HORSLEY — Yes, actually, we did have a couple of retired teachers who used to come to the centres. I did not pay them, but I gave them a reference and stuff. Yes, they were really interested and wanted to work with the communities. They normally had some connection with the community or the school.

The CHAIR — Because there is quite a movement, if you think about the University of the Third Age, where people in business, journalism or teaching go along and run all of those programs, and that is on a voluntary basis.

Assoc. Prof. WALKER — Yes. There is a lot of value in the idea.

Prof. HORSLEY — There was one group in New South Wales — I cannot remember who they were — who conducted training for homework centres. They tried to train people to work in them. They trained people in how to approach kids properly, how to look at what the kids were doing and reframe their explanations just in front of where the kids were — dynamic assessments and that sort of stuff. I remember writing some materials for them but I have lost track of that since I moved to Queensland in 2010. I can track some things down for you; that is all I can say at the moment.

The CHAIR — Is it dependent on the cultural groups being the original glue?

Prof. HORSLEY — Ours was aimed specifically at certain cultural groups, and in some schools in New South Wales and Sydney those groups represent 50 per cent to 60 per cent of the kids. In other schools, it is much, much less, where other groups are more dominant. In some schools there are seven or eight dominant groups. I know that one or two other communities actually decided this was a good idea, and they pursued it off their own bat, where there was a large number of kids from that particular community. I can remember a few phone calls. People rang me and said, 'How do you do it? What should be the basis of it?', and I talked to them over the phone, but I never visited them. It was enough — three nights a week, from 6.00 p.m. to 8.00 p.m. Lucky I was a bachelor!

The CHAIR — The community obviously derived enormous benefit from that sort of contribution.

Mr BROOKS — I just wanted to confirm something you said — and I thought I would get you to reinforce it, if it is the case — about the homework study centres that were set up at the schools. I think you said the kids did not want to stick around at the school, for example. They were happy to go away to do

their sport, or go home, or whatever, and then come back at night. Would you say that is a critical component of the success of those study centres in terms of the — —

The CHAIR — The break?

Prof. HORSLEY — The break is essential for that community, and the fact that there are experts there who can help the kids with the content. If the kids did not come with homework, we would not let them in. They are not there to frig around. Status is a different thing in the Samoan culture. They know I am a professor, and we pray at the start and we thank all the tutors for their contribution. There is an expectation that the kids are going to do homework, and if they are not doing homework, then they are out. You have to be hard. After like six or seven sessions these kids would know how to ask, get help, do maths. They became more confident. They changed in the way they actually interacted with us. I think I made a video of it. They might have shown it on SBS. I will try and track it down.

Mr BROOKS — What about other cultures? Do you think people of other cultures would want to come back to a school and do the homework program?

Prof. HORSLEY — Well, some kids came from that school, so the teachers are only too happy for them to come to the learning centres at night. All of those teachers are supportive of those kids anyway and change their pedagogy based on the nature of the kids. I am not sure exactly how different it would be for another community. I am sure other communities would really support it. One of the reasons we did this was to get a whole bunch of kids to go on to university. In the islander community there was hardly anyone going on, there were no new teachers coming through and no people with degrees. We would have got 23 or 24 kids enrolling at least in first-year university. Some I used to see.

Assoc. Prof. WALKER — But as you can see, you need someone who knows the community well. You have to it implement it in a particular community.

Mr BROOKS — What role if any did the teachers in particular schools play in selecting students? Did anyone select students to participate, or was it just an open invitation?

Prof. HORSLEY — No, we went on community radio and said there are some homework centres open, bring your kids and show them that you support their education. There will be experts there and Pastor X will be there to open with a prayer. It was also backed up by little chats on community radio saying that this was happening and to bring your kids to Canterbury Hills at 6 o'clock. The community then organised kids to come three or four in a car, or the whole family in a Tarago. At first the parents would be slipping outside. I thought that was a bit rubbishy, so I got a community organiser to go and bring all the parents in. They had a bit of a meeting and sang, and after a while they said, 'Tell us about the curriculum', or 'A lot of our community are sending money to Nigeria — can someone come from consumer affairs come and tell them it is all lies even though they get this official letter'. Then the community thing just went off on its own. I did not really have much to do with it. The community organisers themselves used it as a development. Some communities are much more highly developed and less emergent than the islander communities.

Mr CRISP — Just following up a little bit on the relationship between the formal education, being the school sector, and these centres when they operate: was there feedback and communication coming through?

Prof. HORSLEY — Yes, I did a lot of PD in those schools. Every four weeks I would ask the kids how schooling was going, what was happening to them at school and what their experience of education was. And they gave it to me. Then I returned that to the schools via PD.

Assoc. Prof. WALKER — Some of the teachers from those schools came along to the homework centres as well.

Prof. HORSLEY — They learnt more about communicating with the kids and about people in the community. Some were left in charge after a while, as well.

Mr CRISP — In some of your earlier evidence you said homework is an afterthought in a lesson, then it is turning up at the homework centre. That certainly invites some comment about homework, but in that situation how receptive is the system to interfacing with you?

Prof. HORSLEY — Primary tends to be a bit worksheet based and secondary has more assessment tasks — studying for tests, doing assessment things and some homework. Richard has attended a few. I sometimes had these homework tasks where two professors and a person with a masters degree in mathematics really could not figure out what they were, much less some kid in year 5 whose parents do not speak English. We saw thousands of tasks. When talking about some of these tasks it is also based on experience three nights a week for a decade. It does not matter. We were there to help the kids do the task, and that is what we did.

The CHAIR — In terms of how this got up and running and how it ran three nights a week for a decade — —

Prof. HORSLEY — It was a specific clientele.

The CHAIR — There is a lot of modesty packed into your discourse about this, I would suggest. Are there other champions out there? I mean, can other people with the community connections, knowledge and depth of professional experience be mobilised, or is it something that is a more narrow band, where you have to have a whole combination of things coming together — where it is the planets in alignment more or less?

Prof. HORSLEY — I do not believe in the narrow-band thing. A lot of community organisations can do this; but they have to know about homework. They have to know about some of these things, and they have to have experts there. A lot of homework centres fail because they have people who are volunteers — a kid will come along and say, 'What is the cosine rule?', and no-one in the centre will know what the cosine rule is. Or we have this calculus problem — the kid is in year 11, doing calculus. They are blocked because they do not know about limits or whatever. You have to have subject expertise, and it is really hard to get that. That is a critical factor, and each context will have some rules they will have to create for themselves.

There are many community organisations that I think can play a role and make things more equitable and provide that assistance, but they also need training and support. We used to have university students turn up as well. You have to have expertise, you have to have some knowledge of maths, science and chemistry, and you have to have some of that access on tap. You do not have to be there every night. You can organise it and structure it, and you probably have to have a few resources as well. I always had a bunch of textbooks, stuff for kids to read and big books for the little kids who came who could not read and all sorts of stuff. You have to have resources, but I do not think it is narrow band.

The CHAIR — Is homework still regarded as a punishment?

Assoc. Prof. WALKER — I added that 10th point. I do not think too many teachers would set homework as a punishment now, but I think they certainly did when I was a student.

Prof. HORSLEY — Kids think of homework as a punishment sometimes.

Assoc. Prof. WALKER — Homework is a cost-benefit situation for students. There are costs for them. There are things they cannot do because they are doing homework.

The CHAIR — Should we still call it homework?

Assoc. Prof. WALKER — That is a good question.

Prof. HORSLEY — That is a very good question. The reality is that in the assessment framework in schools — like in New South Wales and to some degree as well in Victoria — we now have assessment tasks or high-stakes tasks where part is done in school and part is done in the home. Teachers typically

scaffold this assessment task and then the kids have to do it at home. That is where all the issues come where some parents can pay people to do these things and all of that type of thing.

There have been innumerable reviews in New South Wales about internal assessment components for the HSC score in schools. We have not talked about that very much, but that is a big change in schools, and it is gradually moving down and down, whereas that was once a feature of years 11 and 12, and now it is in years 10, 9, 8 and 7. Normally the school has an overview of those sorts of tasks. For the communities who do not have access to expertise to do those tasks, that is very inequitable.

That is what we spend a lot of our time in these homework centres doing — assessment tasks — and we have to explain them to the kids and unpack the language. They come with the language of assessment. They come with the discourse of curriculum and assessment, and that is not accessed by the community; it is only accessed by middle-class parents basically, or not even them. We found more and more of our work was doing that. There is still what we would regard generally as homework, but this tends to be the feature of the change in secondary. Whereas primary is relatively unchanged, I think. More and more in primary, though, kids have research tasks, which are sort of new growth tasks. That is what produces the most conflict in families — new growth tasks.

I have worked in 11 schools collecting data from parents, students and teachers. I remember going to one school where I interviewed three groups of 20 parents. One woman said she had five children and she had made five models of the universe over those eight years. I said, 'Why didn't you get the kids to make them?'. She said, 'I really enjoyed making them'. Unbelievable! Can we not record the next thing I am going to say?

Assoc. Prof. WALKER — You can't do that!

The CHAIR — You can't. You have parliamentary privilege. That is why you have got it!

Prof. HORSLEY — I was going to rat on a teacher who had her own child at another school.

Mr CRISP — Perhaps afterwards.

Prof. HORSLEY — Basically the kids were the ones who were onto it. I asked parents, teachers and children the same six questions, and one of the questions was, 'How should parents help children with their homework?'. Basically the kids said they should be guided on the side and parents should give you support to get going and give you help. Then I said, 'Okay, kids, you know that some parents do the homework for the children. What are you going to say to those parents?'. 'Don't do it! You'll never learn yourself if your parents do it!'. Then some kid said, 'Which parent does the homework for their child?'. 'Jean's parent'. 'Jean, can you get your parent to do my homework as well?'.

Assoc. Prof. WALKER — Colin was making this point earlier — that in fact students have a good understanding of what is good homework, and they should be included in the whole process of making decisions about homework.

Prof. HORSLEY — And they have very strong views that parents should only be the guide on the side.

The CHAIR — What would you say to a student who is vehemently opposed to the notion of homework, because the week is divided up for 6 hours work and 10 hours socialising at the pointy end of their secondary school life? What would you say about how homework interferes with not the work but the socialising component, which is a block of 10 hours as stated?

Prof. HORSLEY — Are you going to rustle up a legal case here?

Assoc. Prof. WALKER — I would be quite sympathetic to the student in fact, because we all have to have good social lives. We have to be confident in our social lives in the same way that we are confident in every other aspect of our lives. So we should not minimise the value of developing social skills.

The CHAIR — That is welcome.

Mr CRISP — With those social skills in mind and with centres for homework, did that encourage teamwork or combined efforts? Is that a desirable outcome, an inevitable outcome or no outcome at all?

Prof. HORSLEY — I think you are intruding on cultural views of learning, so — —

Assoc. Prof. WALKER — If I could just jump in for 2 seconds, one of the things we have emphasised here is that cooperative and collaborative homework activities are very valuable, and they will help students to develop social skills. We endorse cooperative and collaborative activities, but that does not mean that we saw very many of them in these homework centres.

Mr CRISP — You mentioned earlier the cultural stuff — about different nationalities with competing — —

Prof. HORSLEY — Okay. Curriculum has a cultural basis, and this has been much studied in New Zealand. Kids in year 8 who are Tongan will say, 'Why can't we do NAPLAN together, all four of us, and get the one result, because that is what we do anyway in our community? Why do we have to do it individually?'. You can answer the kids and say, 'In Australia we have to do it individually'. They say, 'But why? We would get a much better score if we could', but that is the cultural view of learning.

Assoc. Prof. WALKER — But it is also the teacher view of what is appropriate, and most teachers set homework that is individually based. But there is value in not doing that.

Mr BROOKS — This is jumping right back to the start of your presentation. You listed a range of reasons that people saw as research for homework. One of them was public relations. You only spoke briefly about that, and I think we touched on it again in terms of perceptions.

Assoc. Prof. WALKER — Can I go first? As far as I am concerned the public relations aspect of homework is the really detrimental aspect. That is where schools set a lot of homework because they think it is going to enhance the reputation of the school, or even a teacher will set a lot of homework because a teacher thinks that will improve their reputation in the eyes of parents. I think that is what we actually have to try to work against. It is not about improving the reputation of the school; it is about students learning and understanding.

Mr BROOKS — Are there other examples of schools promoting or communicating that to prospective parents?

Assoc. Prof. WALKER — All the private schools do it. They emphasise their homework activities; it is part of a marketing exercise. 'We set a lot of homework. We are rigorous school and therefore you should send your kids to our school'.

The CHAIR — Are you aware of the feedback and the assessment on the management of that homework?

Prof. HORSLEY — Yes, the response from parents is a conflict in those environments, and the grids and all those other things tends to be the response.

Assoc. Prof. WALKER — But if you are talking about a private school, essentially you are sending your kid to that school because that is what you want. The marketing has basically had an effect, and you send your child to that school because you endorse the policies that the school is promoting. It is more contentious in public schools, I think, where you are likely to have some parents and some teachers who are opposed to homework and some who are in favour of it.

Prof. HORSLEY — Our observation is that when kids in years 8, 9 and 10 are forced to do 3 hours of homework a night it has an impact on what happens to them in years 11 and 12. There is no research on this, but think of burnout, for example, or a sudden change in focus or the fact that kids from those schools drop out much more in the first year of university. Apart from all the detriments that we have identified,

there are other longer term problems of setting kids 3 or 4 hours of homework every night, partly from some parental reaction.

The CHAIR — If the children have been disruptive during the day and the class has spun out of control, and then there is homework — and it could be a hefty load of 2 or 3 hours or something — we would then have the punishment and the catch-up factor. Is there measurement of how often homework is given in lieu because there has been poor conduct in the class and discipline has evaporated?

Assoc. Prof. WALKER — We do not really know anything about that.

Prof. HORSLEY — No. I have a PhD student looking at what teachers set for homework in Queensland primary schools and then analysing it using that framework, but it is a small study. I think she has actually videoed the teachers scaffolding the homework as well — what they say to the kids about the homework. That is a small-scale study, but I do not know. There are a number of areas in which there is very little research. There is almost no research on teacher control — what teachers actually do when the kids do not do their homework and the strategies they employ; and there is very little research on what homework is set. We can tell you we looked at 10 000 homework tasks, but if you want a piece of research on what teachers are actually setting, apart from the student I mentioned doing a PhD, I do not think there is any other research on that.

The CHAIR — Are we talking about research within Australia, within the English-speaking world or anywhere?

Assoc. Prof. WALKER — No, there is a large dataset in TIMSS — the trends in international mathematics and science study. We wrote a specific chapter at the end of the book — I think it is chapter 11 — which looked at the TIMSS studies. For all children aged 13.9, basically year 8, and all children aged 7.8, basically year 4, TIMSS does a study in mathematics and science related to the curriculum of that country. It sets a test related to the curriculum of that country. PISA is a problem-solving test aimed at 15-year-olds, and it is not related to the curriculum, whereas the TIMSS test, which is done by around 80 countries, is at year 4 and year 8 and is on the curriculum of that country, with similar questions across all countries, but on the country's curriculum. Then a survey is undertaken of principals, teachers and students. The teachers identify whether they have a high focus on homework, how much they set and all that sort of stuff.

There are all these tables about how much homework is set internationally through TIMSS, and then the sort of homework that is set and then whether it is marked or not. There is a quite a deal of data in TIMSS, which we have summarised in chapter 11. That is the biggest dataset. I cannot remember all the data, but there is a mine of information there, which we have provided in this particular chapter. The PISA and TIMSS data fits with our framework very, very closely and with the evaluation of the research which Richard has presented this morning.

Assoc. Prof. WALKER — But given that there are so many issues relating to homework and its effectiveness, the range of research is extraordinarily narrow.

Prof. HORSLEY — Small, yes.

Assoc. Prof. WALKER — It is mostly concerned with achievement, a small amount is concerned with self-directed learning and there is some research concerned with parental involvement, and that is pretty much it.

The CHAIR — At the end of the primary school experience where there is very little homework set and a possible departure as the child leaves the primary school and starts in the secondary setting, is there anything that you could comment on in terms of what that means for the family's or the child's adjustment to the rigours of and the discipline required for homework?

Assoc. Prof. WALKER — There is certainly no research on it, so we have only made anecdotal comments.

The CHAIR — Is there a need for a transition period in perhaps year 6 of primary school, or preparation?

Prof. HORSLEY — The teachers in year 6 are aware that going to a secondary school is going to require a whole new set of skills and that the teaching will be subject and discipline-based. I guess a lot of year 6 work is aimed at preparing the students for that, whether it is successful or not or whether it is much better done as it is in Queensland where they go to year 7 in primary — although unfortunately in 2015 they will be changing in year 6. There tends to be a big difference in those school systems where this transition is not at the end of year 6, but there is more effort made for the transition the longer the kids are in primary. That tends to be a feature of primary education — that teachers are aware that there is going to be a change and new skills are required. My observations are from a long teaching career and from teaching in other countries and then working in teacher education and research; I cannot point to any research about that. But, yes, a new set of skills are required because the teaching is not — —

If you ask the kids in primary what is the great thing about secondary school, they will say, 'Oh, you learn subjects and you have a different teacher'. That tends to be what they say.

Assoc. Prof. WALKER — There are a whole range of factors that change as a consequence of that transition.

Prof. HORSLEY — The Australian curriculum has an impact on that, because they have mandated the subject areas in primary, and some primaries are responding by making it more discipline-based — not every primary school.

Assoc. Prof. WALKER — Yes, but there are different emphases too. Effort is valued more in primary school, whereas ability is valued more in high school and so on. There are significant factors related to learning that do change in that transition.

The CHAIR — Just to put some of the things we spoke about informally on the record — and I welcome a contribution from both of you on this — in terms of teacher training and the preparedness for the whole notion of the momentum around self-directed learning per se and how that might transmogrify into what we know as homework and the skills that are required to get real value out of that new shift in learning. What is actually happening in the areas of teacher training or teaching centres of excellence? Should this be a postgraduate course, should it be part of in-service training or should it be renewed as technology changes and puts new imperatives to bear and so on?

Assoc. Prof. WALKER — Can I make a quick comment initially? It will be a narrow comment because Mike is more involved in a broader range of teacher education, but I teach educational psychology, and educational psychology is all about understanding the nature of learning and motivation. My courses are all about helping people who are going to be teachers understand the process of learning and understand what we mean by self-directed learning. We go into that in a great deal of detail, and we do talk about how teachers can help students to become self-directed learners. However, self-directed learning at home is a different thing. I can talk about self-direction in relation to learning in the classroom, but I do not ever talk about self-directed learning in relation to homework because essentially we have not included it in our curriculum. I think it is something that we probably should be including. I have given one lecture on homework and this was to a group of master of teaching students, and the real context there was the school community relationship. That was why I was asked to give the lecture. But I think there is a significant issue about helping teachers to better understand homework and self-directed learning in relation to homework. Michael will probably have a broader set of comments.

Prof. HORSLEY — When a teacher goes to teacher education, they will be doing courses like educational psychology and learning the underpinnings of thinking about learning and motivation. They also do subject-specific courses about how to teach their specific subjects, like mathematics, science and English. To my knowledge those courses have not been informed by a discussion of homework or by the inclusion of homework and the wider aspects of school community relationships of which homework is some sort of component.

Also, as well as doing Richard's sort of course and then the subject-specific courses that lead to learning to teach their own discipline area, they do general teaching and learning courses which are more about the general operation of the schools. To my knowledge there is no inclusion in those sorts of courses either about this specific aspect of teachers' work, which probably has contributed to the fact that even though the school has moved and there is a change in emphases — student-oriented teaching and learning and pedagogy — homework has not caught up with that. I think it is still reflecting social and cultural practices of the past. That is my perception.

The CHAIR — That is very interesting; there is a time warpedness about homework.

Prof. HORSLEY — I think it is partly because the research has been hijacked by time spent on homework and achievement. I think it has been hijacked by that particular issue for 70 years and other areas more pertinent have — —

Assoc. Prof. WALKER — Yes. There are about 90 years of research on homework, and the worst of it is concerned with achievement.

Prof. HORSLEY — And time spent doing it. I have a bit of a problem. I have four children in their 30s, a stepdaughter in her 20s and a seven-year-old. When she started school in Queensland at age 6, obviously homework came home. I know the school she goes to pretty well, so they are pretty twitchy about setting her homework. When I go to the school, they say, 'Mike, this is what we're doing'. I think this is probably an instructive sort of thing. You have to put your money where your mouth is. I often tell this story. She comes home and she has to do three things. She has to write these words in a sort of spelling list. Then she has to read this little reader that the parent reads first and then the child reads. I cannot remember what the other thing is.

How do we activate all this in that context? The first thing is, 'Well, Sadie, where do you want to do the homework?'. She has to choose where she wants to do it. We have a discussion with her and her mum. Basically she decides she wants to do it on the kitchen table, even though she has a room and a desk — although not at the moment. She decides the place in consultation with us, and so we are happy. When? Obviously if we are going to do it on the kitchen table it has to be after dinner and not after school. Again, it is her choice to do that. This is autonomy in action, making choice. Then she decides which one of these two tasks she wants to do first. She chooses which one she wants to do first. Even with the simplest homework most unconnected to the curriculum — it is not really related that much to the curriculum; it is like a separate learning activity task, which I am happy with; that is okay — she has made the decision about where and when and in which order, and then she does the spelling words. It is not high control or hover or, if she does not do it, we are going to — —

In other words, you can actually build into very simple tasks a whole mass of really good homework practice. I am a bit loath to go up to the school and talk about the quality. She is happy and she loves doing it. She does not do it all the time, but that is her choice. I am just saying that sometimes things look incredibly complicated, but with just the right approach all those things can fall into place.

Mr BROOKS — You talked before about excessive homework, and I think you mentioned burnout and family conflict. Is that an observation?

Prof. HORSLEY — It is an observation.

Mr BROOKS — There is no research?

Prof. HORSLEY — There is a fair bit of research on the way that private school students, not selective school students, drop out in first year. Universities sometimes have actually granted a points bonus for kids from public schools because, although they might not have got the highest marks compared to kids from private schools, they drop out at a much lesser rate. There has been a long trend in research which has shown that.

Assoc. Prof. WALKER — There is a long tradition of protesting about homework in schools — in Australia, worldwide and in the US. In the US there have been some really significant books written by lawyers in conjunction with parents and parents rights groups basically protesting about the amount of homework that students get and collecting information. What that research would suggest is that probably about 20 per cent of parents think that their children are getting too little homework, probably about 20 per cent of parents think their kids are getting too much homework and in the middle you have the large group who are moderately happy.

Prof. HORSLEY — Some of the parents believe that homework is the way that the school colonises the home and changes the nature of the home.

The CHAIR — That is an interesting term, colonisation of the home. Implied in that is some sort of enmity or negativity.

Assoc. Prof. WALKER — Yes.

Prof. HORSLEY — There are a lot of people who believe that.

Assoc. Prof. WALKER — A lot of the cases in the US were about parents rights versus the rights of the state. There is a significant group of people who consider that this is an issue of the rights of the community as opposed to the rights of the school. That is what part of the debate is in the US; in fact, if we have people too much engaged in homework, then they are not engaged in the community. They are not contributing to the community, volunteering or doing other work that is of value to the community.

The CHAIR — That is a very interesting point and a profound one with which to close the formalities of our hearing today. Professor Richard Walker and Professor Mike Horsley, we thank you very much for your contribution and the effort you have made to visit Melbourne today.

Witnesses withdrew.