designing homework learning resources Susan Richardson 31-48

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Australian classroom teacher homework practices in designing homework learning resources

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## **Abstract**

There has been considerable research into the design and development of teaching and learning resources for classroom instruction. However, far less research emphasis exists concerning the design and development of learning resources for homework and out-of-school learning. In Australia the approach tends to be a classroom-up approach to the design, development and implementation of learning resources. In this approach, the classroom teachers' role is of critical importance in designing, developing and implementing learning resources that support homework. In this respect, Horsley and Walker (2012) have found that a relationship exists between classroom teachers' homework practices and the teaching and learning resource base of these practices.

This paper presents preliminary results from a research investigation concerning the approach taken by two primary classroom teachers in the design, development and use of homework teaching and learning resources. The research explored teacher perspectives on homework practices using focus groups, and examined actual teacher homework practices using a stimulated recall method.

**Keywords**: Homework, Homework design, Homework learning resources, Primary school classrooms

# Introduction

Many researchers (Cooper 1989, Cooper 2001, Cooper, Robinson & Patall 2006, Corno & Xu 2004, Epstein, Simon & Salinas 1997, Simplicio 2005, Warton 2001) propose that homework can be described as a traditional strategy intended for developing learning skills and reinforcing knowledge within the classroom; a strategised task that is completed outside of the school classroom. Traditionally in Australian schools, it is the classroom teachers who are responsible for the choice of homework task, the administration of homework tasks and the monitoring of those homework tasks.

There has been considerable research into the design and development of teaching and learning resources for classroom instruction. However, far less research emphasis exists concerning the design and development of learning resources for homework and out-of-school learning. Horsley and Walker (2012) have found that a relationship exists between classroom teachers' homework practices and the teaching and learning resource base of these practices.

This paper explores that relationship. In order to do so we examine the ways in which two Australian (Queensland) primary classroom teachers design and develop homework teaching and learning resources specifically for the students in their respective classrooms. Primary classroom teachers are those who work in classrooms with children aged between 5 years of age and 12 years of age.

This paper is structured in the following way. Firstly, background will be provided to contextualise homework in the Australian setting, and more particularly, within the Queensland school setting. Then the research methodology used in this investigation will be discussed. After that, the findings of the research will be presented. Finally, conclusions are drawn by way of summarising the research investigation.

# The Australian context: the social and educational landscape

Homework, and indeed primary classroom teacher homework practices in Australian primary classrooms, are positioned within the current educational and social landscapes. Teachers are increasingly accountable for student learning outcomes and homework might be seen as one criterion by which

school, teacher and classroom quality are benchmarked (Betts 1997, Eren & Henderson 2008, Hoover-Dempsey et al 2001).

The current educational landscape in Australia is one that is characterised by:

- school funding Australia-wide that is linked to student learning data (National Assessment Plan for Literacy and Numeracy, NAPLAN);
- mandated school homework policies Australia-wide that inform teacher classroom homework practices; and
- increasing consumer expectation around the quality learning experiences that schools provide for their students with subsequent improvements in student learning outcomes.

The current social landscape in Australia is one that is characterised by:

- competing family and societal demands that are challenged by changing family structures, increased work demands and financial pressures on care providers and parents; and
- conflicting parental/caregiver viewpoint on the value of homework with some believing that homework is an intrusion into family life (Kohn 2006) and others believing that homework provides students with enhanced student learning and achievement opportunities (Corno 2000, Epstein & Van Hooris 2001, Trautwein 2007).

Homework is a firmly entrenched cultural part of schooling in Australia. In responding to government, systemic and school-based demands around homework policies, in the main Australian primary classroom teachers, assign, design, structure, scaffold and monitor classroom homework tasks.

# The Queensland context: homework and schools

The country of Australia comprises six states and two territories, each with its own independently-elected governing bodies. Queensland is one of those states. This paper presents the research undertaken in two Queensland state schools; that is schools that function under the jurisdiction of the government body, Education Queensland. For the purposes of this paper, it is useful to consider the Queensland homework schooling context in particular.

Homework is defined by Education Queensland as "independent learning to complement work undertaken in class" (Queensland Government 2006:3) and is an acknowledged and entrenched element of classroom practice in Queensland schools. The current Queensland educational landscape is characterised by:

- classroom teacher practices that are influenced heavily by 'data driven teaching' (Collaborative Inquiry: Using data for targeted teaching, Queensland Government 2011);
- state school funding that is linked to student learning data, thereby increasing teacher and school accountability for documented evidence of learning improvement, to which homework might be linked (North Coast Strategic Plan, Queensland Government 2011);
- classroom teachers who are under increasing pressure to draw on teacher practices (of which homework is a part) that lead to improved student learning (United in our Pursuit of Excellence: Agenda for Improvement 2011 – 2015, Queensland Government 2011); and
- mandated school homework policies (Homework in State Schools Policy

   Queensland Government 2006) that inform teacher classroom homework practices.

Figure 1: Systemic influences on homework resources

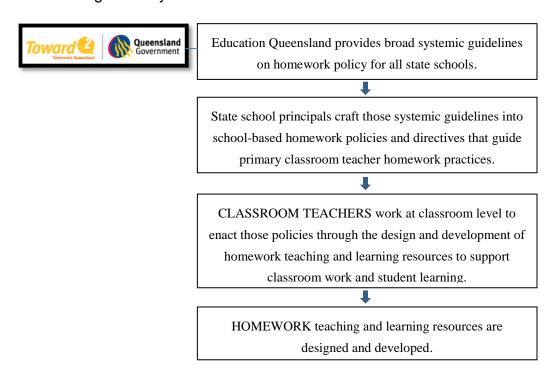


Figure 1 presents a flowchart that shows the systemic influences on classroom teachers in relation to homework and homework tasks. Classroom teacher response to these influences underpins the design and development of homework teaching and learning resources.

# The Queensland context: homework design

This section considers the ways in which homework teaching and learning resources are designed by classroom teachers in response to the contexts described above.

As can be seen from figure 1 above, Queensland state school teachers design and develop homework tasks in response to the systemic demands of state and school authorities. This 'systems-down' approach places demands on classroom teachers that require a 'classroom-up' approach in response.

Textbooks and student work books are used in many Australian, and indeed in many Queensland, primary classrooms. But unlike other countries that use textbooks quite extensively for in-class instruction as well as for homework activities/tasks, Queensland primary classroom teachers tend not to send home textbook/workbook-oriented materials for homework completion. Rather, primary classroom teachers tend to adopt an approach that sees the design and development of homework learning resources grounded within the classroom itself; with a "classroom-up" approach. In this approach, the classroom teachers' role is of critical importance. The classroom teacher is accountable for enhanced student learning outcomes; homework is a criterion by which teacher success might be benchmarked by parents and school systems. Consequently, homework teaching and learning resources are developed by individual classroom teachers in response to classroom needs. Certainly in Queensland state primary schools, homework teaching and learning resources are developed by individual classroom teachers.

This paper will now present the research approach and design that was used to investigate the ways in which two primary classroom teachers (from the Australian state of Queensland) adopted this "classroom-up" approach to homework teaching and learning resource design and development. Throughout this paper, homework teaching and learning resources are also interchangeably referred to as 'homework tasks'.

# Research approach and design

A qualitative research methodology was used in this research. The focus for the investigation is on teacher homework practices and for this paper, the refined focus is on teacher homework practices in designing and developing homework teaching and learning resources. A qualitative research methodology that would gather data offered anecdotally by teachers to describe their practices, as well as capturing evidence of that practice, was deemed to be the most appropriate for this research.

To that end, stimulated recall methods were used in conjunction with focus groups to gather data. Figure 2 below presents the research design.

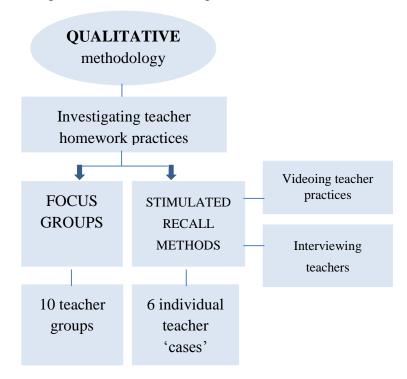


Figure 2: Research design

As can be seen from figure 2, focus groups were used independently of, but in conjunction with, stimulated recall methods. The focus groups generated anecdotal teacher descriptions around their individual teacher practices. Primary classroom teachers who participated in the focus group sessions also provided online and hard copy examples of their classroom homework teaching and learning resources. The stimulated recall methods generated data in two parts. The first part was the actual iPad recording of individual teacher homework practices within the classroom which provided evidence of practice;

what the teacher actually did. The second part was a semi-structured interview that accessed the teacher's individual reflections in response to viewing the recorded practice; teacher perspective on what they did and why they did it.

#### Data collection methods

This section provides further detailed information on the data collection methods identified above.

# Focus groups

A focus group schedule was piloted and further refined before implementation across school focus groups. The focus group schedule was designed around the following key areas for discussion:

- importance and value of homework
- types of homework
- planning for homework
- · student learning through homework
- purpose for homework
- other areas important to the group

Key discussion points were structured within those key areas. Teacher participant responses were audio-recorded and this researcher made additional field notes as required. The audio recordings were later transcribed. Each focus group was timed for one hour fifteen minutes. The focus group schedule accessed teacher perspectives and viewpoints on homework and teacher homework practices. Teacher participants also provided hard copy and online samples of homework teaching and learning resources as prompts for discussion.

#### Stimulated recall methods

A stimulated recall schedule, in two parts, was piloted and further refined before implementation with individual teacher participants. Teacher participants were sourced from the focus groups.

Part 1 was the SRR; the stimulated recall recording of teacher homework practices. This researcher and each individual teacher participant developed a recording schedule to be undertaken in the classroom itself. The teacher's specific homework teaching practices were recorded using iPad technologies.

This researcher, working with the teacher participant, crafted a recording schedule that would:

- record and capture the teacher in action demonstrating real life, real classroom specific homework practices;
- be the least intrusive possible; and
- accommodate the normal functioning of the classroom.

Part 2 was the SRI: the stimulated recall interview at which the teacher participant viewed playback of her teacher homework practices and reflected on, and responded to that practice. The interview was semi-structured with prompts provided by this researcher to the teacher participant to promote reflection and response. The reflections and responses were audio-recorded and later transcribed.

The stimulated recall methods accessed teacher-in-action recordings and teacher reflections-on-action.

#### Analysis

Focus group data, once transcribed, was examined for emerging patterns of teacher response. The focus group data was analysed by participant, by school and by group of "like" year level teachers. Emerging patterns of teacher responses were identified, collated and presented within the much broader scope of examining wide-ranging teacher homework practices.

Stimulated recall data, once reviewed and transcribed, was examined in detail in order to generate 'case' stories of teacher homework practice.

This paper examines very specifically the ways in which classroom teachers design and develop homework teaching and learning resources. To that end, the data from both the focus group source and the stimulated recall source will be used in combination to examine patterns of practice.

## Sample

Figure 2 above shows that the research design accessed ten (10) focus groups. Membership in each focus group ranged from four (4) participants to eight (8) participants and all participants were volunteers. Within the focus groups, the participant teachers were representative of:

a range of school demographics;

- a range of teacher experiences and teacher services;
- both male and female teachers;
- a range of classroom levels being taught; and
- a range of viewpoints around homework and teacher homework practices.

Six (6) teacher participants ('cases') were then sourced from the focus groups to participate in the next phase of the research which used stimulated recall methods.

For the purposes of this paper, two (2) 'cases' only will be considered. The two 'cases' serve as a preliminary examination of the ways in which homework teaching and learning resources are designed and developed by classroom teachers. Both classroom teachers currently teach at year four level (9 year old children). The teachers teach in different schools.

The presentation of findings is an introduction only to teacher homework practices. It is a consideration of one aspect only of teacher homework practices.

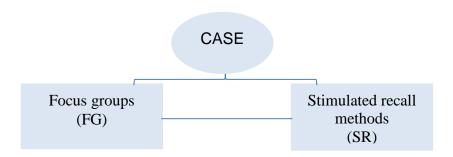
# **Results and findings**

Both classroom teachers participated in the focus group phase of data collection and then agreed to continue on to the stimulated recall methods phase. This section now presents the data as two primary classroom teacher 'cases'.

Each 'case' presented here represents a snapshot only of the homework practices with which each teacher engages. As can be seen from figure 3, this snapshot combines data collected through the focus group data collection instrument (focus group schedule) with the data drawn from the stimulated recall data collection instruments (recorded practice and stimulated recall interview). The data source is identified within the 'case' description; FG for focus group, SR for stimulated recall.

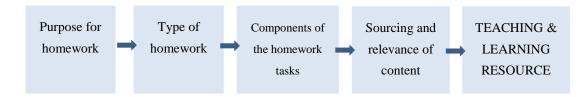
In presenting each of the two 'cases', a flowchart of practice will be used to frame and consider the ways in which classroom teachers design and develop homework teaching and learning resources. This flowchart of practice was identified as a 'pattern of practice' within the combined data sources identified in figure 3.

Figure 3: Combined data sources



The flowchart of practice is presented below in figure 4 and the steps within the flowchart will be used to organise the presentation of findings from each 'case'.

Figure 4: Flowchart of practice for resource design and development



As can be seen from Case A's flowchart of practice (below), this teacher is developing homework teaching and learning resources that directly reflect her purpose statements around homework. She believes that homework gives children the opportunity to revise and consolidate content that is directly linked to classroom instruction. She uses a consistent format, with consistent components so that the students know what they can expect from the homework task. She does this in order to develop self-management routines and time management skills.

She describes the process for developing homework teaching and learning resources in the following way:

It takes time to plan for and create a homework sheet. It takes me about an hour each week to design and develop the resource. I will go searching through all of my C2C resources, my computer resources, and then I specifically match up my teaching content with my homework content. I snip activities from here and there. I won't design homework tasks that I think is past the point of knowledge take-up. I will plan to teach just up to that point. (SR)

#### Case A:

CASE A

Case A is a very experienced female teacher, who has been teaching for over 30 years. She has been teaching this particular year level, year four, for ten years. (FG)

Purpose for homework

She believes that homework "consolidates the specific teaching focus taught in class, giving opportunities for student practice. It assists in student learning and develops routines and self-management skills." (FG)

"Homework gives children revisiting opportunities for content; opportunities to revise and consolidate." (FG)

1



Type of homework

She designs specific weekly homework sheets using a consistent weekly format. (FG)

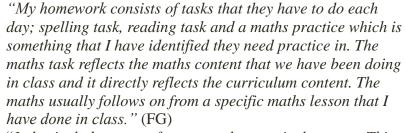
"The children know that the format of the sheet remains consistent and they know what to expect, Monday through Thursday." (FG)

Homework is marked daily and links to explicitly scaffolded content from the classroom. (FG)

"My homework is routined. It is part of my daily regular programmed routine – straight after first lunch is homework every day." (FG)



Components of the homework tasks



"I also include content from one other curriculum area. This week it is science." (SR)

"I also include online activities into the homework task, but they are sometimes optional rather than compulsory." (SR)



Sourcing and relevance of content

"For maths, I source from C2C curriculum content and activities.

For spellings, I source from the commercial product Sound Waves. I use the activities from that workbook, but I put them into my own homework sheet.

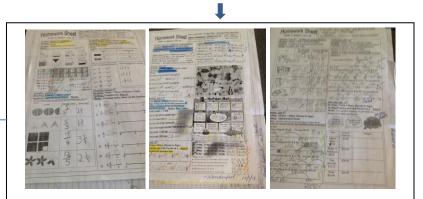
For English, I source from C2C curriculum content and activities." (SR)

"I plan very specifically for my homework tasks to make sure they link back and are relevant to classroom content." (SR)

"The maths task will reflect the topic that we are focusing on that week. For example, this week we are focusing on using addition and subtraction strategies.

The homework is an integral part of my maths instruction in class daily. So usually they have had a lesson on the content in the homework sheet." (SR)

HOMEWORK TEACHING & LEARNING RESOURCE



As can be seen from Case B's flowchart of practice (below), she is developing homework teaching and learning resources that are linked to the purpose statements she made around homework.

Case B describes the process for developing homework teaching and learning resources in the following way:

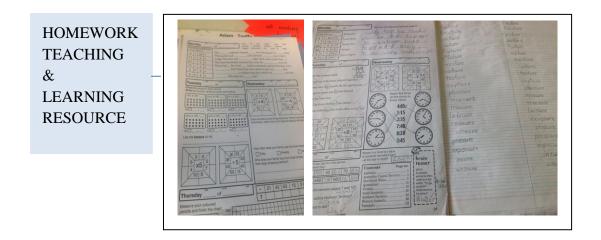
I choose the sheet from the blackline master that best fits with what we are doing in class. It might tie in with something we have done or it might perhaps set the scene for something that we are going to do. With these sheets from the commercial source, the work on each sheet links to year 4 content at some point. I don't follow the blackline master page by page. I skip back and forth to try to get the best match that I can for what is going on in the classroom. I know my program planning quite well. (SR)

## Case B:

Case B is a very experienced female teacher, who has been CASE B teaching for twenty years. She has been teaching this year level, year four, for several years. (FG) She believes that "homework consolidates learning, Purpose for instills a reading habit, develops study habits and time homework management skills. Homework also prepares students for high school."(FG) She uses a weekly homework sheet, photocopied and distributed to all students. (FG) Homework is marked at the end of the week. The Type of homework goes out on a Monday and comes back in on a homework Friday. (FG) "The homework sheet should be able to be completed independently as an individual task. The content goes across curriculum areas." (FG) "I have weekly spelling and nightly reading. I set the number facts to be learned up at the beginning of the year. Components The content on the sheet is generic to this year 4 level of the across English and mathematics." (FG) homework "I am just trying to consolidate their understanding." (SR) tasks The teacher sets students' homework books up at the beginning of the year, pasting in number facts to be learned and starting up a reading log. (FG) The students source their own reading material, choosing from the classroom, the library or home. (FG) Sourcing & The spelling is taken from the C2C relevance of OMEWORK MASTERS curriculum planning documents for content year 4 level. They get 15 spelling words on the Monday and they all have the same spelling focus. (FG) Teacher B uses a homework sheet that is a photocopied page from a commercial blackline master book: Homework Masters for Year 4,

IARTEM *e-Journal* Volume 6 No 3 Australian classroom teacher homework practices in designing homework learning resources Susan Richardson 31-48

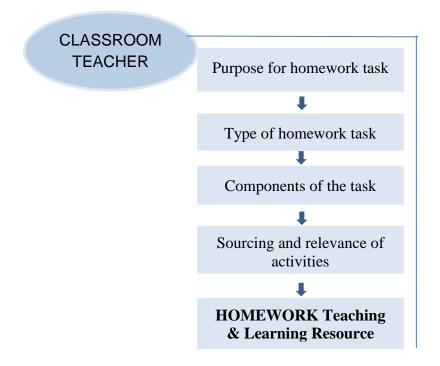
E & R Publications. (FG)



# **Discussion**

Both teachers followed the same decision making process that is presented below in figure 5.

Figure 5: Process for developing homework teaching and learning resources



The process generated homework teaching and learning resources for both teachers that were used by the students in those classrooms. Examples of

these teaching and learning resources provided within the 'cases' above demonstrate that the resources look similar. The resources seem to focus on similar elements of curriculum content; both resources provide a range of activities with which students can engage. However, the difference between the two homework teaching and learning resources lies in the ways in which the resources link to teacher practice, student learning and classroom curriculum demands.

Case A maintains that homework is linked very specifically to classroom teaching and her homework sheets reflect that. This particular teacher takes considerable time to develop a homework teaching and learning resource that very explicitly addresses the learning needs of her students and supports the instructional content that is targeted within classroom instruction. There are direct links between teaching, learning and the homework tasks undertaken by the students in her classroom. These three components are explicitly linked. Case A develops the homework teaching and learning resource weekly in direct response to her curriculum planning demands. Curriculum documents are a consistent source of materials, but time is also spent sourcing materials from a number and from a variety of sources. There is a direct match between the homework content and classroom instruction. Case A explicitly scaffolds the content in class before it is followed up at home using the homework teaching and learning resource. This approach is evidenced in the anecdotal evidence provided through both the focus group and the stimulated recall methods.

On the other hand, Case B provides a routined response to the development of homework teaching and learning resources. Case B draws on curriculum demands for the spelling content. Case B encourages student selection of reading material. The homework teaching and learning resource used by Case B is taken directly from a commercial source without customisation for the students who will work with it. The point of customisation comes with the teacher making conscious choices over which page in the commercial source will be used and at what time that page will be used. This is a conscious decision made in relation to classroom planning.

However, unlike Case A who is making very explicit connections between specific skills and content taught in class and consolidation through homework, Case B is taking a more generic skills-based approach to content and consolidation.

# **Conclusions**

Two primary classroom teacher 'cases' only have been presented within this paper. The findings of course cannot be generalised to encapsulate the practices of all primary classroom teachers Australia-wide. However, the findings do serve to identify that, despite teacher differences, there are similar considerations made by these two classroom teachers when they are designing and developing homework teaching and learning resources.

In summary then, a generalised model of practice has been suggested. That model identifies design and development considerations as:

- the purpose of the homework task;
- the type of homework task that will be developed;
- the components that will be included within the homework task; and
- the source and relevance of activities and/or tasks, either from commercial, textbook or online sources or from teacher developed, classroom-based materials.

The two primary classroom teachers 'cases', when responding to these considerations, tended to engage in a linear process when designing and developing homework learning resources. That is, they firstly identified the purpose of their homework task before deciding on the type of homework task that they would individually develop. Then both primary classroom teachers very deliberately chose the components, the activities, the structure and the format of the homework task. Each teacher also made a conscious choice around the source of those components and activities.

The homework teaching and learning resources that were developed through this linear process were products of a clear decision-making process.

The findings suggest that even though the process undertaken by primary classroom teachers to design and develop homework teaching and learning resources might be the same, the product developed will be customised by the teacher's responses to that linear decision-making process.

The point of difference appears to come when decisions are made by teachers around the sourcing and relevance of the components that will be developed into the homework task.

# Recommendations for further research

Preliminary findings around the design and development process of homework teaching and learning resources have been presented within this paper. This has been a narrow focus examined within a limited sample of classroom teachers. Further research, across a wider sample of classroom teachers, would be helpful to validate the efficacy of the model presented herein.

The research into homework is continuing.

## References

Betts, J.R. (1997) "The Role of Homework in Improving School Quality", unpublished manuscript. Department of Economics, University of California: San Diego.

Cooper, H. (2001) *The Battle Over Homework (2<sup>nd</sup> ed.)*, Thousand Oaks: Corwin Press.

Cooper, H. (1989) Homework, White Plains: Longman.

Cooper, H., Robinsonn, J.C., & Patall, E.A. (2006) "Does homework improve academic achievement? A synthesis of research", *Review of Educational Research*, 76, 1-62.

Corno, L. (2000) "Looking at homework differently", *The Elementary School Journal*, 100 (5), 529-48.

Corno, L., & Xu, J. (2004) "Homework as a job of childhood", *Theory into Practice*, 43, 227-33.

Epstein, J.L., Simon, B.S., & Salinas, K. C. (1997) "Involving parents in homework in the middle grades", *John Hopkins University Research Bulletin, no. 18.* 

Eren, O., & Henderson, D. J. (2008) "The Impact of Homework on Student Achievement", *Econometrics Journal*, *11*, 326-48.

Hoover-Dempsey, K.V., Battiatio, A.C., Walker, J.M.T., Reed, R.P., DeJong, J.M. & Jones, K.P. (2001) "Parental involvement in homework", *Educational Psychologist*, 74, 248-53.

IARTEM e-Journal Volume 6 No 3 Australian classroom teacher homework practices in designing homework learning resources Susan Richardson 31-48

Horsley, M. & Walker, R. (2012) Reforming Homework: Practices, learning and policies, South Yarra: Palgrave Macmillan.

Kohn, A. (2006) The Homework Myth: why our kids get too much of a bad thing, Cambridge MA: Da Capo Press.

Trautwein, U. (2007) "The homework-achievement relation considered: Differentiating homework time, homework frequency and homework effort", *Learning and Instruction*, 17, 372-88.

Queensland Government (2006) "Homework in State Schools Policy", accessed 12 April 2012 <a href="http://www.educationqueensland.com.au">http://www.educationqueensland.com.au</a>>

Queensland Government (2011) "Collaborative Enquiry: Using data for targeted teaching", accessed 12 April 2012 <a href="http://www.educationqueensland.com.au">http://www.educationqueensland.com.au</a>>

Queensland Government (2011) "North Coast Strategic Plan", accessed 12 April 2012 <a href="http://www.educationgueensland.com.au">http://www.educationgueensland.com.au</a>

Queensland Government (2011) "United in our Pursuit of Excellence: Agenda for Improvement 2011 – 2015", accessed 12 April 2012 <a href="http://www.educationgueensland.com.au">http://www.educationgueensland.com.au</a>

Warton, P.M. (2001) "The forgotten voice in homework: views of students", *Educational Psychologist, 36*, 155-65.

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