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Homework-based learning resources: two distinct approaches to design and development

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Abstract

Homework can be described as an enculturated expectation of our schooling discourse both nationally and internationally (Horsley & Walker, 2013). There are universal understandings about homework. From country to country, classroom teachers respond to government homework policy to set homework for their students, mostly using textbooks as the source of homework activity. However, in Australian primary school classrooms, the provision of homework tasks is not generally supported by the use of textbooks or by textbook activities. Rather, the classroom teacher is responsible for the design and the development of homework-based learning resources. This paper presents qualitative research that examined the ways in which, and the influences on, the processes used by primary classroom teachers in Queensland (Australia), to design and develop homework tasks. This paper foregrounds two distinct approaches to homework design and development that emerged through the findings; an early years' teacher orientation and a middle years' teacher orientation. These findings are significant because teacher homework practices have not been examined in this way before.

Keywords: Homework, Homework tasks, Primary (elementary) classrooms, Early years' teacher practice, Middle years' teacher practice, Homework design and development.

Resumo

A lição de casa pode ser descrita como uma expectativa aculturada de nosso discurso escolar tanto nacional quando internacionalmente (Horsley & Walker, 2013). Existem compreensões universais sobre a lição de casa. De país em país, os professores de sala de aula respondem à política governamental sobre lição de casa para determinar as tarefas para seus estudantes, na maioria dos casos utilizando livros didáticos como fonte de atividades para as mesmas. Entretanto, nas salas de aula de escolas primárias na Austrália, a disponibilização de tarefas de casa não é normalmente apoiada no uso do livro didático ou suas atividades. Ao contrário, o professor na sala de aula é responsável pelo planejamento e elaboração dos recursos de aprendizagem baseados na lição de casa. Esta pesquisa qualitativa apresenta a análise dos processos usados pelos professores de turmas de escolas primárias em Queensland (Austrália) para conceber e desenvolver tarefas de casa, assim como a sua influência nestes processos. Este artigo enfatiza duas abordagens diferentes para planejar e elaborar a lição de casa, apontadas durante a pesquisa: uma orientação para os anos iniciais e outra para os anos secundários. Estas descobertas são significativas, uma vez que as práticas dos professores em relação à tarefa de casa não foram examinadas dessa maneira até o momento.

Palavras-chave: Lição de casa, Tarefa, Escola primária, Prática para os anos iniciais, Prática para os anos secundários, Planejamento e elaboração da lição de casa.

Resumen

Se puede describir la tarea de casa como una expectativa aculturada de nuestro discurso escolar de manera nacional así como internacionalmente (Horsley y Walker, 2013). Hay entendimiento universal acerca de las tareas de casa. De país en país, los maestros del aula responden a la política gubernamental sobre la tarea de casa para determinar las tareas para sus estudiantes, en la mayoría de los casos utilizando los libros didácticos como fuente de las actividades para las mismas. Sin embargo, en las aulas de escuelas primarias en Australia, la disponibilidad de las tareas de casa no se apoya normalmente en el uso del libro didáctico o de sus actividades. En cambio, el profesor en el aula es responsable del planeamiento y de la elaboración de los recursos de aprendizaje basados en la tarea de casa. Esta investigación cualitativa presenta el análisis de los procesos utilizados para los profesores de las clases de escuelas primarias en Queensland (Australia) para concebir y para desarrollar tareas de casa, así como su influencia en estos procesos. Este artículo destaca dos abordajes distintos para planear y para elaborar la lección de casa acentuadas durante la investigación; una orientación para los años iniciales y otra por los años secundarios. Estos descubrimientos son significativos, una vez que las prácticas de los profesores

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en lo que se refiere a la tarea de casa no han sido examinadas de esta manera hasta el momento.

Palabras clave: La tarea de casa, Escuela Primaria, Práctica por los años iniciales, Práctica para los años secundarios, Planeamiento y elaboración de la tarea de casa.

Introduction

Homework, defined seminally by Cooper (1989) as "tasks assigned to students by teachers that are meant to be carried out during non-school hours", can be described as an enculturated expectation of our national and international schooling discourse (Horsley & Walker, 2013). There is a 'universality' about homework; a 'universality' that from country to country worldwide, stems from consistent tensions about:

- government homework policy and guidelines;

- homework development and implementation;

- time spent on homework;

- perceived student learning benefits from homework; and

- disparate teacher and parental viewpoints about homework and its efficacy (Horsley & Walker, 2013, p. 207-218).

In examining homework policies around the world, Baker and LeTendre (2005) have concluded that the relationship between national patterns of homework and national student achievement suggests that more homework may actually undermine student achievement. Two major international evaluations of student achievement, PISA (Program for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study), identify that different nations, regions and communities place different values on homework and exhibit different homework practice. According to Horsley and Walker (2013, p. 232), the PISA (2014) and TIMSS data (2011), shows that there are significant differences between countries; wide variations in time spent on homework, different correlations between time spent on homework and student achievement across disciplines and significant differences in the types of homework tasks set in different subjects.

Implicit stakeholder beliefs, both positive (Cooper, Robinson & Patall, 2006; Trautwein, Ludtke, Schnyder & Niggli, 2006) and negative (Bennett & Kalish, 2006; Hattie, 2009; Kohn, 2006), exist about homework. Nonetheless, homework remains. Classroom teachers in countries around the world (Organisation for Economic Co-operation and Development, 2013, p. 1) set homework for their students in both the primary (students aged approximately 5yrs – 11yrs) and secondary schooling contexts (students aged

approximately 12yrs – 17yrs). Many countries provide homework policy or major homework documents that provide guidelines for homework practice (Horsley & Walker, 2013, p. 214). Textbooks are used by teachers in many countries to guide and support both classroom instruction and homework activity.

However, in the Australian (and Queensland) primary schooling context, textbooks are not used as extensively as in other countries. Australian primary classroom teachers do not rely on the use of textbooks for instructional, in-class purposes. Rather, teachers draw on and use alternative instructional resource sources such as those that are available through the Australian Curriculum materials (Australian Institute for Teaching & School Leadership, 2014). As well, Queensland primary school teachers for example, use the Curriculum into the Classroom (C2C) materials to support classroom instruction and the implementation of the Australian Curriculum. C2C is a digital resource that provides a "comprehensive set of whole-school and classroom planning and teaching materials that can be adapted to suit individual student learning needs and to suit local school contexts" (Department of Education and Training, Queensland, 2015). Additionally, classroom teachers independently source teaching resources, many of which are on-line, using them to design and develop materials for specific classroom use.

Similarly, textbooks are generally not used by primary classroom teachers in Queensland, nor in Australia generally, to support homework activity. Rather, primary classroom teachers source particular materials from which they design and develop the homework-based learning resources and tasks that are sent home for the students to complete as homework.

Interestingly and despite the central role that classroom teachers play in the homework process, relatively few studies have focussed on the teachers' role, or on the specific homework practices with which they engage. According to a synthesis of the homework research undertaken by Horsley and Walker (2013), most of the homework research to date has examined:

- what students do, and the relationship between time spent on homework and student learning achievement;

- the role of parental involvement in homework that supports learning; and

- the development of student self-regulatory, independent learning skills.

Trautwein and associates (2002 - 2009) in particular have promoted research that examines the inter-relationships between these various aspects of homework connected with student learning. Horsley and Walker (2013) suggest that in light of Trautwein's research focus, there is a need to further examine homework task quality, the design and development of homework tasks and task links to student learning. Such teacher

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homework practice receives limited research attention and is not well documented for the primary schooling context. Yet, the homework process begins with the classroom teacher (Epstein & Van Voorhis, 2010). Teachers not only assign homework; teachers design and develop homework tasks.

Further examination into teacher homework practice is warranted. This paper presents current research that examined the influences on, and the ways in which primary classroom teachers in Queensland (Australian) classrooms design and develop homework-based learning resources (homework tasks) for their students. The research presented within this paper was undertaken with teachers in 10 Queensland state primary schools; schools that teach students from 5 years of age to approximately 12 years of age.

The paper will firstly present an overview of the Australian and Queensland homework contexts, through which it will be established that teachers respond to the influence of government mandated, school-based homework policy through individual interpretation and development of homework-based learning resources. In particular, a 'systems-down, classroom-up' model that outlines the process of practical teacher response to policy will be briefly described. Then, the research design will be outlined. The research examined the ways in which primary classroom teachers design and develop homework tasks and explored the influences on homework task design and development. Particular detail is offered about the analysis of data. After that, the findings from the research will be presented and discussed. Final conclusions that summarise the research investigation will then be presented.

Australian (Queensland) homework context

Australia comprises six states (one of which is Queensland) and two territories, each with its own independently elected governing bodies. Education in Australia is constitutionally a state matter. Whilst there is an Australian Curriculum that guides classroom instruction/teaching nationally across the states and territories, there is no one national homework policy or homework guideline. Guidelines typically outline the intent of homework and provide more specific details and recommendations about homework approaches, homework practices with which classroom teachers might engage as well as time spent on homework. Hence, individual states and territories are responsible for their own documentation regarding school homework policy and homework guidelines for schools. Homework can be described as a long-standing practice that is embedded in community beliefs (Gill & Schlossman, 2003) and this impacts on policy makers. In Queensland, homework is defined in the government homework policy and in the guideline document *Homework in State Schools* as "independent learning to complement work that is undertaken in class" (Queensland Government, 2006, p. 3). This document provides broad guidelines for primary

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classroom teacher practice with respect to homework. The guidelines are articulated according to two identifiable phases of student learning; namely 'early years' and 'middle years'.

Queensland homework policy guidelines for primary classroom teachers

Table 1 presents an overview of the homework guidelines presented in the *Homework in State Schools* (Department of Education & Training, Queensland, 2006) document and highlights the generalised requirements for homework tasks.

Unlike other countries that use textbooks quite extensively for in-class instruction as well as for homework activities/tasks, Queensland primary classroom teachers do not send home textbooks to support homework activity. Rather, teachers tend to respond to government policy mandates and guidelines through the design and development of their own customised homework-based learning resources. This is done at classroom level. 'Homework-based learning resources' are inter-changeably referred to throughout this paper as homework tasks.

	Guideline recommendations for homework activity
Early years	Prep (students aged approx. 4 – 5 yrs): • Generally no homework should be set for students
	Years 1 – 3 (students aged approx. 6 – 8 yrs): • Activities should develop literacy, numeracy and problem solving skills • Daily reading and opportunities to write for meaningful purpose • Activities should link classroom concepts to familiar activities, to conversations and to preparations for oral presentations *Time spent:* Not more than one hour per week
Middle years	Years 4 – 5 (students aged approx. 9 – 10yrs): *Time spent:* Generally not more than 2 – 3 hours per week Years 6 – 7 (students aged approx. 11 – 12yrs): *Time spent:* Generally not more than 3 – 4 hours per week *Homework can be completed* daily, weekly or over a fortnightly period Homework activities for both groups include: • Daily independent reading • Tasks co-ordinated across subject areas that extend class work • Projects and research

Table 1: Queensland 'Early years' and 'middle years' homework guidelines

It can be seen from Table 1 that time allocations for homework activity are 'learning phase' appropriate; time allocations increase as students' age increase. As shown

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in Table 1, daily reading is recommended for students in both phases of learning as are homework activities that link to classroom concepts and content. However, it can be seen from Table 1 that the recommendations are generalised and provide broad brush-stroke suggestions for classroom teachers, thereby inviting a range of teacher interpretation of the actual guidelines for teacher practice. On one hand this allows for teacher and class customisation of the homework-based learning resources that are developed by individual classroom teachers. It is acknowledged that whilst classroom teachers undertake the same type of work, they undertake it in different ways (Hattie, 2009). However, on the other hand, the generalised recommendations do not highlight the specifics of consistent, explicit teacher homework practice and homework activity. Rather, the effective implementation of the homework guidelines relies on an efficacious interpretation and enactment by individual teachers.

A model: policy to practice

Figure 1 presents an author-developed model that presents the 'systems-down, classroom-up' interpretation by classroom teachers in response to government policy mandates. As shown in Figure 1, at Step 1, a 'systems-down' mandate promulgates homework policy and homework guidelines from government through to individual state schools. As indicated, the guidelines are written according to identified phases of student learning.
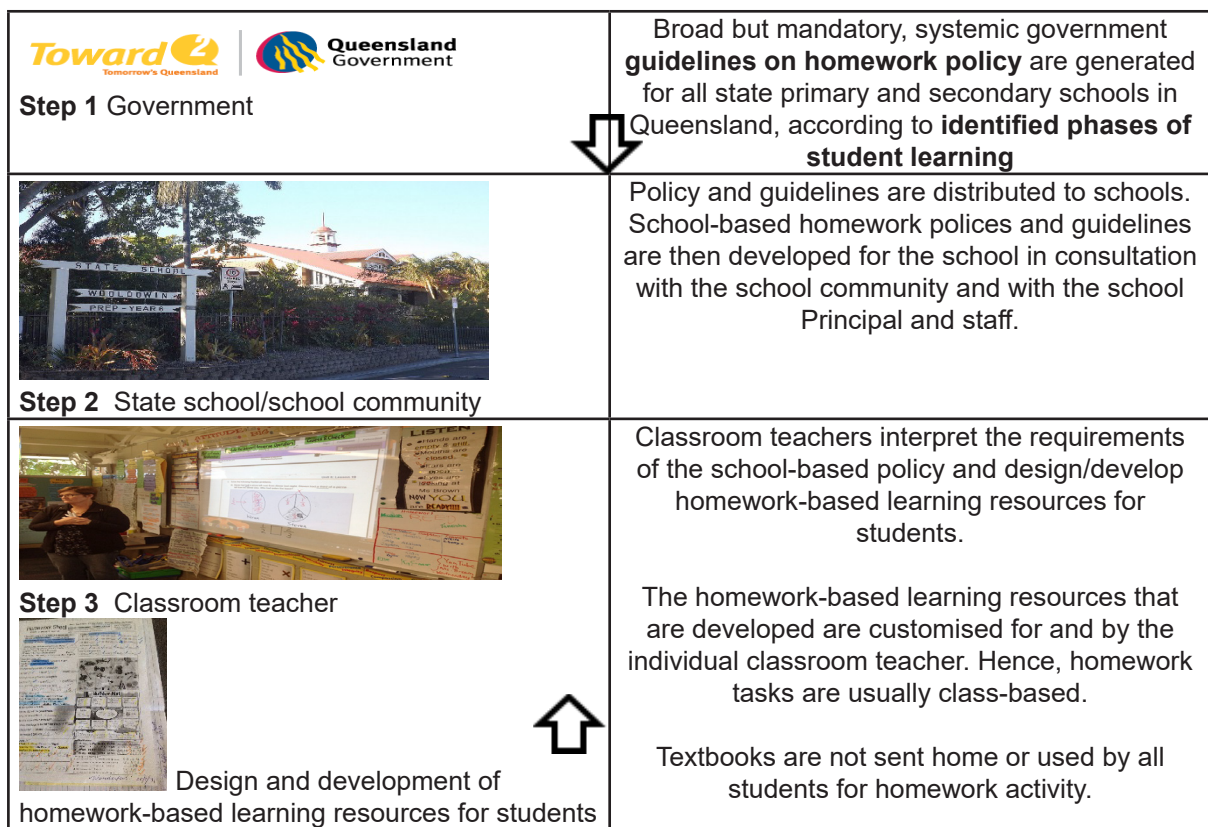
Toward 2 Tomorrow's Queensland | **Queensland Government** **Step 1** Government	Broad but mandatory, systemic government **guidelines on homework policy** are generated for all state primary and secondary schools in Queensland, according to **identified phases of student learning**
 Step 2 State school/school community	Policy and guidelines are distributed to schools. School-based homework polices and guidelines are then developed for the school in consultation with the school community and with the school Principal and staff.
 Step 3 Classroom teacher Design and development of homework-based learning resources for students	Classroom teachers interpret the requirements of the school-based policy and design/develop homework-based learning resources for students. The homework-based learning resources that are developed are customised for and by the individual classroom teacher. Hence, homework tasks are usually class-based. Textbooks are not sent home or used by all students for homework activity.

Figure 1: 'Systems-down, classroom-up' interpretation: policy to practice

Then at Step 2, in consultation with each school community, and led by school principals and administration staff, these broad and systemic guidelines are intended to be interpreted and documented for the purpose of a school-based homework policy; a homework policy for a particular school. Generally though, state schools tend to adopt the government guidelines (*Homework in State Schools,* 2006) as their own school-based homework policy document with few changes made to it. Consequently, school-based homework policies typically only provide broad brush-stroke indicators of the general time allocations for homework for particular phases of learning, and generalised identifiers of the types of homework that would be appropriate for particular phases of learning. These identifiers were outlined in Table 1.

Then, as shown in Figure 1, at Step 3, classroom teachers individually interpret the specifications of the school-based homework policy and enact the policy using a range of specific teacher homework practices to do so. It is at Step 3, where the 'systems-down' approach places demands on classroom teachers that require a 'classroom-up' approach in response. At this step, classroom teachers design and develop homework-based learning resources that they deem to be appropriate for their class and for their students. It is at this point that teacher practices vary according to individual teacher interpretation of policy. It is at this point that teacher practices vary according to the phase of learning in which the practices are positioned (early years or middle years), and the ways in which individual teachers approach the connection between classroom content and homework content.

At Step 3, classroom teachers make unilateral decisions about the type of task that will be used, the components of the task, the formatting and whether it is to be paper based or on-line as well as the sources used to generate appropriate activities for the homework task. Unlike schools in many overseas countries, in Queensland (Australia) primary school classrooms, the provision of homework tasks is not supported by the use of take-home textbooks. Rather, the classroom teacher is responsible for interpreting the school-based homework policy to design, develop and implement homework-based learning resources. The classroom teacher is accountable for enhanced student learning outcomes; homework is a criterion by which teacher success and effectiveness might be benchmarked by parents and school systems (Eren & Henderson, 2008; Hoover-Dempsey, Battiato, Walker, Reed, DeJong & Jones, 2001). Consequently, the homework task itself, as well as its design and development by the classroom teacher in response to systemic influences, demands scrutiny and closer examination.

As stated in the introduction, there is an absence of current homework literature that examines the specifics of teacher homework practice in the primary school context. This paper now presents research that:

- investigated the ways in which primary classroom teachers design and develop homework tasks; and

- explored the influences on homework task design and development.

Research design

A qualitative research methodology was used. Figure 2 presents the research design; a dual- component design that facilitates an examination of what classroom teachers say about homework alongside what they do in practice. The dual research design components were used so that the teacher perspectives accessed through the focus group sessions (FG) could be examined through a second means, the stimulated recall method (SR). In this way the relationship between what teachers say about homework and teacher homework practices and the teacher practices actually used by the teachers in the classroom could be considered.
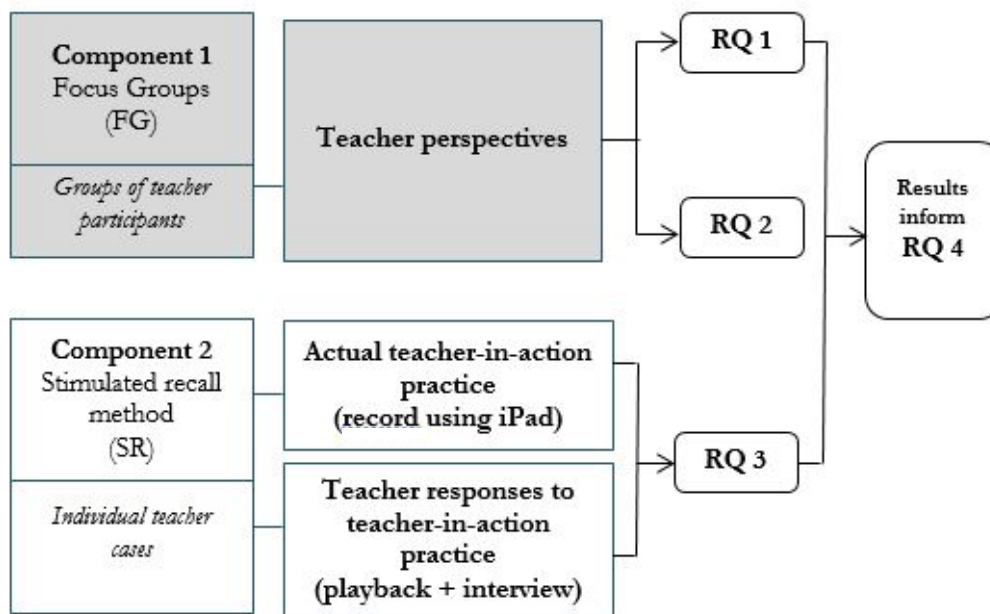

Figure 2: Research design

Four specific research questions (RQ) were addressed:

- RQ1: What are the internal and external factors influencing primary classroom teacher homework practices and what are the ways in which they influence practice?

- RQ2: What are the teacher perspectives that describe specific aspects of homework with respect to purpose of homework, student learning through homework, types of homework and teacher planning for homework?

- RQ3: What are the teacher homework practices used by primary classroom teachers?

- RQ4: How can the results from this research be used to develop a frame for practice that can be used by teachers to reflect on the teacher homework practices used in the primary classroom?

The research design has two components. Figure 2 shows that Component 1 of the research design concerns the use of focus groups. Focus groups were used to explore primary classroom teacher perspectives; teacher views and insights about homework and the teacher homework practices they used to facilitate the homework process (design, development, implementation and monitoring of homework). As shown in Figure 2, RQ1 and RQ2 are addressed through the use of the focus groups.

Component 2 addresses RQ3. As shown in the figure, Component 2 draws on stimulated recall methods (Fox-Turnbull, 2013; Lyle, 2002; Mackey & Gass, 2005) to explore actual 'teacher-in-action' homework practices and teacher responses to that practice. 'Teacher-in-action' homework practice refers to the actual teacher homework practices used by primary classroom teachers 'in situ' in the classroom context. 'Teacher responses' to teacher-in-action practice encapsulates teacher commentary about the practices evidenced, teacher reflection on the practices used and teacher explanation about the specifics of those practices. The capture of 'teacher-in-action' homework practice was done through the use of iPad recording of teachers-in-action in the classroom and then through the subsequent playback to which teachers provided commentary and reflection about the homework practices being viewed.

The data was analysed from each of the two components individually at first and then collectively in order to address the four research questions. Figure 2 shows that the results from RQ1, RQ2 and RQ3 are used to address RQ4.

This paper presents and discusses the findings from Component 1 of the research design only; focus groups. The use of focus groups presented teacher participants with a voice to describe what was relevant and important to understand about their individual perspectives (Marczak & Sewell, 2013) on homework and teacher homework practices. The use of focus groups facilitated data collection from a range of teacher participants in efficient and timely ways. As well, the focus groups provided an authentic and supported professional context through which teacher participants could collectively and actively create conversations about homework that "generate a richer understanding of participants' experiences and beliefs" (Morgan, 2002, p. 6).

Data collection

Sample

As shown in Table 2, focus groups were conducted at ten (10) state primary schools in the Sunshine Coast (South East Queensland) school district.

Number of schools at which focus groups participated	Number of teacher participants in total	Number of Early Years teacher participants (Eyr)	Number of Middle Years teacher participants (Myr)
10	46	23	23

Table 2: Research sample

The schools represented a range of social demographic, size, structure and location. Membership of each focus group ranged from 4 classroom teacher participants – 9 participants, and all participants were volunteers. Each focus group was a common collective of primary classroom teachers. It can be seen from Table 2 that teacher participants represented both the early years phase of schooling (Eyr, teaching children from approx. 4 yrs of age – 8 yrs) and the middle years phase of schooling (Myr, teaching children from approx. 9 yrs of age – 12 yrs). Twenty-three classroom teachers from each phase of schooling participated in the focus group sessions. However, the composition of teachers for each focus group was different, due largely to the fact that teacher participants were volunteers. Teacher participants, male and female, represented a range of teacher experience and service, a range of year levels being taught and a range of viewpoint about homework and homework practices.

Focus group schedule

A semi-structured focus group schedule was used. It was organised around open-ended questions (Cresswell, 2003) that encouraged the collective responses from teacher participants through lead questions and researcher prompts. The questions and prompts related to key themes that emerged from the literature, namely: purpose of homework; types of homework; planning for homework; student learning through homework; and other aspects of homework deemed important to the group.

Analysis of data

Figure 3 presents the five-step process that was developed and used to analyse the results.
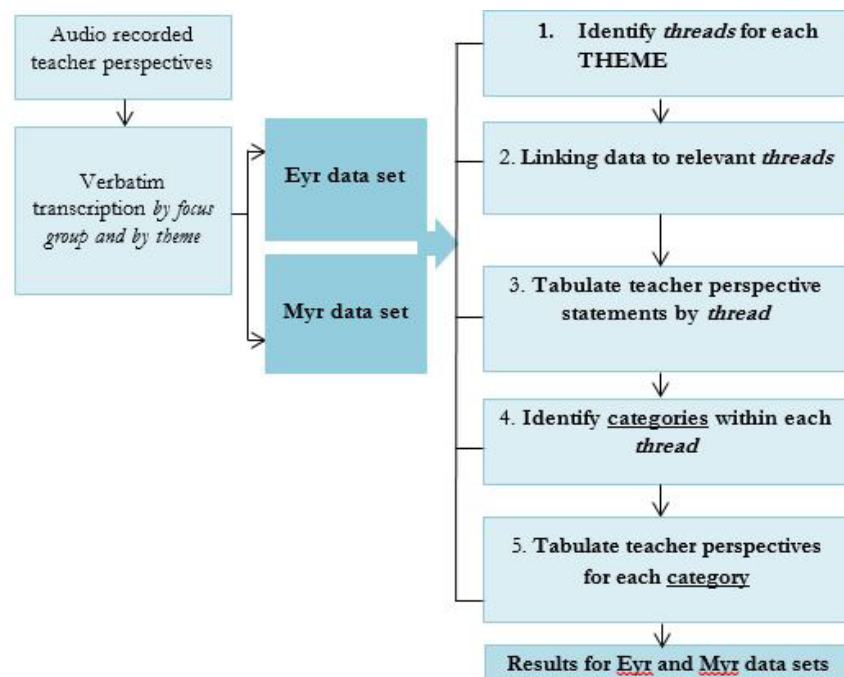

Figure 3: Process used to analyse focus group data.

As shown in Figure 3, teacher participant perspectives were recorded during each focus group discussion and then transcribed into two data sets, Early years (Eyr) and Middle years (Myr). Then, as Figure 3 indicates, a sequential five-step process was applied to each data set respectively; for Eyr and Myr teacher participants, theme by theme.

Figure 3 shows that at Step 1, theme data was examined and key threads from each theme were identified. A 'thread' is a grouping of 'like' teacher participant responses that can be described as similar statements or similar ideas. Table 3 presents the four themes (organising structures for the focus group schedule) and the common threads that emerged from the teacher data for each theme.

Homework Themes	COMMON threads, all teacher data
TYPES of homework	components, sources, format, scheduling, mode
PURPOSE of homework	policy, parents, teacher views, student learning, development of self-management skills
STUDENT LEARNING through homework	classroom content links, explicit scaffolding, responding to student needs, development of self-management skills, choice in tasks, monitoring homework, collaborative tasks, non-completion of homework
TEACHER PLANNING for homework	intended learning outcomes, classroom content links, non-completion of homework

Table 3: Common threads for each theme

For example, the common threads that emerged at Step 1 for TYPES of homework included components, sources, format, scheduling and mode. Colour coding was then arbitrarily allocated to each thread to facilitate easier identification of threads within each data set.

At Step 2, as indicated in Figure 3, teacher participant perspectives were linked to relevant, identified threads for each theme through manual colour coding. Table 4 presents a sample of the documentation developed at Step 2 of the analysis process. By way of example, and for the purposes of this article, different fonts have been used to represent the different colours used. A key is included underneath the table.

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Myr teacher participant response (FG 2.4)
"I have contract style homework this term. They can do a little activity each night, or do it in one big hit on one night. They have spelling, times tables and reading which is a priority. I consider that to be the most important part of homework. The format might stay the same, might change. If I can see something that they are not getting in class, I might do something on that. If they are getting too comfortable with the format, I might change it to keep their interest and mine."
Myr teacher participant response (FG 2.6b)
"We use Maths Mate and sometimes I put maths examples on the board for them to copy down as homework."

Key: | *components* **sources** *format* `scheduling` |

Table 4: Sample of linkage of teacher perspectives to threads

Figure 3 shows that at Step 3 in the analysis process, teacher perspectives were tabulated by threads for each theme. As an example, Table 5 presents a sample of the documentation that was developed at this step.

Theme: TYPES of homework	**Thread:** *Sources*
"Not linked to classroom content. They do sit within ACARA requirements, however. We use an online program Teach This as the source of content. (FG 1.6) *If I can see something they are not getting in class, I might do something on that.* (FG 2.4) *Some of the maths just comes about. Mostly I base my homework on Mathsmate textbook.* (FG 2.6a) *We use Maths Mate as our source.* (FG 2.6b) *I do some online homework, using Study Ladder. I also use a commercial text. I use old textbook sources.*(FG 3.4) *Homework tasks link to classroom content. I use the C2C unit linked to science, for example.* (FG 5.4) *I source from different level textbooks. I also source online activities.*(FG 5.5) *I use the C2C for maths. I used to use an old maths textbook but now I try to mirror what we are doing in class content. It works better.* (FG 6.7) *Mostly photocopied sheets out of a textbook.*(FG 6.6/7) *It is sourced directly from C2C* (FG 6.4a) *Activities come from my head, from a maths mental commercial text, sometimes specifically from my planning.* (FG 7.4a) *I was just copying a page of maths activities out of a really old textbook and it was not all that relevant to what I was teaching them so that was a problem. Now homework is revision.* (FG 8.5) *The year level of teachers share the responsibility for homework sheets so we use the C2C content as the main source for homework.* (FG 8.6) *It is sourced mostly from needs based items.* (FG 9.7a) *It comes from what I am doing in class."* (FG 9.4/5)	

Table 5: A sample - teacher perspectives for thread 'sources'

The table presents fifteen Middle years teachers' perspectives that use statements linked to the thread, 'sources'. Response statements tabulated in the table indicate, for example, that homework tasks/activities are developed from old textbooks, from curriculum objectives, from classroom-based needs, from on-line sources and from

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out of the teacher participants' heads. These are clear clusters of ideas that are represented through the statements. As shown in Figure 3, at Step 4, these clusters of ideas are grouped and labelled into particular categories. A sample of the identification of categories within the 'sources' thread is presented as Table 6.

Categories of teacher perspective statements within *sources* thread
1. Not linked to classroom content
2. Broad ACARA requirements
3. Online eg: Teach This, Spelling City, Study Ladder, Mathletics, Ed Studio and virtual homework folders
4. Current classroom content – C2C
5. Something they are not getting in class
6. Naplan textbook
7. Textbooks eg: Mathsmate, Soundwaves, other commercial texts, old textbooks
8. Activities out of my head.

Table 6: A sample – categories within 'sources' thread

At Step 5, as shown in Figure 3, teacher participant perspectives were tabulated. For each category, and through the use of tally marks, the number of teacher participants who responded to a particular category of statement was noted. The purpose for tabulating the perspectives was so that the extent of the way in which teacher participants talked about using particular teacher homework practices could be determined.

Findings

According to the focus group findings, teachers generally agree that homework connects home to school and that there are links between homework and student learning. All teachers identify that policy influences homework practice in as much that there is a mandated expectation that teachers will set homework, even if policy is not enforced. Commentary from teachers indicates that:

> *"I set homework because there is an expectation that I do so."* (FG 2.4)
> *"It seems that in this school, different teachers set different amounts of homework. There doesn't seem to be a consistent interpretation of the homework policy."* (FG 8.5)
> *"Whilst there is a homework policy in place here, it is not enforced, so there is a variety of homework practices across the school."* (FG 1.0)

Findings suggest that teacher views about the efficacy and value of homework are mixed. Nonetheless, all teacher participants set homework tasks; designing and developing homework tasks in some way. The results from the focus group data, in combination with an analysis of the shared teacher-developed homework tasks, indicate that common aspects of homework tasks can be described as paper-based, routinely formatted components in weekly tasks that are completed individually. Furthermore, there are consistent influences on, and steps used, in the process of homework design

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and development. Figure 4 presents a flowchart that summarises the key findings about the steps in the process of homework task design and development.

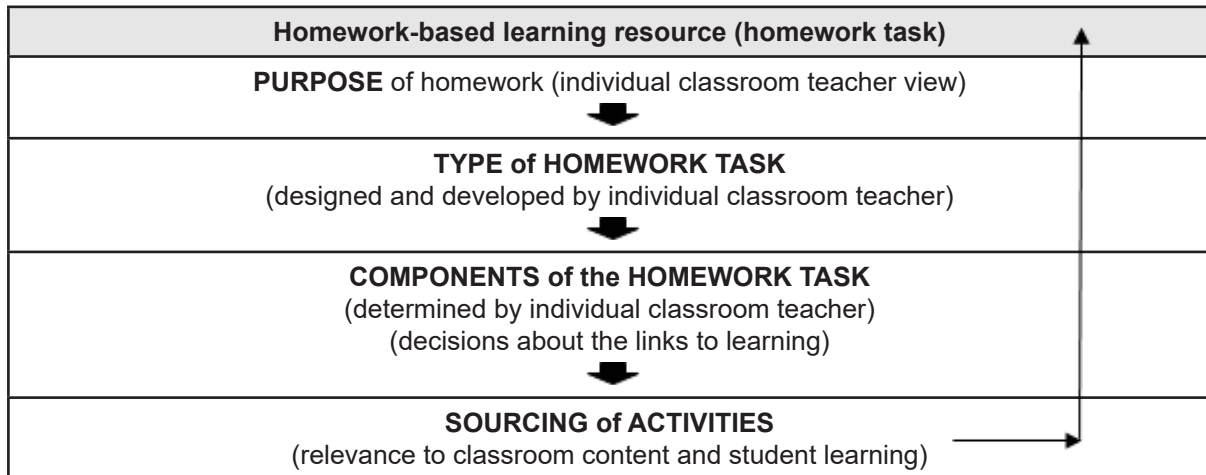| Homework-based learning resource (homework task) |
| :---: |
| **PURPOSE** of homework (individual classroom teacher view) |
| **TYPE of HOMEWORK TASK**
(designed and developed by individual classroom teacher) |
| **COMPONENTS of the HOMEWORK TASK**
(determined by individual classroom teacher)
(decisions about the links to learning) |
| **SOURCING of ACTIVITIES**
(relevance to classroom content and student learning) |

Figure 4: Steps in design and development process for homework tasks

Figure 4 shows that for the Queensland primary classroom teacher, the design and development of homework-based learning resources starts with the teacher identified purpose of homework. The findings showed that 'teacher view' about the purpose of homework was a key determinant in the process outlined in Figure 4. Once established, the identified purpose influences the type of homework task that he/she develops. For example, one teacher reported that:

> *"I only set homework because there is a school policy in place that says I have to. I don't value homework and I don't mark it. I just use a blackline master sheet for them to fill out and it does not even particularly link to what we are doing in class that week."*(FG 4.6)

This teacher view about the purpose of homework directly influenced the subsequent steps in the design and development process; commercially generated, generic homework tasks that made few links back to the classroom content were used. Alternatively, a different teacher reported that:

> *"I think that homework is really valuable. The students in my class get a lot of homework and I use it to consolidate the work that we have been doing in class that week."*

This particular teacher view influenced the design and development of homework tasks in very specific ways so that the activities used were taken directly from classroom work and the content was linked very explicitly to academic student learning.

As shown in Figure 4, after determining the 'purpose' for the homework task, the individual classroom teacher then makes decisions about the task components; the specific nature and selection of the items to be included, the formatting, the schedule

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for completion. Figure 4 shows that after that, the classroom teacher makes decisions about the source of activities; either from the classroom content or alternative activities sourced elsewhere. The two examples provided earlier offer evidence of the process in action.

Despite there being a consistent process used by teachers for homework task development, the findings show that there are distinct differences in the approaches used by early years and middle years teachers to homework task design and development. This is a significant finding. It was evidenced that common aspects of practice are considered but the aspects of practice are constructed in different ways according to fundamental differences in early years teachers' and in middle years teachers' orientations or approaches to homework. The findings indicate that the differences occur with respect to:

- teacher views about the purpose of homework;

- the ways in which teachers plan for homework tasks in systematic ways that link classroom content and learning objectives directly to the task; and

- the ways in which teachers design, develop and customise homework tasks sourced from classroom content and other sources.

The specifics of both orientations, early years and middle years, and the findings re the respective engagement with the homework task development process identified in Figure 4, are presented next.

Early years teachers' (Eyr) orientation to homework task design and development

Purpose of homework

The findings indicate that in the main, early years teacher participants strongly believed that the purpose of homework and homework tasks was to consolidate learning and to review relevant classroom content. The findings also suggested that the effect of the homework tasks is two-fold:

- classroom content is specifically reviewed within the learning resource; and

- parents/care-givers are informed through the task about the specific content that is being covered in the classroom.

Commentary provided by teacher participants in the focus group offers the following:

> *"Homework consolidates learning."* (FG 4.1b)
> *"What they do at home gets used in the classroom. I use homework for consolidation, just to get that extra bit of revision on the work we are doing in class."* (FG 1.1)

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> "*The key is that they have already been taught the content and the concept and they are just revising it at home.*" (FG 9.2)

The findings show that over half of the early years teachers reported that 'homework was very important'.

> "*Children have a lot of homework to do in my class. I value homework and would set it even if I didn't have to.*" (FG 1.1)
> "*I would absolutely set homework even if it was not mandated.*" (FG 9.2)

Type of task/components of the task

The mostly positive teacher viewpoints about the purpose and value of homework directly influence the type of homework task developed by the early years teachers. The findings indicate that three-quarters of the early years teacher participants developed tasks that are linked very closely to the classroom content, thereby reinforcing the consolidation and review of curriculum content and class work, as well as the development of literacy and numeracy skills. Results show that all teachers set nightly, levelled home-reading tasks, appropriate to student-learning needs. Over half of the early years teachers set levelled sight words, spelling words and number facts activities, all appropriate to student-learning needs. Additional English and mathematics tasks were set by a third of the teacher participants. Eighty percent of the early years teacher participants use paper-based homework tasks with another 20% using a combined on-line and paper-based homework learning resource. Commentary about the type of tasks developed by early years teachers describes that:

> "*There will be a content specific literacy task and a content specific maths task as well as number facts, reading and spelling. All of the content comes from our classroom work*". (FG 1.2)
> "*Reading, comprehension, maths, writing. I also use online Ed Studio and the online Mathletics program.*" (FG 2.3)

Source of activities/materials to support homework

As described above, the findings indicate that early years teachers draw on the classroom content and on the informing classroom curriculum as sources of homework task activity. The sourcing of activities is underpinned by systematic teacher planning for the development of the homework-based learning resource. Early years teachers draw on a variety of sources such as online sites (Mathletics, Reading Eggs, Study Ladder), student workbook material such as THRASS and Education Queensland curriculum learning materials (C2C, Curriculum to Classroom). Early years teachers collate the activities from the various sources into consistently formatted homework-based learning resources. Sample commentary from early years teachers about the sources of homework activity include:

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> *"We have nightly reading and sight words, spelling based on the C2C curriculum materials and on the commercial THRASS spelling program and levelled number facts."* (FG 4.1b)
>
> *"Spelling linked to C2C, overlaid with activities taken from the Soundwaves text, spelling sentences, reading log and maths activities that come directly from work we have done in class."* (FG 3.3).

Middle years teachers' (Myr) orientation to homework task design and development

Purpose of homework

The findings highlight that middle years teachers identify the main purpose of homework as being linked to the development of self-management/study skills that prepare students for secondary school.

> *"There is an expectation that you will be a self-managed student by the time you walk through those secondary school gates."* (FG 9.7a)

Whilst there is limited acknowledgement in the results that homework improves academic learning, the findings indicate that middle years teachers believe that the completion of homework tasks develops time management skills, organisational skills and self-managing study skills.

Type of task/components of the task

This identified purpose of middle year homework strongly influences the nature of the homework task that is developed. The findings indicate that spelling, mathematics, reading and English activities form the basis of routinely formatted homework sheets for the middle years classroom teachers.

> *"Usually there is a reading task, writing task, number fact task but they do not correlate with what we are doing in class. They are generic."* (FG 1.6)

Further, whilst the homework-based learning resources that are developed link in some way to the work to be done in the classroom, there may not be direct links between the homework task and the associated classroom instruction, point in time. Middle years homework-based learning resources are more generic in nature, covering the broad scope of year level content in mathematics and English in particular.

Source of activities/materials to support homework

The findings indicate that the use of generic content is acknowledged through the nature of the sourcing for activity used by middle year classroom teachers. Seventy-five percent source homework activities from generic classroom content; that is, content that will be covered at some point but not necessarily within complementary

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timeframes of classroom instruction and homework. Furthermore, the findings show that 66% of middle year teachers use commercial texts that are not specifically related to classroom work to source English activities.

> *"I source some of the spelling activities out of my head but mostly I just use a photocopied sheet out of a text."* (FG 5.5)
> *"Mostly I base my homework on the MathsMate textbook, just taking activities out of there and putting them into my own homework sheet."* (FG 2.6a)

There is evidence in the findings to suggest that half of the middle years teachers use classroom mathematics activities as a source for homework task activity.

"I try to use maths directly from my classroom so that they can do it for revision." (FG 6.4)

Discussion of findings

Two distinct orientations or approaches to homework practice have been identified; early years (Eyr) and middle years (Myr). This was not an unexpected finding given that the *Homework in State Schools* (Department of Education and Training, Queensland, 2006) homework policy provides homework guidelines for these two distinct phases of learning within the primary school context.

Both Eyr (early years) and Myr (middle years) primary classroom teachers use the same steps in the process to design and develop homework-based learning resources. However, the findings have highlighted that when classroom teachers design and develop homework-based learning resources, the two very distinct orientations to practice:

- are underpinned by very different ideations of homework *purpose*; and

- generate *tasks*, the *activities* for which are *sourced* in distinctly different ways.

Links to homework literature

There is consensus amongst researchers that the purpose of homework can be described broadly as instructional and non-instructional (Cooper, Robinson & Patall, 2006; Epstein & Van Voorhis, 2001; Horsley and Walker, 2013). The research findings presented in this paper concur. For example in the literature, 'instructional purposes' for homework include "practice, preparation, participation and personal development" (Epstein & Van Voorhis, 2001). In particular, 'practice, preparation and participation' align with the research findings that describe student learning with respect to the consolidation of skills and knowledge directly related to classroom content. This describes the early years teacher participants' orientation to homework-based learning resource design and development. 'Personal development' aligns with student learning with respect to

the development of self-skills (self-management, self-discipline, self-study); the middle years teacher participants' orientation to homework task development.

As well, the clear link between the purpose of homework and the types of homework tasks developed by classroom teachers, emerged through this research. The homework literature concurs. The purpose of homework influences the type of homework task designed and developed (Epstein & Van Voorhis, 2010).

Purpose of homework

Early years teachers believe that homework supports the consolidation and review of classroom learning. The homework-based learning resources that are designed and developed by early years teachers reflect this. The early years teachers consider the learning needs of individual students in more consistent and comprehensive ways. This is evidenced through differentiated and levelled activities that support literacy and numeracy learning. Homework tasks developed by early years teachers reflect a more individualised and customised orientation to homework-based resource development rather than a one-size-fits-all approach. This orientation towards resource development requires extensive planning on the part of the teacher so that the individualised nature of literacy and numeracy tasks can be sustained.

As well, there is an identifiable relationship between the aspects of homework practice that collectively characterise the early years teachers' orientation to homework task design and development. The early years teachers plan for homework and plan the development of tasks in systematic ways. The teacher participants describe the ways in which they plan to individualise homework tasks that scaffold classroom and homework content and meet intended student learning goals as outlined in curriculum documents:

> *"There is a lot of planning and direct teaching into the homework content."* (FG 2.0)

There are identifiable links between the work done in the classroom and the work sent home for review through homework tasks. This generates a communication link between school and home and parents are encouraged to assist in homework completion.

In contrast, for middle year teachers, the purpose for homework task development focuses on student completion of the task and the inherent self-study and management skills that are developed through that. There appears to be less teacher emphasis on the academic learning through homework (although some teachers do acknowledge this purpose) and a much stronger focus on the ways in which the student manages the task. Consequently, the content of the middle years homework task is more generic, and the activities link less directly to classroom instruction at the time that the task is sent home. The middle years homework task can be described as more of a 'one-size-fits-all' homework-based learning resource.

Unlike the early years teachers whose practices with respect to task design and development are inter-related through a focus on student learning, the middle years orientation to homework embraces non-related aspects of practice. In the middle years orientation, there is little planning directly linked to the design and development of the homework task and there is almost no evidence of the development of levelled, differentiated and customised homework tasks that address specific academic student learning needs. It is of interest as well that the findings do not articulate the ways in which self-management skills are learned and developed specifically through the middle years homework tasks, or if in fact, they are learned and developed. The mechanisms that are built into the homework tasks to achieve this learning outcome are not apparent. Yet, the teachers identify this as the key purpose of homework.

The homework literature purports that there is limited consensus to suggest homework actually does develop these skillsets in primary students (Eren & Henderson, 2008; Horsley & Walker, 2013; OECD, 2011).

As was the case though for the Eyr (early years) teachers, the Myr (middle years) teachers' identified purpose of homework influences the type of homework task that is designed and developed.

Sourcing activities for homework task development

In designing and developing homework-based learning resources, classroom teachers in the Queensland primary school context locate activities from a variety of different sources and collate them to create a weekly homework task. Both early years and middle years teachers draw on similar curriculum foci, namely mathematics and English (numeracy and literacy), as the basis for the homework-based learning resources that are developed. The key point of difference between the two is the source of the activities on which teachers draw.

Early years teachers draw directly on the classroom content and on curriculum documentation to inform the design and development of tasks, and to source homework activities. As noted earlier, the early years teachers' use of systematic planning makes explicit links between classroom and homework content through structured, scaffolded and purposeful homework-based learning resources. The reading, sightwords, spelling, number facts and additional English and mathematics activities are linked directly to the work done in class or are linked directly to the levelled learning needs of individual students. For early years teachers, sourcing comes directly from the classroom; relevant and authentic.

In contrast, a prominent characteristic of the middle years' orientation to homework task development is the use of online homework support activities and online platforms for storage of homework activities that can be accessed by school students at home. As one teacher described,

> *"We give them a hard-copy homework sheet but we also put it electronically into our Ed Studio with some additional supporting activities."* (FG 7.4a)

This increased online activity in the middle years' phase of learning (Australian Bureau of Statistics, 2011) might be explained by the focus on the use of technologies both inside and outside the classroom. In light of the teacher expectations to develop self-skills through homework, sourcing online activities for student use might be a teacher inducement to encourage students to complete homework tasks. It does however raise questions about the relevance of the materials used online that directly support the classroom content.

Whilst two-thirds of early years teachers source materials for homework-based learning resources directly from specific classroom content, three-quarters of middle years teachers use generic, non-classroom specific content for homework tasks and this is mostly evident in English. As well, two-thirds of the middle years teachers use commercial texts as the basis for activities that do not necessarily complement classroom instruction, but rather support a broad scope of content to be covered. As one teacher described,

> *"I use a range of student workbooks and I take basic English and mathematics activities out of them. The tasks don't necessarily match up with what I am teaching that week in class, but eventually we will cover the content in class. It is just revision of basic skills."* (FG 5.5)

The sourcing of materials on which to develop homework-based resources is a significant point of difference in the ways in which the teachers collectively approach homework. It is a significant point of difference with respect to the type of homework tasks that are developed.

For the early years teachers, the direct sourcing from the classroom content facilitates the development of levelled and individualised homework-based learning resources. For the middle year teachers, the more prominent use of commercial and textbook based activities results in generic, broad homework tasks that are not necessarily directly linked to student classroom learning, point in time.

Summary and conclusions

In Australia, Queensland primary school teachers do not send home textbooks to support homework activity. Rather, Queensland primary classroom teachers set homework, designing and developing homework-based learning resources for their students in response to homework policy demands. Homework policy mandates are linked to specific phases of student learning; early years and middle years in the primary schooling context. In responding to policy demands, individual classroom teachers interpret the policy and enact the policy through a 'systems-down, classroom-

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up' approach to teacher practice. It can be concluded that primary classroom teachers develop homework-based learning resources in ways that reflect an individual and idiosyncratic interpretation of, and response to, policy and homework guidelines.

This research has established the connection between individual teacher-perceived 'purpose' of homework, the type of homework-based learning resource that is developed in response to this purpose and the sources used to generate activities for the resource. Furthermore, and quite significantly, this research has established that early years teacher participants' identified purpose of homework is perceived to be different from that of middle years teacher participants, and this influences different types of homework tasks and teacher practices used to develop tasks. The research findings indicate that with respect to the design and development of homework-based learning resources, there are two distinct orientations; one used by early years teachers (working with children aged 4 - 8) and another used by middle years teachers (working with children aged 9 - 12). The research findings indicate further that each orientation can be described through specific collective characteristics of teacher practice.

Homework for the Queensland primary state schooling context is defined in the policy (*Homework in State Schools,* 2006) as activities designed to complement the work undertaken in class, premised on the notion that homework supports learning. This research has identified specific differences in the early years' and middle years' approaches to homework and to homework task development. The differences highlight inconsistencies in the ways in which teachers use relevant and authentic classroom content as the basis for homework tasks and in the teacher homework practices used to design, develop and scaffold instruction for homework-based learning resources.

It can be concluded from this research that primary classroom teachers in the Queensland (Australian) context:

- comply with policy expectation for homework through the use of a range of individualised teacher homework practices; and

- develop homework-based learning resources that are underpinned by a plethora of teacher perspectives about the purpose of homework in particular.

Nevertheless, the findings from this research also raise questions about the efficacy of homework and of teacher homework practices. The research into homework and teacher homework practices in the primary schooling context continues.

References

Australian Bureau of Statistics (2011) "Children of the digital revolution", Australian Government, Canberra [online], available from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features60Jun+2011>.

Australian Institute for Teaching and School Leadership. (2014). *Australian professional standards for teachers.* Retrieved from: <http://www.aitsl.edu.au/tools and resources>.

Baker, D. & LeTendre, G. (2005). *National Differences, Global Similarities:* World Culture and the Future of Schooling. Stanford University Press, Stanford.

Bennett, S. & Kalish, N. (2006). *The case against homework:* How homework is hurting children and what parents can do about it. Crown Publishing Group, New York.

Cooper, H. (1989). Synthesis of research on homework. *Educational Leadership,* v. 47, 85-91.

Cooper, H.; Robinson, J. C. & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research 1987-2003. *Review of Educational Research,* v. 76, 1-62.

Cresswell, J. W. (2003). *Research design:* Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: Sage Publications.

Department of Education and Training, Queensland. (2015). "Classroom into the Curriculum, C2C". Author, Brisbane [online], available from <http://education.qld.gov.au/C2C>.

Department of Education and Training, Queensland. (2006). "Homework in state schools policy". Author, Brisbane [online], available from <http://education.qld.gov.au/parents/pdf/homeworkpolicy.pdf>.

Dettmers, S.; Trautwein, U. & Ludtke, O. (2009). The relationship between homework time and achievement is not universal: Evidence from multilevel analyses in 40 countries. *School Effectiveness and School Improvement,* v. 20, 375-405.

Epstein, J. & Van Voorhis, F. (2010). More than minutes: Teacher's roles in designing homework. *Educational Psychologist,* v. 36, 181-193.

Eren, O. & Henderson, D. (2007). "The impact of homework on student achievement" [online], available from <http://ssrn.com/abstract=917447>. Accessed 12 July 2015.

Fox-Turnbull, W. H. (2013). The nature of conversation of primary students in technology education: Implications for teaching and learning. *Waikato Journal of Education,* 18(2), 175-176.

Gill, B. & Schlossman, S. (2003). Parents and the politics of homework: Some historical perspectives. *Teachers' College Record,* v. 1, n. 5, 846-871.

Hattie, J. (2009). *Visible learning:* A synthesis of over 800 meta-analyses relating to achievement. Oxon, MD: Routledge.

Hoover-Dempsey, K.; Battiato, A.; Walker, J.; Reed, R.; DeJong, J. & Jones, K. (2001). Parental involvement in homework. *Educational Psychologist,* v. 36, 195-209.

Horsley, M. & Walker, R. (2013) *Reforming homework:* practices, learning and policy. Palgrave Macmillan, Melbourne.

Izbicki, J. (2008). Homework for primary schools. *Education Journal,* v. 110, 25-35.

Kohn, A. (2006). *The homework myth:* Why our kids get too much of a bad thing. Da Capo Press, Cambridge.

Lyle, J. (2002). Stimulated recall: A report on its use in naturalistic research. *British Educational Research Journal*, 29(6), 861-878.

Mackey, A. & Gass, S. M. (2005). *Second language research:* methodology and design. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

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Morgan, D. (2002). Focus group interviewing. In: Gubrium, J. F. & Holstein J.A. (Eds.). *Handbook of interviewing research:* Context and method. Thousand Oaks, CA: Sage. p. 141-159.

Organisation for Economic Co-operation and Development. (2011). *Trends in international mathematics and science study.* OECD Publishing, Paris.

Organisation for Economic Co-operation and Development. (2013). *Education policy outlook:* Australia. OECD Publishing, Paris.

Organisation for Economic Co-operation and Development. (2014). Does homework perpetuate inequities in education? *PISA in Focus*, v. 46 [on-line], available from <http://dx.doi.org/10.1787/5jxrhqhtx2xt-en>. Accessed 20 April 2016.

Patall, E.; Cooper, H. & Robinson, J. (2008). Parent involvement in homework: A research synthesis. *Review of Educational Research,* v. 78, n. 4, 1039-1101.

Trautwein, U. (2007). The homework-achievement relation reconsidered: differentiating homework time, homework frequency and homework effort. *Learning and Instruction,* v. 17, 372-388.

Trautwein, U. & Koller, O. (2003). The relationship between homework and achievement – still much of a mystery. *Educational Psychology Review,* v. 15, 115-145.

Trautwein, U.; Ludtke, O.; Schnyder, I. & Niggli, A. (2006). Predicting homework effort: Support for a domain-specific multilevel homework model. *Journal of Educational Psychology,* v. 98, 438-456.

Trautwein, U.; Koller, O.; Schmitz, B. & Baumert, J. (2002). Do homework assignments enhance achievement? A multilevel analysis in 7th grade mathematics. *Contemporary Educational Psychology,* v. 27, 26-50.

Van Voorhis, F. (2004). Reflecting on the homework ritual: Assignments and design. *Theory Into Practice,* v. 43, 205-212.

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