

What Is Homework For? Hong Kong Primary School Teachers' Homework Conceptions

Vicky C. Tam and Raymond M. C. Chan

Abstract

It is generally agreed that student homework has the potential to extend learning beyond the classroom. Teachers play a crucial role in the design and implementation of these assignments. Their beliefs and perceptions are important factors in determining the type and load of homework. This mixed methods study focuses on teachers' homework conceptions, that is, how teachers think about or perceive the nature and purpose of homework. It examines Hong Kong Chinese primary school teachers' homework conceptions with respect to preference for assignment type and perception of homework functions. Findings draw from questionnaire survey data collected from 317 teachers together with focus group interviews involving 38 teachers. On the whole, respondents support the use of homework assignments to serve various academic and nonacademic functions. Tension between tradition and change is reflected in their preference for drilling versus nondrilling assignment type. Furthermore, questionnaire survey results indicate that teacher efficacy relates to preference for nondrilling assignments and endorsement of the homework functions of enhancing long-term learning and supporting home-school communication. Implications for homework design, teacher preparation, and future research on teacher conceptions are discussed.

Key Words: homework, Chinese teachers, conceptions, function, preferences, Hong Kong, perceptions, primary schools, elementary

Introduction

It is generally accepted that student homework has the potential to extend the learning process commenced in the classroom by providing opportunities for practicing skills, increasing learning-task involvement, as well as fostering self-discipline and responsibility (Epstein, 1988). Given its significance, there has been discussion in various education systems around the world with regard to appropriate homework load, assignment type, and purposes (Cooper, 2001; Eren & Henderson, 2011; Kralovec & Buell, 2000). Homework assigned to students at elementary or primary school levels is particularly worthy of attention so as to optimize the use of these young children's limited cognitive and physical capacity in managing take-home assignments. As teachers play a crucial role in homework design and implementation, there is a need to understand their views and thinking so as to prepare new educators for these important tasks.

It is the focus of this study to examine the homework conceptions of Chinese primary school teachers in Hong Kong. This specific education system provides an intriguing context for homework research with respect to changing cultural and societal demands. On one hand, Chinese children in Hong Kong and elsewhere spend a substantial amount of time on school-related assignments every day (Chen & Stevenson, 1989; Dandy & Nettlebeck, 2002; Tam, 2009). Their heavy engagement in homework stems from the traditional Chinese culture that is achievement-oriented and puts an emphasis on intensive drilling and practice (Salili, Zhou, & Hoosain, 2003). On the other hand, education reform in Hong Kong highlights the proper role of homework for meeting the challenges of the 21st century. Schools are urged to set meaningful homework assignments and to regulate the frequency and amount to keep students inspired and wanting to do homework (Curriculum Development Council, 2002). This tension between traditional values and practices versus changing societal demands—which is also encountered in other education systems that experience rapid transformation—has to be resolved at the system, school, and classroom levels. This study on Hong Kong teachers' conceptions elucidates the views and beliefs behind the design and use of homework assignments. It also makes an attempt to examine how these teacher cognitions relate to one of the attributes reflecting teaching performance and outcomes, namely teacher efficacy. This attribute refers to the belief teachers hold about their individual capacity to teach effectively and to influence student learning (Klassen, Tze, Betts, & Gordon, 2011). It is of specific interest to explore how teachers' views on the purposes of homework and preference for assignment type and load are linked to efficacy belief on teaching. The findings of this

study will inform teacher education programs in Hong Kong and elsewhere on developing novice teachers' capacity on the design and use of homework. There is also the potential for this study to enlighten policymakers and school administrators about teachers' homework conceptions when planning for curriculum changes and innovations that involve student work and assignments.

Teachers' Homework Conceptions

Teachers' beliefs and perceptions are important factors affecting instructional practices and student achievement (Fang, 1996; Stevens & Vermeersch, 2010). Among various conceptualizations of cognitions, teachers' conceptions refer to how they think about or perceive the nature and purpose of an educational process and practice (Thompson, 1992). Previous research on teachers' conceptions has examined views on specific academic subjects (Yilmaz, 2008), language competence (Baleghizadeh & Shahri, 2014), student assessment (Brown, Lake, & Matters, 2011; Segers & Tillema, 2011), and teachers' professional roles (Swann, McIntyre, Pell, Hargreaves, & Cunningham, 2010). These studies on teachers' cognitions are useful in providing an understanding of the function and structure of beliefs as well as in interpreting the nature of the relationship between beliefs and professional practices (Thompson, 1992).

When teachers design and implement homework, they often draw upon their own beliefs and perceptions about the nature and purpose of the assignments. Epstein (1988) pointed out that homework was assigned by teachers to serve a range of functions, namely, to practice skills, to foster students' personal development, to establish parent-child communication about schoolwork, to fulfill system policy prescriptions about homework, and as punishment. These perceived functions are likely to link to the type and amount of homework assigned. Various aspects of teachers' homework conceptions have been examined in studies conducted in different education systems around the world. These include homework functions or purposes (Bang, 2012; Brock, Lapp, Flood, Fisher, & Han, 2007), preference for assignment type (Kaur, 2011; Trautwein, Niggli, Schnyder, & Ludtke, 2009), and perceived homework problems (Hong, Wan, & Peng, 2011). For example, the study of Brock and her associates (2007) on elementary school teachers in the U.S. has demonstrated a range of perceived homework functions including practicing skills and teaching discipline, as well as meeting parental expectations and system requirements. Kaur (2011) reported Singapore Grade 8 teachers' preference for review, practice, and drill types of assignments. Another study on Grade 8 classes conducted in Switzerland showed an association between a low emphasis on drill and practice homework tasks and students' homework effort and achievement (Trautwein et al., 2009). The above studies indicated how

teachers' homework conceptions related to the type, load, and effectiveness of assignments. So far only a few studies on teachers' homework perceptions and attitudes focus on elementary schools. Furthermore, no study has been done to demonstrate how teachers' homework conceptions relate to teaching attribute or performance.

This study is a fresh attempt to examine teachers' homework conceptions in changing Chinese educational contexts. It provides an opportunity to show how educators' pedagogical orientations and practices are ingrained in cultural values and beliefs vis-à-vis transformation brought about by curricular reform. Tam and Chan's (2011) study on homework conceptions of Chinese parents and students in Hong Kong reported a continuation of cultural values on homework importance and responsibility in conjunction with a de-emphasis on the traditional preference for assignments emphasizing drilling. It is of interest to see if the views and perceptions of Hong Kong teachers also demonstrate similar patterns of continuity and change. Furthermore it was shown in Tam and Chan's (2011) study that Hong Kong students' and parents' preference for nondrilling assignment and appreciation of the learning and communication functions of homework were linked to personal efficacy beliefs. The current investigation extends upon these findings by relating teachers' homework conceptions to efficacy beliefs. Teacher efficacy relates to the belief about personal capacity to carry out professional pedagogical tasks. It incorporates the ability to create an adequate learning environment and to deliver academic instruction (Pas, Bradshaw, & Hershfeldt, 2012). Research studies have associated teacher efficacy with a range of teaching behaviors and performances including innovative teaching techniques, higher expectations for students' outcomes, as well as more job satisfaction and professional commitment (see Haverback & Parault, 2008 and Klassen et al., 2011 for reviews). Building upon the existing literature, this study investigates Chinese teachers' conceptions of homework preference and functions and relates these conceptions to efficacy belief on teaching performance.

Finally, compared to secondary school, primary school curriculum in Hong Kong is less constrained by demands of public examination. This renders it possible for teachers to design homework assignments for meeting multiple academic and nonacademic purposes. Hence this study focuses specifically on primary school teachers' homework conceptions.

Method

This study was part of a larger research project on homework in primary schools in Hong Kong (Tam, 2009; Tam & Chan, 2009, 2010, 2011). The

present study included data collected from teachers through focus group interviews and a questionnaire survey. Mixed methods design was employed as it allows for corroborative evidence for the interpretations of the results that enlighten understanding on teachers' conceptions (Brown et al., 2011). While the focus group interviews explored context-specific conceptions of homework, data generated from the questionnaire survey described the profile of teachers' homework conceptions and was used to examine relationships between homework conceptions and teacher efficacy.

Sample

Questionnaire data for this study were collected from 317 teachers (78.9% female) in 36 government, subsidized, and private primary schools. This sample, taken together, represented teaching at all six primary grade levels with an average of 14.69 years ($SD = 9.03$) of experience. In terms of professional rank, 53.9% ($n = 171$) were teachers holding senior posts in the school including deputy headteacher, curriculum chair, and subject panel chair, while the rest were junior teachers. The focus group interviews involved 38 teachers (86.8% were female) from four schools. Twenty-two of these teachers held senior posts. Informed consent from the participants was received prior to data collection.

Focus Group Interviews

Eight focus group interviews were carried out on school premises. Each interview involved four to five teachers and lasted between 50 to 60 minutes. We conducted these semi-structured interviews in Cantonese, a Chinese dialect native to Hong Kong. The interview protocol covered topics on preferences of assignment types, perceived functions of homework, as well as expectations of students' and parents' involvement in homework. All interviews were transcribed verbatim in Chinese. The transcripts were then analyzed using coding procedures recommended by Taylor and Bogdan (1998) and Auerbach and Silverstein (2003) that involved developing a coding list, sorting and comparing the data, as well as organizing ideas and themes into a narrative. A list of 10 codes was used which included, among others, amount and type of homework assigned, considerations on assigning homework, functions of homework, school support for homework, and observed and expected student involvement in homework. Through the support of the NVivo qualitative data management and analysis software, interview data were categorized and organized for identification of themes or key content that elucidated teachers' views and practices on homework. The key content was then incorporated with the survey results into an integrative narrative as reported in the Results section.

Questionnaire Survey

The questionnaire used in the research project was written in Chinese language and included a host of measures including homework preference, perceived homework functions, and teacher efficacy. The self-administered questionnaires were distributed to teachers through their schools and were returned to the research team by postal mail.

Homework Preference

A seven-item inventory was developed for the research project to measure preference for two homework types: drilling assignments that involve text copying or rote memory; and nondrilling assignments requiring thinking, imagination, reading, peer collaboration, or parent–child collaboration (Tam 2009; Tam & Chan, 2011). Teachers reported on a five-point Likert scale (1 = very unimportant and 5 = very important) the extent to which they found a specific assignment type important for enhancing learning and child development. Cronbach's alphas for the two subscales were .74.

Perceived Homework Functions

An inventory of 12 items tapping perception on the functions and purposes served by homework assignments was developed for the research project (Tam, 2009; Tam & Chan, 2011). Four subscales were formed, covering homework functions of: (a) meeting immediate learning goals (4 items): to review learning, to prepare for quizzes and examinations, to comprehend things learned, and to apply learning; (b) meeting long-term learning goals (3 items): to learn time management and responsibility, to improve learning skills, and to enhance learning interests; (c) meeting external demands (3 items): to meet teachers' demands, to punish students, and to please teachers and parents; and (d) enhancing home–school communication (2 items): parent–child communication, and parent–school communication. Responses to each statement were measured on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). Cronbach's alphas for the four subscales were .76, .70, .67, and .63, respectively.

Teacher Efficacy

A self-reported measure of instructional self-efficacy adapted from Bandura (2006) was used to assess teachers' self-beliefs of capability in managing teaching and learning. There were four items in this scale (e.g., “how much can you do to motivate your students who show low interest in schoolwork?”). Responses were collected using a five-point scale (1 = not at all and 5 = very much). Cronbach's alpha was .69.

Results

Findings of the focus group interviews and the questionnaire survey are reported in the following integrative narrative. It elucidates the profile of Hong Kong primary school teachers' conceptions of homework and the relationships to teacher efficacy. English translation of verbatim quotes extracted from the interviews is also included as support for validity.

Teachers' Expected Student Involvement and Preference for Assignment Type

Primary school teachers taking part in this study considered homework an essential part of learning. Results of the questionnaire survey showed that the majority of the teachers (70.9%) expected students to spend more than one hour each day on take-home assignments and revisions, whereas none endorsed no homework (see Figure 1). The profile reflected teachers' recognition of the essential role of homework in primary school education. In the interviews, they explained their support of homework by making reference to the unique educational context. Primary One teacher A (Note: a subject code was assigned to each focus group participant) cited large class size as a rationale to use homework intensively for learning assessment:

Under the current education system in Hong Kong, resources allocated by the government to the schools are quite limited. We really need to make use of homework to assess students' learning. Foreign countries tend to put more resources into schools so the teacher–student ratio is low. For them, it is acceptable not to assign homework to students.

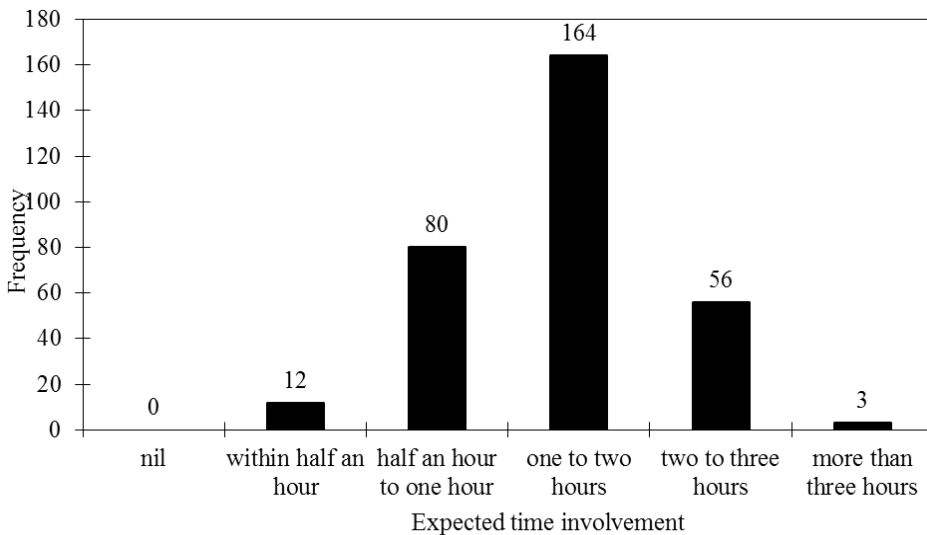


Figure 1. Frequency distributions of expected student involvement in homework.

Another context-specific rationale for the support of homework relates to the emphasis on bilingualism in the Hong Kong education system. Beginning in kindergarten, children learn the Chinese language as their mother tongue and English as a second language. Homework is thus deemed essential for building up skills and competence in two languages. Senior teacher B shared her view on English learning:

English is a second language to our students. So they need to copy text in order to strengthen their memory. It is especially the case with students whose parents are not competent to supervise English learning; they need to put more time in practicing.

These teachers' narratives indicate the perceived significance of written assignments emphasizing drilling and practice for second language acquisition.

The questionnaire survey data provided the profile of teachers' preference for assignment types. Teachers as a group showed higher preference for non-drilling assignments involving thinking, imagination, peer collaboration, and reading ($M = 4.04$, $SD = 0.43$) than for drilling assignments including copying text and memorization ($M = 3.00$, $SD = 0.64$). Yet, it was interesting to note the larger value of standard deviation of preference for drilling assignments, indicating variations among teachers in preference for traditional homework that emphasizes mechanical practice and memorization. We explored variations in preference for assignment type by examining two professional background factors, namely rank and years of experience. Results of independent sample *t*-tests reported no significant professional rank differences in preferences. In other words, senior and junior teachers held similar views on homework types. Analyses based on bivariate correlations between teaching experience and preference for the two assignment types showed a significant negative relationship with preference for drilling assignments only, $r = -.16$, $p < .01$ (see Table 1), but not with nondrilling assignments. Specifically, compared to novice teachers, experienced teachers indicated lower preference for homework involving memorization and copying.

In the interviews, teachers voiced their support for drilling assignments. English Language and General Studies teacher C stated her view with reference to language learning:

I find copying text very helpful even though the Education Bureau keeps saying that it is useless. It helps students learn the [Chinese] characters. It would be useless copying text all day, but through the process students learn the characters and the strokes involved. I have experimented with and without assigning copying text as homework before a dictation and found a major difference in students' performance.

C's revelation indicated how she, like many other local teachers, found value in traditional assignments while she acknowledged that such a view did not align with the requirements of curricular reform. The balance between drilling and nondrilling assignments needs to be considered in the design of homework for meeting learning goals specific to the academic subject.

Table 1. Intercorrelations for Scores on Teacher Background Variables, Homework Conception Variables, and Teacher Efficacy

	2	3	4	5	6	7	8	9
1. Teaching experience	.12*	-.16**	-.01	-.01	-.02	.14*	.14*	.06
2. Professional rank		.06	-.03	.02	.03	.16**	.11	.15**
3. Preference for drilling assignments			.16**	.06	.10	-.02	.03	.03
4. Preference for non-drilling assignments				.32**	-.06	.17**	.15**	.25**
5. Perceived function – Meeting immediate learning goals					.08	.29**	.37**	.22**
6. Perceived function– Meeting external demands						.05	-.01	-.02
7. Perceived function – Meeting long-term learning goals							.41**	.34**
8. Perceived function– Enhancing home–school communication								.34**
9. Teacher efficacy								

Notes: $N = 317$; * $p < .05$; ** $p < .01$.

Teachers' Perceptions of Homework Functions

Focus group participants cited a host of academic and nonacademic functions fulfilled by doing homework. The learning functions mentioned included consolidating and monitoring learning and preparing for assessment. Other functions of homework mentioned in the interviews related to nonacademic aspects, namely facilitating personal development, enhancing home–school communication, and serving as punishment for misbehaviors.

First of all, teachers found homework important for consolidating learning, specifically in promoting comprehension and enhancing recall. English

Language teacher D explained why she believes homework assignments help students to strengthen learning:

If you are presented with something you have just learned a few hours ago and what you have learned helps you to complete a certain task, then the activity will boost your long-term memory on that piece of learning.

Chinese Language teacher E drew upon school children's developmental characteristics to support the benefits of homework:

I believe that children learn through certain processes. We cannot simply ask them to look at the textbook. We need to ask them to read aloud or copy the text. There has to be some output. Children are different from adults; adults can acquire knowledge through reading, while children cannot.

Teachers also spoke on the functions of homework in monitoring learning progress and improving teaching. Deputy School Head F shared her views:

When students work on assignments that are related to the lessons, they realize how much they have learned. Sometimes students think that they know the materials. But when they go home and work on the assignments, they find out that they don't quite understand. When students have this awareness, teachers are able to offer help to them.

Doing homework thus provided an opportunity for primary school students to review learning attainment. Furthermore, Chinese Language senior teacher G described how homework enhances her teaching:

Sometimes I notice that many students make a similar mistake in a certain piece of an assignment. Then I start to think whether it is a problem with my teaching so that they did not get what I said.... Then I can do some follow-up work the next day to explain further and to improve learning.

These two examples showed the ways in which teaching and learning could be monitored through the feedback provided by homework to teachers and students. Given the significant role of homework in the pedagogical process, teachers in the interviews raised the concern that the learning purposes of assignments should be explained to the students so as to instill positive homework attitudes. Another Chinese Language senior teacher H remarked:

As part of their process of learning, students need to understand the purposes behind doing homework. Teachers do not assign homework simply to fill up students' free time. The purposes of homework are very important. You learn something, and then there is a follow-up assignment. This is the process of learning. If students understand this point, they will hold a different view on homework.

Teachers indicated how homework benefited students by preparing them for assessment. This instrumental perspective was crucial in the examination-oriented education system in Hong Kong. Students' successes in assessment bore important consequences not only to themselves, but also to their teachers. Mathematics teacher J said frankly, "We have practical concerns....There is pressure on us with regard to Territory-Wide System Assessment.¹ If there is no preparation and students' performance is below the basic competency standards, teachers will be affected." J's remarks highlighted the high-stakes assessment system in Hong Kong and pressure on teachers to ensure good exam results. Homework was thus also a tool for meeting external demands.

Secondly, other than functions related to academic gains, doing homework was considered contributive to personal growth. Primary One teacher K shared her belief, "Students do homework in order to build up knowledge. At the same time, homework helps students to develop independence and confidence." She expressed the conviction that children developed virtues such as personal responsibility and accountability through doing homework. In this regard, homework facilitates whole-person development and serves long-term learning goals.

Thirdly, teachers elucidated how homework provides a platform for home-school communication. By supervising homework, parents got to understand children's learning. Primary Three teacher L reported her observation:

In my class, I find that students with parental support in doing homework tend to have better learning outcomes. Even when parents may not be capable of supervising homework, the support they render to children is beneficial in enhancing learning. It is also important for parents and the teacher to communicate on students' performance.

Her view supported the importance of parental involvement in children's education. There was also another home-school communication function of homework expressed in the interviews. As pointed out by Primary Six teacher M, students' personal changes could be observed through tracking homework performance: "If a student's homework performance deteriorates suddenly, there may be some family problems. We can make observations like this through homework assignments." Observant teachers like M were able to take note of homework performance to find out about nonacademic aspects of life affecting the students.

Finally, the use of homework as a form of punishment was mentioned in the interviews but is on the whole considered inappropriate and ineffective. Deputy School Head N held a strong view on this point, "If students are punished for talking in class by copying text, the punishment is irrelevant to the misdeed....They won't understand the purpose of the punishment."

Teachers' conceptions of homework functions were further examined in the questionnaire survey. Results of one-way within-subject ANOVA showed significant differences among individual teachers' endorsement of the four homework functions, $F(3, 948) = 933.74, p < .01$. Post-hoc pairwise comparisons indicated that among the 317 teachers sampled, higher endorsements of homework functions of meeting immediate learning goals ($M = 4.13, SD = 0.44$) were reported as compared to the other two functions of meeting long-term learning goals ($M = 3.71, SD = 0.50$) and enhancing home-school communication ($M = 3.65, SD = 0.59$). Teachers as a group gave lower endorsement to the function of meeting external demands ($M = 2.33, SD = 0.60$) than all the other three functions ($ps < .01$ for all pairwise comparisons). Results of independent sample t -tests comparing professional rank difference showed that teachers holding senior administrative posts were more likely to see homework for meeting long-term learning goals ($M = 3.78, SD = 0.49$) than their junior counterparts ($M = 3.62, SD = 0.51$), $t(312) = 2.77, p < .01$. No rank difference was reported with the other three perceived homework functions. Furthermore, teaching experience was found to correlate with two of the perceived functions, namely meeting long-term learning goals and enhancing home-school collaboration, $rs = .14, p < .05$ (see Table 1). The more experienced the teachers, the stronger their endorsement of these two homework functions.

Relationships Among Homework Conceptions and Teacher Efficacy

The associations of homework conceptions with teacher efficacy were examined using hierarchical regression analysis on the questionnaire data. The analysis allowed for a comparison of the relative contribution of homework conception variables in predicting teacher efficacy when controlling for professional background factors. Bivariate correlations between teacher efficacy and teacher characteristics and homework conception variables are reported in Table 1. Teaching experience, preference for drilling assignments, and the homework function of meeting external demands showed insignificant correlations with teacher efficacy, and these variables were dropped from further analysis. The rest of the predictor variables were entered into the hierarchical regression model in two blocks: (1) professional rank, dummy-coded; (2) preferences for drilling and nondrilling assignments, and the perceived homework function variables of meeting immediate and long-term learning goals as well as enhancing home-school communication.

Results of the regression analysis are presented in Table 2. The regression model was significant at both steps, with 3% and 20% of total R^2 explained, $F(2,301) = 4.37, p < .05$ and $F(8, 295) = 8.91, p < .01$, respectively. At step

2, R^2 change (.17) was significant, $F(6, 295) = 10.12, p < .01$, showing that homework conception variables were important predictors of teacher efficacy above and beyond professional rank. Among them, preference for nondrilling assignments, together with the two perceived function variables of meeting long-term learning goals and enhancing home–school collaboration, were significant positive predictors of teacher efficacy, β s = .19, .20, and .21, respectively, all $ps < .01$. Implications of these findings on the design of homework and teacher preparation are discussed in the next section.

Table 2. Hierarchical Regression Analysis Predicting Teacher Efficacy

Variable	Teacher Efficacy	
	Step 1 β	Step 2 β
Professional rank	.15**	.11*
Preference for nondrilling assignments		.19**
Meeting immediate learning goals		.02
Meeting long-term learning goals		.20**
Enhancing home–school communication		.21**
Total R^2	.02**	.21**
Incremental R^2		.18**

Notes. $N = 317$; * $p < .05$; ** $p < .01$.

Discussion

This mixed methods study on Hong Kong Chinese primary teachers’ homework conceptions indicated how beliefs and perceptions of the nature and functions of homework are rooted in the sociocultural contexts of the education system. It is one of few research attempts that has focused on homework and teachers’ homework conceptions in Hong Kong. Findings are discussed in terms of implications for school practices and teacher preparation in Hong Kong and other education systems.

Hong Kong Primary School Teachers’ Homework Conceptions

We have shown in this study that Chinese primary school teachers in Hong Kong in general favored the use of homework and that they expected students to spend about an hour a day completing assignments at home. These views reflect Chinese cultural values for effort and practice as a significant component of schooling (Salili et al., 2003). Moreover, homework was considered essential in Hong Kong schools as a way to cope with limited resources as well as to manage bilingual learning. These findings reveal how teachers’ conceptions of

homework as pedagogical tools are strategic to the demands of the local education system.

Our survey data showed that teachers as a group preferred nondrilling assignments that encourage thinking, creativity, and other intellectual and non-intellectual abilities over traditional assignments requiring drilling and practice. At the same time, focus group interviews revealed teachers' recognition of the contribution of drilling and practice to children's learning, especially given the heavy demand of bilingual language education in the local system. Such views reflect how cultural values and ideologies are ingrained in the thinking and practices of teachers. It also indicates a tension between following traditional practices and managing change brought forth by curricular reform, which has been similarly documented in Hong Kong Chinese teachers' conceptions of assessment (Brown, Kennedy, Fok, Chan, & Yu, 2009). Consideration is thus needed in the design of homework that takes into account cultural practices while at the same time provides various assignment types unique to the demands of specific academic subjects, rendering sufficient opportunities for the development of a diverse range of skills and competences. A balance of assignment types should be considered in designing homework so as to achieve the various academic and nonacademic functions.

Teachers in the focus group interviews reported their perceptions on diverse academic and nonacademic functions served by homework. Their conceptions are in line with findings reported in previous studies conducted elsewhere (e.g., Epstein, 1988). Our survey results showed that teachers in Hong Kong considered homework beneficial for consolidating and monitoring learning and developing positive virtues in students. At the same time, take-home assignments were used as a tool to improve teaching, as well as a mechanism for enhancing home-school communication. The overall positive conceptions among Chinese teachers in Hong Kong leave little room for a case against homework, contrasting with those who have sometimes criticized it as a waste of time (Eren & Henderson, 2011) or a source of stress to children and families (Kralovec & Buell, 2000). From a cultural and professional vantage point, the challenge for our Hong Kong Chinese teachers is not a black-and-white acceptance or rejection of homework. Our findings on homework functions point to the need to design and use homework to serve a variety of teaching, learning, and developmental purposes.

One important contribution of this study is the investigation of the relationships between homework conceptions and teacher efficacy. While correlational analysis using cross-sectional data did not allow us to determine the direction of cause-effect relationships, our findings demonstrated the link between conceptions on professional practices to beliefs in professional competence. We

showed that after controlling for professional rank, teacher self-efficacy related to homework conceptions, in particular preference for nondrilling assignments and appreciation of the long-term learning purposes and home-school communication functions served by homework. In other words, teachers' appraisal of their competence in managing teaching and learning anchored upon recognition of the wider homework functions that develop important values, learning attitudes, and skills in students and that draw in parental involvement, as well as the preference for homework assignments emphasizing reading, peer collaboration, thinking, and creativity. In such regard, the understanding of teachers' homework conceptions carries important implications in teacher preparation and professional development. Furthermore, our findings on the relationship between teacher conceptions and efficacy beliefs corroborates with studies on parents and students that link homework perceptions to efficacy beliefs (Tam & Chan, 2011). These observations together render support to cognition-oriented frameworks in understanding teaching and learning processes (e.g., Bang, 2012; Thompson, 1992).

Designing Homework: Practice and Guidelines

Curricular reform in Hong Kong has highlighted setting meaningful homework so that its important functions can be met by emphasizing its quality and not its quantity (Curriculum Development Council, 2002). Bembenuity (2011) suggested that the effectiveness of homework is enhanced by teachers who understand the pedagogical benefits of homework, assign homework when it is necessary, and provide homework assignments that appeal to the students' interests while maintaining solid curricular objectives. Clarification and affirmation of homework conceptions is thus a critical component in the development of teaching competence. By explicating homework functions and how these assignments are embedded in the contextualized teaching and learning processes, this study can be helpful in orienting teachers and school administrators in the design and use of homework for academic and nonacademic purposes. Homework functions should be considered when planning and designing the load and type of student assignments. Our findings reveal Hong Kong Chinese teachers' support of drilling-type homework that serves the immediate learning purposes of reviewing and consolidating materials, especially given the bilingual educational context. At the same time, emphasis should also be given to assignments that meet the long-term learning functions of developing academic interest and skills. Examples include individual and group projects that address cross-curricular content and draw upon creative thinking and problem-solving skills.

Finally, teachers and schools should also consider the home–school communication role of homework which includes designing assignments that explicitly involve parents, as in parent–child projects. Furthermore, it is important that the purposes of homework assignments be communicated to students and parents so that they recognize and support the significance of homework. As Segers and Tillema remark (2011), the effectiveness of homework as a form of assessment can be enhanced when teachers’ and other stakeholders’ conceptions of learning, teaching, and assessment are congruent. The views of parents and students should thus be considered and incorporated so as to make effective and efficient use of homework efforts (Bang, 2012; Tam & Chan, 2011; Tas, Vural, & Öztekin, 2014). Homework functions and objectives are best made explicit in school- and system-based guidelines that are developed in collaboration among teachers, school administrators, parents, and students. These guidelines or policies can help affirm the value of homework and align the expectations and behaviors of major stakeholders. As indicated from the results of our study, the formulation of homework guidelines should take into account the social and cultural expectations in each school system’s society.

Preparing Teachers for Homework Design and Use

Given the significant role of homework in Hong Kong, it is surprising to find that its design and implementation have not been incorporated explicitly in the local Teacher Competencies Framework (Hong Kong Advisory Committee on Teacher Education and Qualifications, 2003) nor in local teacher education programs. As this study demonstrates the significant contribution of homework conceptions to teachers’ efficacy beliefs, we urge that teacher training programs in Hong Kong and elsewhere pay more attention to addressing homework types and functions so as to facilitate professional teachers’ role in the design and use of homework. The demand is especially important for novice teachers who have yet to accrue consolidated understanding and conceptions of the best assignments to hand out to students. Education reform taking place in Hong Kong and elsewhere in the world makes it essential to systematically include critical discussion of homework types and the respective potentialities in preservice and advanced, in-service teacher education curricula (Epstein & Van Voorhis, 2001; Trautwein et al., 2009). Findings stemming from this study on teachers’ conceptions inform the curriculum design of teacher education programs to ensure teachers develop competency in designing and using homework. Past research has demonstrated that teacher preparation is linked to teaching efficacy (Pas et al., 2012). By preparing teachers for the important task of homework design and use, they become more confident in making homework more effective.

Future Research

This study examined primary school teachers' conceptions of homework in Hong Kong. While we interpret its findings with respect to this unique sociocultural context, this investigation has the potential to trigger the interest of researchers and practitioners in other Chinese and non-Chinese education systems to reflect on similar issues and concerns encountered in homework design and use.

With recent advances in educational technology, teachers now have a multitude of tools to assist and enhance student learning and motivation. The nature and functions of homework are likely to change with the integration of technology in teaching and learning. For instance, web-based homework, among other new technologies, has been increasingly adopted in schools in Hong Kong and elsewhere in the world (Medicino, Razzaq, & Heffernan, 2009). Future studies should investigate how teachers' homework conceptions relate to and accommodate such pedagogical transformation.

Future research should also examine the homework conceptions of teachers and other stakeholder groups at the secondary school level. The understanding and practice of homework in secondary schools in Hong Kong is likely to differ because of the unique learning needs of adolescent students. Moreover, the public examination that marks the end of secondary school education will influence the importance of preparation and formative assessment for these older students.

This context-based examination of Chinese teachers' homework conceptions adds to the volume of research on teachers' cognitions and thinking (Brown et al., 2009; Thompson, 1992; Turner, Christensen, & Meyer, 2009). This cognitive focus could be expanded in future research on teacher development in several directions. First, our correlational results on teacher conceptions and efficacy should be validated in future studies using longitudinal designs that tap into the professional developmental trajectories of teachers. Second, it is of interest to find out how homework conceptions relate to a host of teacher attributes including homework use/practices, pedagogical beliefs, instructional behaviors, and teaching performance. Finally, a broad framework of teacher cognitions covering various domains of teaching practices such as relating conceptions of homework and assessment can be established through further research. This would contribute to the development of theory on teacher cognitions that enhance the professional development of teachers.

Endnote

¹Territory-Wide System Assessment is conducted by the Education Bureau in Hong Kong annually to assess the performance of all Primary Three, Primary Six, and Secondary Three students in key learning areas of Chinese Language, English Language, and Mathematics. This assessment provides information to schools and teachers to enhance their pedagogical plans and helps the government to review policies and to provide support to schools.

References

- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. New York, NY: New York University Press.
- Baleghizadeh, S., & Shahri, M. N. (2014). EFL teachers' conceptions of speaking competence in English. *Teachers and Teaching, 20*(6), 738–754. doi:10.1080/13540602.2014.885702
- Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 307–337). Greenwich, CT: Information Age.
- Bang, H. J. (2012). Promising homework practices: Teachers' perspectives on making homework work for newcomer immigrant students. *High School Journal, 95*(2), 3–31.
- Bembenny, H. (2011). The first word: Homework's theory, research, and practice. *Journal of Advanced Academics, 22*(2), 185–192. doi:10.1177/1932202X1102200201
- Brock, C. H., Lapp, D., Flood, J., Fisher, D., & Han, K. T. (2007). Does homework matter? An investigation of teacher perceptions about homework practices for children from nondominant backgrounds. *Urban Education, 42*(4), 349–372. doi:10.1177/0042085907304277
- Brown, G., Kennedy, K. J., Fok, P. K., Chan, J. K., & Yu, W. M. (2009). Assessment for student improvement: Understanding Hong Kong teachers' conceptions and practices of assessment. *Assessment in Education: Principles, Policy, & Practice, 16*(3), 347–363. doi:10.1080/09695940903319737
- Brown, G., Lake, R., & Matters, G. (2011). Queensland teachers' conceptions of assessment: The impact of policy priorities on teacher attitudes. *Teaching and Teacher Education, 27*, 210–220. doi:10.1016/j.tate.2010.08.003
- Chen, C. S., & Stevenson, H. W. (1989). Homework: A cross-cultural examination. *Child Development, 60*, 551–561. doi:10.1111/j.1467-8624.1989.tb02736.x
- Cooper, H. (2001). *The battle over homework: Common ground for administrators, teachers, and parents*. Thousand Oaks, CA: Corwin.
- Curriculum Development Council. (2002). *Basic education curriculum guide: Building on strengths*. Retrieved from http://cd1.edb.hkedcity.net/cd/EN/Content_2909/BE_Eng.pdf
- Dandy, J., & Nettlebeck, T. (2002). The relationship between IQ, homework, aspirations, and academic achievement for Chinese, Vietnamese, and Anglo-Celtic Australian school children. *Educational Psychology, 22*(3), 267–275. doi:10.1080/01443410220138502
- Epstein, J. L. (1988). *Homework practices, achievements, and behaviors of elementary school students*. Baltimore, MD: Center for Research on Elementary and Middle Schools, Johns Hopkins University. (ERIC Document Reproduction Service No. PS 017 621) Retrieved from <http://www.eric.ed.gov/PDFS/ED301322.pdf>
- Epstein, J. L., & Van Voorhis, F. L. (2001). More than minutes: Teachers' roles in designing homework. *Educational Psychologist, 36*(3), 181–193. doi:10.1207/S15326985EP3603_4
- Eren, O., & Henderson, D. J. (2011). Are we wasting our children's time by giving them more homework? *Economics of Education Review, 30*(5), 950–961. doi:10.1016/j.econedurev.2011.03.011

- Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research*, 38(1), 47–65. doi:10.1080/0013188960380104
- Haverback, H. R., & Parault, S. J. (2008). Pre-service reading teaching efficacy and tutoring: A review. *Educational Psychology Review*, 20(3), 237–255. doi:10.1007/s10648-008-9077-4
- Hong, E., Wan, M., & Peng, Y. (2011). Discrepancies between students and teachers: Perceptions of homework. *Journal of Advanced Academics*, 22(2), 280–308. doi:10.1177/1932202X1102200205
- Hong Kong Advisory Committee on Teacher Education and Qualifications. (2003). *Towards a learning profession: The teacher competencies framework and the continuing professional development of teachers*. Retrieved from <http://www.edb.gov.hk/attachment/en/teacher/qualification-training-development/development/cpd-teachers/ACTEQ%20Document%202003%20-%20Eng.pdf>
- Kaur, B. (2011). Mathematics homework: A study of three Grade Eight classrooms in Singapore. *International Journal of Science and Mathematics Education*, 9(1), 187–206. doi:10.1007/s10763-010-9237-0
- Klassen, R. M., Tze, V. M., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Educational Psychology Review*, 23, 21–43. doi:10.1007/s10648-010-9141-8
- Kralovec, E., & Buell, J. (2000). *The end of homework: How homework disrupts families, overburdens children, and limits learning*. Boston, MA: Beacon.
- Medicino, M., Razzaq, L., & Heffernan, T. (2009). A comparison of traditional homework to computer-supported homework. *Journal of Research on Technology in Education*, 41(3), 331–358.
- Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacher- and school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology*, 50, 129–145. doi:10.1016/j.jsp.2011.07.003
- Salili, F., Zhou, H., & Hoosain, R. (2003). Adolescent education in Hong Kong and Mainland China: Effects of culture and context of learning on Chinese adolescents. In F. Pajares & T. Urdan (Eds.), *Adolescence and education, Vol. III: International perspectives on adolescence* (pp. 277–302). Greenwich, CT: Information Age.
- Segers, M., & Tillema, H. (2011). How do Dutch secondary teachers and students conceive the purpose of assessment? *Studies in Education Evaluation*, 37, 49–54. doi:10.1016/j.studeuc.2011.03.008
- Stevens, P. A., & Vermeersch, H. (2010). Streaming in Flemish secondary schools: Exploring teachers' perceptions of and adaptation to students in different streams. *Oxford Review of Education*, 36(3), 267–284. doi:10.1080/03054981003629862
- Swann, M., McIntyre, D., Pell, T., Hargreaves, L., & Cunningham, M. (2010). Teachers' conceptions of teacher professionalism in England in 2003 and 2006. *British Educational Research Journal*, 36(4), 549–571. doi:10.1080/01411920903018083
- Tam, V. C. (2009). Homework involvement among Hong Kong primary school students. *Asian Pacific Journal of Education*, 29(2), 213–227.
- Tam, V. C., & Chan, R. M. (2009). Parental involvement in primary children's homework in Hong Kong. *School Community Journal*, 19(2), 81–100. Retrieved from <http://www.schoolcommunitynetwork.org/SCJ.aspx>
- Tam, V. C., & Chan, R. M. (2010). Hong Kong parents' perceptions and experiences of involvement in homework: A family capital and resource management perspective. *Journal of Family and Economic Issues*, 31, 361–370.

- Tam, V. C., & Chan, R. M. (2011). Homework involvement and functions: Perceptions of Hong Kong Chinese primary school students and parents. *Educational Studies, 37*(5), 569–580. doi:10.1080/03055698.2010.539788
- Tas, Y., Vural, S. S., & Öztekin, C. (2014). A study of science teachers' homework practice. *Research in Education, 91*, 45–64. doi:10.7227/RIE.91.1.5
- Taylor, S. J., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource*. New York, NY: Wiley.
- Thompson, A. G. (1992). Teachers' beliefs and conception: A synthesis of the research. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 127–146). New York, NY: Macmillan.
- Trautwein, U., Niggli, A., Schnyder, I., & Ludtke, O. (2009). Between-teacher differences in homework assignments and the development of students' homework effort, homework emotions, and achievement. *Journal of Educational Psychology, 101*(1), 176–189. doi:10.1037/0022-0663.101.1.176
- Turner, J. C., Christensen, A., & Meyer, D. K. (2009). Teachers' beliefs about student learning and motivation. In L. J. Saha & A. G. Dworkin (Eds.), *International handbook of research on teachers and teaching* (pp. 361–371). New York, NY: Springer.
- Yilmaz, K. (2008). Social studies teachers' conceptions of history: Calling on historiography. *Journal of Educational Research, 101*(3), 158–176. doi:10.3200/JOER.101.3.158-176

Vicky C. Tam is a professor in the Department of Education Studies of Hong Kong Baptist University. Her research interests include homework, parental involvement in education, parenting, adolescent development, and stress and coping. Correspondence concerning this article may be addressed to Dr. Tam, Department of Education Studies, Hong Kong Baptist University, Kowloon Tong, Hong Kong, or email vtam@hkbu.edu.hk

Raymond M. C. Chan is an associate professor in the Department of Education Studies at Hong Kong Baptist University. His research interests are school guidance and counseling, teacher professional development, teacher wellness, adolescents' life skills development, and adolescents' cross-cultural adjustment.