Vocabulary Learning and Teaching Beliefs of Pre-service and In-service Teachers in Hong Kong and Mainland China

Qing Ma, Angel

English Department, Hong Kong Institute of Education
maqing@ied.edu.hk

Abstract
Language learners and teachers’ cognition in respect of learning and teaching play a critical role in mediating their actual behaviour and decisions in the process. This study investigates the vocabulary learning and teaching beliefs held by pre-service and in-service teachers in Hong Kong and on the Chinese mainland so that teacher education programmes can better equip teachers with appropriate knowledge concerning the vital task of vocabulary teaching. A mixed approach was adopted in inquiring into the nature of vocabulary learning and teaching beliefs held by these participants. Both quantitative and qualitative data were collected; statistical tests (factor analysis, multivariate analysis, Chi-square test) were employed in conjunction with content analysis. The analyses revealed variations in the beliefs held by the participants in the two contexts. The identified variations in the beliefs held by pre-service and in-service participants both in Hong Kong and on the Chinese mainland were less significant than those that emerged when comparing Hong Kong participants’ beliefs with those of their mainland Chinese counterparts. The findings are indicative of profound contextual mediation on the participants’ vocabulary teaching and learning beliefs. They also confirm the importance of raising and strengthening language teachers’ strategy and language awareness in teacher development programmes.

Keywords
Beliefs, teacher education, vocabulary learning and teaching, contextual mediation, strategy awareness, language awareness

Introduction
Researchers in language learning and teaching have become increasingly aware of the critical role that language learners and teachers’ cognition plays in mediating their actual behaviour and decisions in the process (e.g. Andrews, 2006; Bernat & Gvozdenko, 2005; Borg, 1999, 2003a &b; Kalaja, 1995; Kalaja & Barcelos, 2003). We report on a study on vocabulary learning and teaching beliefs held by pre-service and in-service teachers in Hong Kong and on the Chinese mainland so that teacher education programmes could better develop teachers with appropriate professional knowledge. We set out to examine the contextual mediation on vocabulary learning/teaching beliefs held by the participants since they have grown up and learnt (taught) English in two different educational contexts, even though they are of the same Chinese ethnicity. We also took a developmental approach and in the study included pre-service and in-service teachers, all of whom were in different stages of their language learning/teaching careers and sharing the goal of being English language teachers. In addition, the study focused on vocabulary learning instead of general language learning since vocabulary learning is widely regarded as a crucial task for second language learners in their attempts to improve their linguistic competence (Brown & Perry, 1991; Fan, 2004; Gu, 2003, 2005). Given the size of English vocabulary, most English words are not taught in class and have to be learnt by learners in their own ways. As a result, vocabulary learning and teaching beliefs held by pre- and in-service teachers would have an even greater impact on language learners’ efforts to acquire vocabulary autonomously. Such autonomous learning efforts, in our view, are profoundly mediated by teachers’ input and learners’ beliefs as well as other contextual conditions.

1 The study
In the inquiry, we adopted a mixed-method approach to tap into the beliefs held by the participants; both quantitative and qualitative data were collected from the participants. In the inquiry, answers were sought to the following research questions:

1. How are vocabulary learning/teaching beliefs held by pre-service participants different from or similar to those of their
in-service counterparts?

2. How are vocabulary learning/teaching beliefs held by mainland Chinese pre-service and in-service teachers different from or similar to those of their counterparts in Hong Kong?

3. How can these differences (similarities) be explained?

1.1 The participants

The study involved a total of 250 participants. In the inquiry, the pre-service participants were enrolled in one of the following programmes: Bachelor of Education, Postgraduate Diploma in English Studies, and Master of Arts in Teaching English as an International Language, at a leading teacher education institution in Hong Kong (referred to as ‘the Institute’). The in-service participants also came from a variety of background. There were 37 in-service and 89 pre-service teachers from Hong Kong; there were 80 in-service and 44 pre-service teachers from mainland China.

1.2 Quantitative data and analysis

A questionnaire with both Likert-scale (6-point) and open-ended questions was administered to all the participants. Apart from questions on the participants’ biodata, the questionnaire has 17 Likert-scale questions concerning vocabulary learning beliefs, adapted from Gu’s (2005) vocabulary learning questionnaire. In addition, it also has two open-ended questions concerning vocabulary teaching beliefs, including. We undertook an exploratory factor analysis of the quantitative data, which helped generate four factors in the questionnaire data, such as contextual acquisition and use of vocabulary (contextual use), words have mixed meaning (fixed meaning), words should be learned with lists (list learning) and words should be memorized repeatedly (repetition) (see Table 1). Each factor represents a sub-group of vocabulary learning beliefs with the loading of each item in each factor larger than .4.

### Table 1: Four sub-groups of vocabulary learning beliefs and their reliability

<table>
<thead>
<tr>
<th>Factors</th>
<th>No. of Items</th>
<th>Reliability (Cronbach’s alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contextual Use</td>
<td>9</td>
<td>.858</td>
</tr>
<tr>
<td>2. Fixed Meaning</td>
<td>2</td>
<td>.748</td>
</tr>
<tr>
<td>3. List Learning</td>
<td>3</td>
<td>.681</td>
</tr>
<tr>
<td>4. Repetition</td>
<td>3</td>
<td>.603</td>
</tr>
</tbody>
</table>

1.3 Qualitative data and analysis

The qualitative comments given by the participants to the open-ended questions in the questionnaire were coded for content analysis. In the analysis, the participants’ vocabulary teaching beliefs were classified into four major categories, namely, teaching content, teaching approach, teaching aims and teaching resources. Beliefs in teaching content refer to what content the participants believe should be taught when teaching vocabulary. Beliefs in teaching content were further divided into beliefs pertaining to lexical knowledge (e.g. pronunciation, meaning and spelling) and those concerned with learning skills (i.e. skills helping learners to learn vocabulary). Beliefs in teaching approach reflect the views that the participants had about how to teach vocabulary and the related belief statements were subdivided into the participants’ beliefs in the importance of presentation and practice methods when teaching vocabulary. Beliefs in teaching aims are related to the participants’ beliefs in what students should be able to do as a result of their pedagogical efforts and these statements can be further divided into those emphasizing the importance of learners’ application of acquired lexical knowledge and those focusing on learners’ enhanced motivation for learning vocabulary. Finally, there are a small number of statements that can be classified as beliefs in teaching resources, i.e. beliefs in what pedagogical resources can be utilized when teaching vocabulary. Altogether, seven categories were used to classify the learning and teaching beliefs in the open-ended questions.

Based on the results from the above-mentioned analyses, we decided to follow up the identified issues with select participants through in-depth interviews. 7 Hong Kong and 8 mainland Chinese participants were involved in the interviews in which they were asked about their experiences of language learning, in particular vocabulary learning. All the interview participants were pre-service teachers as the mediation of contextual conditions was identified as a major issue in the preliminary analysis. We were also unable to interview in-service participants because of their busy schedule. For this reason, we directed questions concerning how vocabulary is taught in school to
the pre-service participants so that we could obtain some understanding of pedagogical practices commonly used in Hong Kong and on the Chinese mainland. As a result, the interviews helped us situate our interpretations of the participants’ beliefs in their narrated experiences (Kalaja, 1995). In the interviews, these participants were also shown the preliminary findings and were asked about their general impressions of these findings. The interview data were analyzed paradigmatically to ‘produce taxonomies and categories out of the common elements across the database’ (Polkinghorne, 1995, p.5).

2 Results

2.1 The likert-scale questions.

As can be seen from Table 2, the general trend is that participants have higher means (4.53 – 5.06) for contextual use than those (1.51-3.10) for the other three factors related to the learning and memorization of vocabulary. A closer look at the mean of the four types of participants for each factor shows that the means tend to be similar within the same location group, irrespective of whether the participants are pre-service or in-service teachers. Noticeable differences were found to exist between Hong Kong and mainland Chinese participants in their beliefs. More specifically, the former have higher means in list learning, fixed meaning and repetition and lower means in contextual use. A multivariate analysis of variance (MANOVA) was also conducted to test the significance of these differences and similarities. The results confirmed that overall the two groups of participants differed significantly in terms of the four sub-groups of vocabulary learning beliefs, namely, list learning, fixed meaning, repetition and contextual use, whereas within each group the differences were largely negligible.

Table 2: Mean and standard deviation of each sub-group of vocabulary learning beliefs for the four types of participants

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean (Max=6)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>List Learning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HK_In-service (N=37)</td>
<td>2.79</td>
<td>.85</td>
</tr>
<tr>
<td>HK_Pre-service (N= 89)</td>
<td>2.69</td>
<td>.87</td>
</tr>
<tr>
<td>M_In-service (N=80)</td>
<td>2.00</td>
<td>.83</td>
</tr>
<tr>
<td>M_Pre-service (N=44)</td>
<td>1.95</td>
<td>.65</td>
</tr>
</tbody>
</table>

Table 2: Mean and standard deviation of each sub-group of vocabulary learning beliefs for the four types of participants

The results from the quantitative analysis tentatively lead to two conclusions which will be further explored and elaborated on in the subsequent qualitative analysis: (1) within each location group, whether the participants are from Hong Kong or the mainland, in-service and pre-service teachers hold very similar views regarding vocabulary learning beliefs; (2) across different location groups, Hong Kong and mainland participants demonstrate noticeable differences in that the former tend to value memorization more than the latter who, on the other hand, tend to appreciate contextual use more regarding vocabulary learning beliefs.

2.2 Open questions in the questionnaire

The content analysis of the participants’ answers to the open-ended questions regarding vocabulary teaching belief revealed a complex picture of differences and similarities in beliefs held by different groups of participants. Both the raw counts and percentages seem to indicate that there are differences in the seven identified categories regarding vocabulary teaching across the four groups of participants. The differences have been confirmed by a Chi-square test across the four types of participants $[\chi^2(18, N = 372) = 61.95, p < 0.01]$. That is, generally speaking, the distribution patterns of the seven categories are quite different between Hong Kong and mainland Chinese participants. Within each group, however, the differences among
mainland Chinese participants seem to be less noticeable than those among Hong Kong participants. Two separate chi-square tests were performed to examine these within group differences, one for Hong Kong participants and the other for Chinese mainland participants. The test results confirmed that mainland Chinese participants, being pre-service or in-service teachers, generally have similar views towards vocabulary teaching \[x^2(6, N = 211) = 8.1, p > 0.05\]. By contrast, the pre-service Hong Kong and in-service participants hold different views \[x^2(5, N = 161) = 20, p < 0.01\]; the differences are more prominent in lexical knowledge (55% vs. 35%), practice (29% vs. 16%) and application (1% vs. 19%). On the other hand, the differences in these categories between the mainland participants are almost negligible (39% vs. 49%, 25% vs. 26%, 47% vs. 43%). Thus, regarding beliefs in vocabulary teaching, mainland Chinese in-service and pre-service participants tend to have similar views while the Hong Kong participants have different views. Since all mainland in-service teachers were teaching in secondary schools and the majority of mainland pre-service teachers were fresh secondary school graduates, it is not surprising that they share similar views. By contrast, the Hong Kong in-service teachers were working in different levels of schools, including kindergarten, primary and secondary schools. This might explain why they held different views from the Hong Kong pre-service teachers, most of whom were also fresh secondary school graduates.

2.3  Interview results

As recorded in Table 2, one of the major differences in the participants’ vocabulary learning beliefs was related to the importance of list learning, fixed meaning and repetition. The Hong Kong participants, including pre-service and in-service teachers, had a higher rating on these issues than their counterparts on the Chinese mainland although, in general, both groups considered these strategy-related items less important. Meanwhile, the mainland Chinese participants attached more importance to the learning of vocabulary through contextual use than their counterparts in Hong Kong. The findings from the analysis of the open-ended questions regarding vocabulary teaching beliefs reveal a more complex picture. The mainland Chinese participants were much more inclined to rate highly the teaching of vocabulary learning skills, particularly memorization techniques, than their Hong Kong counterparts. On the other hand, the former tended to value much more than the latter the importance for learners to be able to apply the lexical knowledge taught (e.g. ‘using the word in our daily life’); this is consistent with what was found from the Likert-scale questions.

To explore these findings further, we confronted the selected participants (7 Hong Kong and 8 mainland Chinese students) with the findings in the in-depth interviews, which allowed us to have extended interactions with these participants. The interviews also helped us further situate our interpretation and appreciation of the participants’ stated vocabulary learning and teaching beliefs within the learning contexts and their educational experiences in Hong Kong and on the Chinese mainland.

The analysis of the participants’ prior educational experiences in Hong Kong and on the Chinese mainland did reveal many similarities and differences in their language learning experiences and pedagogical practices. For instance, in both Hong Kong and mainland Chinese schools, memorization of vocabulary was greatly emphasized as part of teachers’ pedagogical efforts and learners’ learning endeavours.

However, there were also noticeable differences in the ways that Hong Kong and mainland Chinese participants experienced the learning and teaching of vocabulary. First of all, Hong Kong participants appeared to have had very varied educational experiences in learning English in comparison with their mainland Chinese counterparts. For instance, Chinese participants frequently reported putting intensive efforts into memorizing vocabulary and grammatical items in preparation for high-stake examinations. In contrast, many Hong Kong participants had other learning activities in addition to the efforts that aimed to enhance their vocabulary knowledge. Many Hong Kong participants had opportunities to participate in extra-curricular learning activities that were designed to enhance their interest in learning English.

Another noticeable difference was related to the ways that English was taught in the two educational contexts. It was found in the interviews that phonetic symbols were taught to learners in mainland Chinese schools, which were later used by some mainland Chinese participants as an aid to memorize vocabulary. In addition, some mainland Chinese participants might have also acquired morphological knowledge to help them memorize vocabulary.

The most important difference in the learning and teaching of vocabulary in the two contexts is probably related to the availability of opportunities to use English. In the interviews, all the participants stressed that Hong Kong as a language learning site had richer learning resources and more
opportunities to use English. For this reason, the majority of the participants (including mainland Chinese participants themselves) considered mainland Chinese participants’ heavy emphasis on the learning of English through use a response to their perceived lack of opportunities to use English on the Chinese mainland.

3 Discussions and conclusion

Significant differences were found in the beliefs held by Hong Kong and mainland Chinese participants, indicative of the profound contextual mediation on the participants’ belief development (Andrews, 2006; Kalaja, 1995). In particular, the quantitative analysis has generated some interesting findings, in which Hong Kong participants placed more emphasis on the learning of vocabulary through memorization than their mainland Chinese counterparts while the mainland Chinese participants were found to emphasize more the learning of vocabulary through use. Most of the participants in the in-depth interviews interpreted this finding as the participants’ responses to the perceived lack or availability of linguistic resources and language use opportunities in their respective learning contexts, a view with which we would concur.

The content analysis of the participants’ teaching belief statements also revealed some important differences in the beliefs held by the pre-service and in-service participants, which deserve further attention from teacher educators. For instance, the pre-service participants in Hong Kong wanted more lexical knowledge to be taught though their in-service counterparts appeared to have been concerned with the teaching of vocabulary learning skills, learners’ application of taught vocabulary and their motivational levels. Although the in-service participants were found to have shared the same concern with developing learners’ vocabulary learning skills, the mainland Chinese pre-service participants apparently had a much stronger demand for skill development. By contrast, Hong Kong pre-service participants had little awareness of the need to develop vocabulary learning skills.

The analysis of the interview data allowed us to see how contextual conditions have mediated the participants’ beliefs as well as how the participants’ situated experiences have engendered their reflections and new beliefs (Peacock, 2001). For instance, the emphasis of Hong Kong pre-service participants on the importance of lexical knowledge in vocabulary learning may be associated with the fact that their prior vocabulary learning experiences had been dominated by repeated ‘dictation’ exercises. Local pre-service interviewees were dissatisfied with their dictation exercises, to which they devoted much time and effort, almost the sole memorable vocabulary learning activity, and from which they had gained so little lexical knowledge. Their dissatisfaction also helped explain why they were more concerned with the teacher’s vocabulary teaching approach. Having worked so hard to learn vocabulary on the Chinese mainland, the mainland Chinese pre-service participants were most unhappy with the lack of opportunities to practise and use their learnt vocabulary meaningfully. Consequently, they demanded better skills and strategies supporting their vocabulary learning efforts. In fact, they themselves were often in search of better methods to learn vocabulary.

In the light of the widespread dissatisfaction with their prior vocabulary learning experiences, both pre-service and in-service language teachers need to work out better ways to help their students learn vocabulary more effectively in class. The popular association of the task with ‘dictation’ in Hong Kong and ‘memorization’ on the Chinese mainland suggests that language teachers in both contexts need to diversify their pedagogical activities in helping empower their students with better capacity and knowledge for the vocabulary learning task. One possible solution, in response to some of the pre-service participants’ demands identified in the study, involves efforts to enhance their use of vocabulary learning strategies and regulation of vocabulary learning efforts.

Although strategy training has been a controversial issue in research (see Rees-Miller, 1993), recent language learning strategy research has generated strong evidence for an integrated pedagogical approach to develop language learners’ strategic learning capacity, through which strategy development efforts are more organically incorporated into regular teaching (Cohen & Macaro, 2007; Macaro & Erler, 2008). In the interviews, we also noticed that a few mainland Chinese participants recalled how they used their knowledge of phonetic and morphological knowledge to develop better ways to learn vocabulary. As Hong Kong pre-service participants appeared to have had little awareness of strategy use in the study in comparison with their mainland Chinese participants, integration of vocabulary learning strategies may help not only improve their vocabulary learning but also enhance their learning motivation when they discover the learning of English vocabulary is more than ‘dictation’. Moreover, language teachers in both contexts need to encourage their learners to be more reflexive so that they can relate previously acquired knowledge of the language to their language learning efforts and strategy use. Probably what matters for teachers
in vocabulary teaching is their learners’ awareness that the learning of other aspects of the language (i.e. morphology) could be transformed into foundations for them to exert their efforts in learning vocabulary or acquiring new linguistic knowledge.

References