

# A Hong Kong case of lesson study—Benefits and concerns

Jackie F.K. Lee\*

*Department of English, The Hong Kong Institute of Education, 10 Lo Ping Road, Tai Po, Hong Kong*

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## Abstract

In recent years, there has been a feeling that effective teachers can be fostered by grounding professional development in actual classroom practice. This paper reports how a group of teachers adopted a lesson study approach and worked collaboratively so as to improve their class instruction on *wh*-question formation. **Teachers' reflections indicate that the collaborative environment throughout the study enabled them to gain insights into how to improve their teaching strategies.** Also identified are some of the problems faced by teachers, which may undermine the gains of lesson study.

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## 1. Introduction

With the introduction of the *Reform Proposals for the Education System in Hong Kong* in 2000, a number of education reforms are being implemented. The aim is to build an education system that is conducive to life-long learning and all-round development. As the key players in implementing the Education Reform, teachers are expected to adapt to new roles: from being merely transmitters of knowledge to sources of inspiration for students in their construction of knowledge, and from implementers of curricula to participants in the development of school-based curricula (Education Commission, 2000). To support these reforms, the Hong Kong SAR Government is striving to enhance the quality and professionalism of the teaching force by providing training and support. However, there are dangers in the top-down

approach that is adopted in the traditional training courses. Typically, experts are invited to deliver talks or workshops, with teachers being merely passive recipients of the new ideas, pedagogies and reforms propounded by the experts. Predictably, there will be some committed teachers who, in isolation, will try to apply the concepts to their classes, with or without success; others will simply ignore the new ideas and continue using the teaching approaches with which they are familiar.

## 2. What is lesson study?

In recent years, there has been a feeling that effective teachers can be fostered by grounding professional development in actual classroom practice. Influenced by Stigler and Hiebert (1999), a number of Japanese, American and Hong Kong educators (e.g. Chokshi & Fernandez, 2005; Fernandez, Cannon, & Chokshi, 2003; Fernandez & Chokshi, 2002; Lewis, Perry, Hurd, & O'Connell,

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\*Tel.: +852 2948 8402; fax: +852 2948 7270.

E-mail address: [jfkee@ied.edu.hk](mailto:jfkee@ied.edu.hk)

2006; Lewis & Tsuchida, 1998; Lo, Chik, & Pang, 2006; Lo et al., 2002; Pang & Marton, 2003; Stewart & Brendefur, 2005; Watanabe, 2002) have shifted to lesson study as a form of professional development.

Lewis (2000, pp. 3–4) explains research lessons and

the definition of lesson study

*Kenkyuu jugyou* means research lesson (or study lesson), and refers to the lessons that teachers jointly plan, observe and discuss. *Jugyou kenkyuu*—using the same two words in the reverse order—means lesson research (or lesson study), and refers to the process of instructional improvement of which the research lesson is the core piece.

Lewis (2000) states that research lessons are lessons with students, and they have characteristics:

课例研究的五大特点中，认为备课常常是需要协作和花费较长时间的

- (1) Research lessons are observed by other teachers.
- (2) Research lessons are planned for a long time, usually collaboratively.
- (3) Research lessons are designed to bring to life in a lesson a particular goal or vision of education.
- (4) Research lessons are recorded.
- (5) Research lessons are discussed.

A number of concepts are pertinent to understanding lesson study. According to Lo and Pong (2005, p. 14), the concept of the “object of learning” refers to the end towards which the learning activity is directed and how it is made sense of by the learner. How one understands and learns a phenomenon depends on what critical aspects one pays attention to. An important role of teachers, therefore, is to identify what is critical in order for students to acquire the object of learning. If teachers are unable to highlight these critical aspects in their teaching, a learning gap will be left unattended. For example, in the learning of subject–verb agreement, some students may have problems with sentences such as *The cook cooks the meal* and *The cooks cook the meal* because of the different word classes that the word *cook* can fall into—as a noun, *cook* + the morpheme *s* is a plural form, thus requiring a general present tense verb to follow; as a verb, *cook* + the morpheme *s* is a singular form, thus requiring a singular noun to precede it. These are the critical aspects that many students find difficult in the process of learning. Teachers who are not aware of these features and the multi-class property

of the word *cook*, and do not help students discern them will encounter frustrated students.

Marton and Booth (1997) argue that a key feature in learning involves discerning a phenomenon in a new light—there is no learning without discerning, and no discernment without variation. Lo et al. (2002) build on the theory and include three types of variation:

- *V1—Variation in students’ understanding of what is taught*: Students possess different previous knowledge, preconceptions or intuitive understanding of the things to be taught, which are often stubborn and resilient to change (see Chinn & Brewer, 1993; Confrey, 1990). Knowledge of these preconceptions, which can be found through pre-tests, student interviews before the lesson and/or listening to students’ views during the lesson, is invaluable for teachers to design effective teaching.
- *V2—Variation in teachers’ ways of dealing with object of learning*: Through daily contact with students, teachers construct knowledge about the different ways that students learn particular concepts and build up different methods to cater for student differences. The variation in teachers’ ways of dealing with particular topics can be shared through preparatory meetings before research lessons, peer observation of research lessons and post-lesson conferences.
- *V3—Using variation as a guiding principle of pedagogical design*: It is argued that teachers should make conscious efforts to vary certain critical aspects while keeping other aspects of the object of learning constant so as to make learning more effective. Marton and Runesson (2003; cited in Lo & Pong, 2005) identify four patterns of variation commonly found in lessons: contrast, separation, generalization and fusion. For example, to understand the concept “oval”, the pattern of variation is produced by varying values of the same dimension (shape)—*contrasting* “oval” with other shapes. Shapes like round, square and rectangular are identified as values on this dimension of variation, and the concept “oval” is therefore *separated* and discerned. To fully understand the concept “oval”, a child also needs to experience its various appearances, as in oval pendants, oval faces, oval mirrors, etc. to *generalize* the concept “oval” and distinguish the dimension of shapes from other aspects (e.g. jewelry, appearance, furniture). Nevertheless, the

understanding of a phenomenon sometimes depends on the simultaneous awareness of several critical dimensions and how those dimensions relate to one another and to the phenomenon as a whole. The pattern of variation that involves simultaneous variation makes it possible for *fusion* to take place. For example, the negation of the sentence *He has some water to drink* involves not only the adding of the negative word *not*, but also the change of the verb form from *has* to *does ... have*, and from the determiner *any* to *some*.

Teachers who participate in lesson study, sometimes together with advisors from outside, are engaged in a cycle of instructional improvement focused on planning, observing and revising research lessons. The research lesson is developed through clearly and precisely identifying the object of learning and the critical features that need to be grasped for the chosen topic. Each teacher who joins the study has his/her own experience of approaching the topic (V2). Through pre-tests and interviews students' prior knowledge is assessed (V1), and teachers' awareness of student needs relating to the topic is developed. Based on these findings, teachers in the research team collaboratively plan a research lesson and vary certain critical features in the design (V3). Through teaching, peer observation, student interviews and post-lesson discussion, the lesson is refined and the revised lesson is conducted with another class. Through this cycle of planning, observing and revising teachers gain the opportunities for continual learning and are in control of their own professional development.

### 3. A Hong Kong case

In the following part I am going to present a Hong Kong case of lesson study, the research team of which consists of five Secondary 1 English language teachers and two school English panel heads, supported by two consultants from a teacher education institute (including the present author). There are three main aims in this study—(1) to promote teacher professional development, (2) to cultivate a collaborative teaching environment and (3) to improve the student learning outcomes with respect to the object of learning. During the project, a total of 14 meetings were held. The 14 meetings can be divided into five phases: (1) understanding

“lesson study”, and identifying the object of learning and its critical features, (2) setting the pilot test and pre-test, (3) lesson planning, (4) conducting research lessons and (5) evaluating.

The object of learning agreed on was *wh*-question formation. Teachers made such a decision because (1) students encountered difficulties in forming and using *wh*-questions even though they had learnt them at the primary level, (2) students failed to differentiate the verb patterns with the verb *be* and lexical verbs, and (3) the teachers wished to explore some effective strategies on teaching *wh*-questions apart from the traditional drills they used.

The critical features of forming *wh*-questions as perceived by the teachers were as follows:

- (1) The differentiation between the verb *be* and lexical verbs is essential.
- (2) The verb *be* has to be inverted with the subject in a *wh*-question; for questions with lexical verbs, dummy *do* is added before the subject, which is followed by the infinitive form of the lexical verb.
- (3) The verb *be* or the dummy operator *do* agrees with the number of the subject (e.g. *Where do teachers usually go during the summer holiday? When does the teacher go to school?*).
- (4) A *wh*-question always has *wh*-phrase fronting.

Because of the limited space of this paper, I will focus on one key aspect of the lesson study project, that is, the professional development of teachers in the process. Benefits related to students' learning will not be discussed in detail, though reference to them is made where appropriate. Apart from exploring the gains of teachers, this article also examines some pitfalls encountered in the process. It is hoped that schools and the education authorities will be made aware of the existence of such obstacles, and that they will lead the way in removing them so that both teachers and students can obtain maximal benefits from lesson study.

To investigate teachers' professional development, the two consultants collected data via various means. One method involved collecting teachers' written feedback at the end of the project. The other kind of data was based on their discussion at meetings. Before the three research lessons, a total of ten preparatory meetings were held to familiarize teachers with the lesson study approach and principles, to design the tests and to plan the

研究关注于设计、观察、修改案例的循环教学过程。  
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研究目标：1.促进教师专业发展；2.培育一种协作教学的环境；3.提高学生学习的结果

research lessons. After each research lesson, a 1-h post-lesson conference was held so that the teacher who conducted the research lessons could reflect on her own performance, the teaching strategies and students' progress, while the teacher observers, based on the data collected during the lesson, gave suggestions to refine the next research lesson. Every preparatory meeting was audio-taped and every post-lesson conference was video-taped, and brief written records were kept. The recordings of all the meetings were transcribed by a research assistant for critical analysis after the whole project was completed. On the basis of teachers' discussion at meetings and written feedback, some significant benefits and pitfalls of lesson study are identified and are discussed below.

### 3.1. Benefits

#### 3.1.1. Developing professionalism

The lesson study process integrated a number of effective professional development strategies, including development of subject knowledge and pedagogical skills, ongoing collaboration, peer observation, group conferencing, self-reflection and heightened awareness of learners' needs and difficulties. Teachers had to think carefully about the object of learning, critical features, questions, activities and approaches to be used in research lessons during a series of meetings. Teachers obtained feedback on their own teaching and new ideas from watching how their colleagues taught the same topic through research lessons. This was likely to lead to demand for improvement. The feedback received ranged from some teaching mechanics such as blackboard use, teaching aids, and teachers' handwriting and facial expressions, to the intellectually more demanding skills such as the teaching approach, teaching activity design and teacher–student interaction. The gradual improvement of the design of the three research lessons in this study was a successful outcome of this ongoing collaboration. There follows a discussion of the modification of the three research lessons to illustrate teachers' professional development during the process.

The research lesson focused on students' weakest parts in *wh*-question forming, as identified in the pre-test, including distinguishing the verb *be* and lexical verb patterns, subject–verb inversion and the use of the dummy *do* operator followed by an infinitive. The preliminary lesson plan designed by

the research team was as follows:

- (1) *Motivation: Reordering of scrambled words:* Word cards that formed two *wh*-questions were put in envelopes, with the presence of some distracters. Students in groups were required to select the right words and put them in the correct order. The aim of this activity was to find out whether students knew what *wh*-words to use and whether they could distinguish between the verb *be* and lexical verbs.
  - Q1: How many teachers are there in this classroom?  
(distracters: *do/does/is/much*)
  - Q2: What subject do you like most?  
(distracters: *does/is/are/likes*)
- (2) *Picture activity:* Three pictures depicting students' leisure activities (on the beach, in the shop and in the library) were given to groups of students, and they were asked to form *wh*-questions using the prompts given. Students' questions were then shown to the whole class for discussion.
- (3) *Interviews:* Since summer was approaching at the time of the study, students were asked to conduct interviews in pairs about how their partners usually spent the summer holiday. Students were required to write a short report based on the information obtained.

Three research lessons were conducted with three classes (with a total of 97 students) by three different teachers. Each research lesson was taught by one teacher according to the lesson plan, and was observed by the whole research team. The lesson was video-taped, and the teacher observers noted down carefully what the teacher and students were doing as the lesson progressed so as to make suggestions for improvement in subsequent lessons.

*3.1.1.1. Research lesson 1.* Both the teacher and the students looked nervous during the lesson. In the first activity on scrambled words when the students could not form grammatical questions (e.g. *\*How many teachers in the classroom?*), the teacher failed to guide them to correct the errors but simply told the class the correct forms herself. The anxiety felt by both the teacher and the students might have been due to the presence of the school principal and many teachers in this lesson.

In the picture activity each group of students was given a picture with prompts (e.g. *reasons for Mary*

being angry, number of kites, time to go to the beach), and was asked to form two questions based on them. Many groups formed ungrammatical questions such as \*How many number of kites? and \*What time to go to the beach?. Again the teacher failed to guide the students to correct the errors.

The last task was conducting interviews with partners about their plan for the summer holiday. Without clear instructions and appropriate assessment procedures, the students failed to complete the task.

The post-lesson conference started with the teacher's own reflection. She realized that the lesson did not go smoothly. As the students often failed to respond to her questions or gave wrong answers, the lesson ran overtime. As a result, she lost control of the class and simply corrected students' errors herself. The teacher admitted that the grammar items were not taught systematically. Other teachers gave the following suggestions based on the data collected during their class observation:

- (1) The critical features should be highlighted. The teacher could consider revising the *wh*-question structure with the students during the scrambled word activity.
- (2) The prompts for the picture activity should be simplified to avoid confusing students (e.g. from *reasons for the teacher being angry* to *reasons—teacher, be, angry*).
- (3) Students should be guided to correct their mistakes that are related to the critical features of *wh*-questions.
- (4) A semantic map could be drawn before students conduct the interview. Students could be encouraged to brainstorm what they would ask their partners and decide what question word to use. An interview demonstration could be done before the start of the activity.

*3.1.1.2. Research lesson 2.* In view of students' unfamiliarity with the structure of *wh*-questions in Research lesson 1, the teacher started with a revision, using separation and contrast to raise students' consciousness of the distinction between the verb *be* and lexical verbs in *wh*-question formation. The teacher adopted the variation theory by keeping other things constant and changing only one element of the sentence to help students become more aware of the critical features of *wh*-questions.

Example sentences are given as follows.

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Separation:

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<i>Wh</i> -word + <i>be</i> + subject	e.g. <i>When is your birthday?</i> <i>Who are they?</i>
<i>Wh</i> -word + <i>do</i> + subject + main verb	e.g. <i>Where do you live?</i> <i>What do you do?</i>

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Contrast:

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*When does he get up?*  
*When do they get up?*  
*When does he get up?*  
*\*When does he gets up?*

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The teacher kept using separation and contrast in the lesson to highlight the critical features. For example, when checking answers with students for the scrambled word game, the teacher separated the components by asking questions such as "What is the *wh*-word in this sentence? What is the subject? What is the auxiliary verb?". The teacher also used the distracters given to show the contrast—she asked students why *does, is, are* or *likes* is not used in the sentence *What subject do you like most?*

It was noted in Research lesson 1 that the prompts used in the picture activity were in complex structures, which was difficult for Secondary 1 students. The prompts were therefore revised in such a way that the subject and the verb were separated from each other, as seen in the following:

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Reason:	<i>Mary—be—angry</i>
Number:	<i>kites—be—in the sky</i>
Time:	<i>people—go to the beach</i>

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Using one picture as an example, the teacher demonstrated how to form questions with the verb *be* and with a lexical verb. The teacher also heightened students' consciousness of the *wh*-question patterns using the contrast method. For example, she asked students to explain why \**Why Mary is angry?* and \**Why does Mary angry?* are not correct. The students' success in explaining the errors showed their strong grasp of the *wh*-question pattern.



For the final interview task the teacher started with drawing a semantic map and elicited from the students such ideas as money, length of time, place, people, etc., which would help them choose the appropriate *wh*-question words to form sensible questions during the pair work. Two pairs of students were invited to do a demonstration before and after the activity. The demonstrations indicated that the students had a good understanding of the critical features of *wh*-questions and could ask *wh*-questions grammatically and appropriately.

At the post-lesson conference, the teacher indicated that opening her class for peer observation was a source of pressure, while other teachers complimented her on the success of the lesson, as seen in (1) the clear explanation of the critical features of *wh*-questions, (2) the frequent use of the separation and contrast methods to help students correct their mistakes, and to raise their awareness of the *wh*-question pattern and (3) the use of a semantic map and brainstorming to prepare students for the interview activity. Seeing the improvement of Research lesson 2 over the first one and students' mastery of the *wh*-question pattern, the participating teachers believed that they themselves benefited from the lesson study project.

Meanwhile, some suggestions were made for the third teacher to consider in the design of the last research lesson:

- (1) Students could be invited to answer the questions formed so that they could see that the use of *wh*-questions is to obtain information.
- (2) Instead of using artificial questions in the revision part, students should be given opportunities to form their own questions, as authentic questions that are related to students' interests or personal lives would add fun in the learning process (Lee, 2003).

*3.1.1.3. Research lesson 3.* Rather than using tables of contrived sentences to show contrast, the teacher made use of the sentences in the scrambled word game to help students attend to the critical features. This improved the flow of the lesson and shortened the time on revision. As in Research lesson 2, the teacher also adopted contrast and separation methods to highlight the critical features of *wh*-questions.

Taking into consideration the teacher feedback at the previous post-lesson conference, the teacher in

this research lesson made conscious efforts to relate the object of learning to students' daily lives, and to highlight the use of questions, i.e. to seek information. For example, in the picture activity the teacher asked students questions not only about the picture given but also about their personal lives, and the students were invited to answer them—e.g. *Where is it? (In a shop); How many people are there in this shop? (Three people); Do you like shopping? (Yes); How often do you go shopping? (Once a week); What do you usually buy? (Some food).* To add fun to the lesson, the teacher turned the picture activity into a memory game. After studying a picture for some seconds, the students had to turn over the picture. The teacher then invited a student to ask a question based on what she wanted to know (e.g. the number of kites in the sky). Another student was then encouraged to answer it. In this way students were given more opportunities to engage in the question–answer interaction.

As in Research lesson 2, a semantic map was used for the last interview activity. Apart from eliciting ideas about what could be asked, the teacher also elicited from students the question words needed. This explicit guidance was useful for weaker students.

Teachers' professional development was evident from the gradual improvement of the design of the three research lessons. The written/oral feedback given by the participating teachers confirms that lesson study enabled the participating teachers to engage in intellectually demanding work and develop as a team professionally.

I believe that teachers have benefited from the study. Everyone should have noticed the improvement of the teaching method in the second research lesson. The students became more confident. The second class learnt better than the first class. I believe the third lesson will improve further.

I have learnt to consider the critical features of a specific topic ... the project enhanced our professional development. I am sure that the other teachers have also gained insights through the process of meetings, lesson observations, interviews with students and their own reflections.

I have learnt to identify the critical features before designing the lessons. By using the three patterns of variation, which acted as a frame of work for the pedagogical purpose, I could

minimize both under-teaching and over-teaching to the least.

Lesson study provides opportunities to me for developing and reflecting on my current teaching skills. I have well understood and developed the skills of teaching students the differentiation of verb patterns in forming *wh*-questions.

The lesson study gave me a chance to refresh my subject knowledge about the formation of the *wh*-questions. It was rewarding to read the reference books. During the devising of the lesson plan, I could also share teaching methods with the team members. It was really an interesting time to learn from each other. After conducting the lesson, the team could discuss and make improvements in the lesson plan.

### 3.1.2. Learning to see things from students' perspectives

Lesson study facilitates teachers to see learning from students' perspectives. In this project, student data were systematically gathered and analyzed in student interviews, and pre- and post-study tests. The design of the lesson study was student based. Knowledge of V1 collected through student interviews and tests was fed back to teachers' lesson planning and test designs (V3).

To find out students' prior knowledge and how they perceived the object of learning (V1), tests with students were conducted before the research lesson. To assure the validity of the pre-test, a pilot test was conducted with nine students (three high achievers, three mid-level achievers and three low achievers) from the two non-researched Secondary 1 classes. Informal individual interviews with the students were conducted by a teacher after the pilot test so as to find out the difficulties students encountered in the test. The interviews and test results confirmed that students were confused about the formation of *wh*-questions. They had problems with subject–verb agreement, subject–verb inversion, *wh*-question words, use of the infinitive after the dummy operator *do*, and the differentiation between the verb *be* and lexical verbs. Through these interviews, teachers had a better understanding of the needs of students, which would help teachers design materials for the research lesson to meet these needs.

The findings of the pilot test and student interviews were used to revise the design of the pre- and post-tests, the purpose of which was to gauge students' learning. The modifications include

- (1) simplifying the instructions—unnecessary details that might confuse students, such as acknowledgement of the sources of the materials, were removed;
- (2) changing some multiple-choice options that were not relevant to the critical features—for example, the question *Who \_\_\_\_\_ to school with you every day?* with the lexical choices of *come*, *arrives* and *goes* was excluded;
- (3) contextualizing the questions—as language items are best encountered in context, situations were added in the test to make it more related to students' personal lives. The test was based on the theme “My school”, where Ivy, the main character, had various interactions with different people. An example situation is given below: Ivy is interviewing a student for a project on students' shopping habits. Fill in the blanks with suitable verbs to complete the interview.

Further, some selected students of **high, mid- and low ability** were interviewed immediately after each research lesson about their learning process and outcomes. The questions asked were (1) What have you learnt in the lesson? (2) Which activity do you like most? and (3) What else related to this topic do you want to learn? To assess students' learning, they were asked to form a *wh*-question

Overall, the students' feedback was encouraging. All of the student interviewees were interested in the learning activities, especially those that involved interaction and cognitive challenges. Apart from learning the form and critical features of *wh*-questions, they also mastered the use—in a student's own words, *wh*-questions are “to communicate with others and collect information”. More importantly, it was encouraging to find that the students had built up their confidence in using *wh*-questions and could form *wh*-questions without much difficulty. One student stated: “I used to be nervous when I had to ask questions in English. I'm not nervous any more. I became familiar with them after I attended Ms. Chan's lesson.” To teachers, through the student interviews, they learnt about the effectiveness of the different activities and the needs of the students. For example, the interviewees after Research lesson 1 mentioned that they wanted the teacher to explain the use of verbs in the picture activity because the verbs were not given clearly in the prompts provided. The change of the prompts in the subsequent two research lessons was a response to this.

在课中学到了什么？你最喜欢什么活动？与这个主题你还想学习什么？

Another way to find out students' learning outcomes was by completing a post-test the day following the research lesson, the results of which were compared with those of the pre-test. The score differences indicated students' learning through this study. Nevertheless, details of the test results are not within the scope of the present paper.

In line with the Education Reform, lesson study enables a shift from a teacher-centered classroom to a learner-focused classroom: instead of viewing education as a top-down process, with teachers providing knowledge for students, now teachers can see education as giving students opportunities to express their needs and difficulties. Equally important, teachers have opportunities to observe research lessons being taught by colleagues directly and become more aware of how students learn and perform in class. Rather than examining student work, teachers examine students working and thinking in the actual classroom. The following are some teachers' comments on how they learnt to perceive learning from students' perspectives:

The pilot test provided vital information about students' weaknesses so that teachers could tailor-make materials or activities for their students.

The pilot test facilitated teachers to spot out students' learning difficulties so that we could efficiently and effectively enhance students' knowledge on the subject matter.

By probing students' abilities in the pre-test, teachers can develop suitable teaching materials and tackle students' problems more effectively. This makes me more aware of the importance of knowing students' competence in normal classroom teaching.

The interview with the students after the lesson was the most meaningful. I could learn about what the students learnt, what they still did not understand, what they enjoyed most and what they found difficult. The interview was most helpful to make improvement in teaching.

### 3.1.3. *The central role of teachers respected*

Although inviting outside experts to observe research lessons and give feedback is a common practice for lesson study, the intellectual pursuit is driven by teachers themselves. Rather than following the traditional professional development practice in which a question is driven by an expert and the relationship between the expert and the partici-

pants is hierarchical, this lesson study began with a question driven by participating teachers, the relationship between the teachers and the consultants being equal and reciprocal. During lesson study, teachers discussed and found the area of content to be studied. Teachers were given the autonomy to make decisions to address student needs.

Another valuable aspect of lesson study was that during the process different views of teaching and learning were raised, and teachers had the opportunity to practice critical self-reflection and to hear opposing points of view, rather than hear only from colleagues who shared similar ideas. For example, to overcome the shortcoming of using only contrived sentences in the revision part of Research lesson 2, the present author, as an external consultant, suggested that the teacher invite students to ask questions about their teachers or classmates so that they could add their own sentences to the tables. The teacher, after taking into consideration the time constraints of the lesson, decided not to take the suggestion. Similarly, when the other consultant suggested that the teacher invite students to form questions freely in the memory game of Research lesson 3 to avoid repeating the questions asked in the picture activity, a teacher mentioned the problem of adding more activities in each part of the lesson, which would cause a constraint on the limited class time available. Healthy debates of such kind between teachers and the external consultants, and among the teachers themselves were not uncommon during the meetings. To the teachers, it is important that their views were listened to and considered, and that they had the autonomy to decide what suited their classes best.

### 3.2. *Pitfalls of lesson study*

During the research lesson cycle, two teachers fell sick and they admitted that peer observation had put them under great pressure. They felt that they represented the school and had to do well. Another source of pressure was from the extra workload involved. Most of the teachers were inexperienced in setting a pilot test and dealing with statistical analysis. Worst of all, they found it difficult to spare time for the scheduling of meetings, lesson planning and lesson observations. As mentioned by Boss (2001), lack of time is the biggest barrier to lesson study. All the teachers in the team made



comments about the heavy workload imposed on them during the process:

The teachers involved have spent a large amount of time in preparing the lesson. We have formal meetings nearly every week. Yet, before these formal meetings, we also need to have pre-formal meetings.

Lesson study is an effective teaching approach providing that teachers do not have a heavy workload. One component of lesson study took us a lot of time to discuss the subject area, develop a detailed lesson plan, select appropriate materials and so on.

Lesson study is time-consuming. We spent a lot of time on numerous pre-meetings, meetings and clerical work as well. Huge labour power is concerned during the whole process. I wonder if there would be any other way to lessen the labour power and maximize the students' benefit.

Concerning the meetings, it was not easy to arrange the 14 meetings with the two advisors or the numerous pre- and post-formal meetings among the team. The schedule of the whole project was tight. Before each meeting, I had to liaise with the two advisors for the agenda and approval of the minutes. Apart from the weekly meetings, I also had to arrange the details of the pilot test, pre-test and post-test ... it was really time-consuming to complete all this administrative work in the short time frame.

As suggested by Stigler and Hiebert (1999) the success of lesson study is determined by long-term improvements in student and teacher learning rather than by the specific features or activities of a lesson. Therefore to make lesson study successful and a pleasant experience for school teachers, it has to be made clear to teachers that the aim of classroom observation is not to assess teacher effectiveness in a particular lesson. In Hong Kong the practice of classroom observation is still a rather new practice. If the focus is on features of "good teaching" in the absence of supporting contexts, the more important goal of student learning and teachers' professional development will be overlooked. Teachers need to be provided with a non-threatening teaching environment; otherwise lesson study will just be another burden to the already very busy Hong Kong teachers. To overcome Hong Kong teachers' anxiety and self-consciousness about opening their classrooms to their peers, they should understand that the ownership of the

research lesson belongs to all the team members who devise the lesson plan and contribute in the whole process. It is also important to shift the focus from evaluating the performance of the teacher to evaluating the design of the lesson. In other words, the focus is on learning, not on judging (Chokshi & Fernandez, 2004). It should be made clear to the teachers that a research lesson is not a model lesson. Instead, the focus is on trying out practices, which can then lead to a fruitful post-lesson discussion. In fact, an imperfect lesson could usually provide a lot of rich opportunities for teachers to learn. Participating teachers need to develop the mindset that constructive criticism is welcome to improve teaching effectiveness, and they can develop protocol guidelines about the common rules of etiquette for giving feedback about an observed lesson. If Hong Kong practitioners are clear about all these, it is hoped that they are less nervous about opening their classes for their peers.

Although lesson study is time-consuming, it can be highly rewarding. What is needed is teachers' commitment to the practice, and the support of school administrators and the government. As suggested by Chokshi and Fernandez (2004), teachers can make use of specific strategies to maximize their limited time available. For example, preparatory and post-lesson conferences can be run more efficiently by assigning roles to group members (time keeping, record keeping, resources allocation, etc.) and distributing materials for feedback beforehand. Lesson study requires a lot of teachers' time, energy and commitment and school principals cannot manipulate teachers into doing it. To facilitate teachers to engage in lesson study, school administrators can show their support in terms of timetabling, obtaining substitute coverage and providing staff development time. The school management has the responsibility to support as well as give recognition to teachers' efforts in enhancing the essence and atmosphere of learning. Meanwhile, the government should also play a significant role in supporting teachers' participation in lesson study by responding to the problems raised through sharing sessions, allocating funds for staff release time, providing financial incentives, recommending good practices across the school community and subsidizing teacher education institutes to offer courses on lesson study so that more teachers are trained to lead lesson study teams. It is pleasing that the education institute at which the present author is working will begin to offer a lesson

study module to its pre-service student teachers in 2007.

#### 4. Conclusion

教师已经有很重的教学任务和压力

What may reduce the appeal of lesson study, which is a relatively new approach in Hong Kong, are the time constraints and pressure faced by many school teachers. **Requiring teachers to stay behind after school for the lesson study meeting every week and doing paper work, on top of their already heavy teaching duties could be a burden.**<sup>1</sup> We have to admit that it is impractical to have the meticulous planning required for lesson study in every single lesson. However, the impacts of intensive work on a few research lessons can be far-reaching. Lesson study enables teachers to take charge of their own professional development—they can put forward their own agendas and choose the object of learning for their study. **Lesson study creates a culture of peer learning and learning from actual classroom practice.** Lesson study also provides opportunities for a free discussion of ideas, with participants able to **challenge others' and their own way of thinking, and seeing learning from students' perspectives.** It is hoped that by engaging in the formal process of lesson study once a year at least, teachers can apply the lesson study mentality to their daily teaching practice, and they are more sensitized to the critical features of the object of learning, and are able to anticipate students' learning approaches, problems and solutions. Quality teaching requires sustained, intellectually demanding professional work, and lesson study is a means to realize this. The government and school authorities play a significant role in facilitating the exploration of the promising potential of lesson study. I believe that Hong Kong teaching practitioners will be more willing to experience the lesson study process and reap its benefits if the government and school authorities are willing to provide necessary support.

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<sup>1</sup>Two teachers committed suicide in 4 days in January 2006. Their wives said that they had suffered from a heavy school workload.