# An Asian Perspective


**Mun Ling LO**

## Contents



**Abstract** Lesson study cannot exist devoid of context; it is always a part of something bigger, for example, the school system and the culture. Focusing on the specific characteristics and features of the lesson study itself will limit our understanding within its internal horizon only. To achieve a more in-depth understanding, we must try to see how the lesson study connects with the external horizon, for example, the theoretical lens used to guide the lesson study and to analyse the research lesson, the school system in which the research lesson is enacted and the culture of which it is a part. Then, we would be able to understand why specific approaches towards conducting lesson study are preferred, why certain features vary across different countries, and unpack culturally embedded messages that have been taken for granted. It is crucial for us to develop theories because they help us to be less reliant on the expert, and more efforts should be directed towards developing theories that guide us on how to deal with the objects of learning.

**Keywords** Theory-informed lesson study · Culturally embedded features · Variation of lesson study · Internal horizon · External horizon

When I was invited by Rongjin to write a commentary for this book from an Asian perspective, I was happy but hesitant. It is an honour for me to be invited to participate in such an important book project, yet I do not know what the Asian perspective is! Being immersed in the Asian culture all my life, I have already taken all its features for granted. However, as one's ways of thinking are necessarily affected by the environment and one's life experiences, my perspectives will reflect the Asian culture, whether I am aware of it or not. That was why I accepted the invitation, but I will leave the readers to unpack the Asian perspectives. I believe that

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the readers will be able to discern the 'Asian perspectives' when they contrast them with their own. Also, having started learning study in Hong Kong and having supported over 100 learning studies over almost 20 years, I cannot help but see through the eyes of a learning study researcher. So, my writing will reflect this as well.

There is a Chinese idiom story about three blind men who wished to learn about an elephant. The first blind man touched the ear of the elephant and said that an elephant was like a flat sheet. The second blind man argued that it was more like a tube as he held on to the tail of the elephant, while the third blind man insisted on his view that an elephant is shaped like a pillar because he was embracing the leg of the elephant. None of them was completely wrong, but each only learned a part but not the whole of the elephant. Lesson study is like an elephant to those of us that need to be enlightened. Although by now there are many papers on this topic, unfortunately, such publications are also under many constraints. For example, the need to focus and conform to word limits makes it impossible to paint a complete picture. This book includes chapters from researchers of different countries, with diverse experiences, under different contextual constraints, and with lesson studies at various stages of development. It presents a good collection of rich descriptions of the present situations in this field of study. The book will answer many of the questions of the patient enquirer who will read the whole book, and this book is a landmark in the development of lesson study. Still, the 'part-to-whole' relationship must be born in mind in reading the chapters, because these chapters still only represent some parts of the whole.

As I dutifully read through the chapters of this book to write the commentary, I realised that each of them has to be understood as a culturally embedded text; many of the messages and ideas need to be unpacked to be fully appreciated. One must refrain from jumping to conclusions that certain essential features are missing, because such features may be so culturally embedded that the authors have taken them for granted. Even with the same terms, they do not mean the same thing. An example is 'the object of learning' (e.g. see Gunnarsson, Runesson and Kakansson's chapter). For the researchers of learning study premised on variation theory, the 'object of learning' is not simply content. Embedded in the term 'object of learning' is a whole set of meanings. An object of learning is clarified and defined by critical features. It is dynamic because the defining critical features are only revealed when students encounter the object of learning. Its worthiness lies on how the learning of it provides a linkage to the whole of which it is a part. Also, it is not limited to content but includes capabilities, skills and attitudes (Lo 2012).

Another example is the term 'unit flow' or 'flow of the research lesson' when mentioned in lesson study (e.g. see Fujii's chapter). It does not simply mean the planned progression of the lesson and the sequencing of teaching activities as some of us might take for its meaning. This term includes the studying of curriculum and teaching materials, choosing learning tasks and examples and anticipating student learning difficulties. However, most of these would be considered by the learning study researchers under the 'object of learning', whereas the 'flow of the lesson' for them would include things like 'enacting the patterns of variation' used to bring out

the critical features and carrying out the activities to bring about the patterns of variation. These are just two examples, but the readers can surely unpack many more. I raise this issue because it would be possible that researchers of different camps misunderstand each other and think that there are missing features in the other parties' approach if they do not pay particular attention to unpack the real meaning of the terms used.

The chapters also reveal how culture shapes the development of lesson study in various countries. In both China and Japan, there is an emphasis on the 'knowledgeable other' or 'expert'. In both cultures, respect for the senior is an accepted cultural norm. We can certainly see the value of an expert because their advice usually comes as a result of a fusion of many aspects and represents the sublimation of experiences and wisdom. Such insights sometimes surpass scientific analysis (Lo 2012, p. 67). In both China and Japan, since lesson study has been widespread and practised for many years, experts can be and have been nurtured. Unfortunately, in other countries, where the history of lesson study is relatively brief, the environment to nurture experts does not yet exist. Although it is possible to nurture 'experts' (see J.M. Lewis' chapter on 'Learning and Leading Lesson Study'), it takes time and opportunities. The lack of experts perhaps explains why in most countries, other than Japan and China, scientific evidences and theories are sought to support lesson study and an action research approach is usually adopted. Teaching different cycles of the research lesson is a common practice. The various teaching cycles allow evidences to be gathered to verify if the suggested amendments are indeed improvements. Explorations are underway searching for theoretical frameworks, and a whole section in this book is devoted to discussing the theoretical perspectives of lesson study. It would be interesting to take the data from one lesson study and analyse it using different explanatory frameworks and theories. The commonalities and differences would be revealed. However, I believe that there would be more commonalities than differences and that various theoretical lenses would be offering multiple ways of saying the same thing.

An aspect that shows variation across countries is the focus of the lesson study; it varies from focusing on the learning of the teacher to focusing on the learning of the students. From my reading of the chapters, lesson studies in both China and Japan have a greater focus on the learning of the teacher and similarly for lesson studies of countries that aspire towards the Japanese model. Lesson study in Japan is regarded as a platform for teachers' professional development. The research lesson is rarely retaught because its main purpose is to serve as a model lesson which provides a context for critical review and analysis (e.g. see Makinae's chapter). The experts make the final judgement about the quality of the research lesson. Similarly in China, although the research lesson may be retaught and modified, the goal is to produce the best available lesson plan. This lesson plan is then disseminated through public demonstration lessons taught to different classes of pupils. The same lesson plan, only with very slight modifications as necessitated by the dynamics of the classroom, is used. Sometimes, a teacher may even teach this demonstration lesson to different groups of unfamiliar students from other schools. This situation may seem incredible to readers of other countries, but with a national curriculum, highly motivated

students, and streaming according to ability, the classes that are chosen for the demonstration lesson may be quite similar in academic achievement across the country. While the focus is on the professional development of teachers, it does not imply that the learning of students is ignored. In lesson studies of both Japan and China, meticulous attention is paid to how students learn during the research lesson, for example, by observing the reactions of target students during the lesson very carefully and making detailed notes of students' reactions. In some lesson study models, teachers draw on their knowledge of students to predict a learning trajectory and anticipate student learning difficulties (e.g. see Han and Huang's chapter and Suh, Birkhead and Galanti's chapter). However, I have not yet found any references to what students have to 'say' about their learning before or after the research lesson being used to shape the research lesson. In England, the lesson study model is modified to take into account student learning by focusing on the learning of three case students (see Dudley et al.'s chapter). These students are carefully observed and interviewed to assess their learning. The learning study model which started in Hong Kong and later further developed in Sweden and some other countries, on the other hand, focuses primarily on student learning. Special attention is paid to students' voices before, during and after the research lessons. Interviews and diagnostic tests are the norms for assessing students' ways of seeing the object of learning, and the dynamic nature of the object of learning is acknowledged. Students' difficulties with, misconceptions of, and different ways of seeing the object of learning play an important role in constituting the critical features. In learning study, the students' voices are deemed more important than the experts' voices. For example, in Hong Kong, student interviews are an essential feature of learning study. Instead of relying solely on teachers' experiences to guess the learning trajectory, pilot interviews with students from a more senior class that had already learned the topic help the learning study group to find out what difficulties students encountered in the object of learning. These students' persistent misconceptions about the object of learning become valuable resources for identifying some of the critical features. Apart from administering pretest and post-test to all students, three students considered to be of low, average, and high achievement are chosen by the class teacher for interviews just before and right after the research lesson. These interviews are attended by all members involved in the learning study, sitting at the back of the students. During the post-lesson interview, searching questions to establish how students have experienced the research lesson are asked. Questions include, for example: 'What do you think the teacher was trying to teach you in this lesson?' 'Did you learn something new in this lesson? What is it that you did not know before the lesson, but now you know or have mastered?' 'How did you learn it? What did the teacher do that helped you to learn "X"?' 'Before the lesson, this was how you described your understanding of "X". . . . now have you changed your mind? Can you please elaborate on it?' Also, students are asked to demonstrate what they have learned by working out some problems. In this way, the teachers get feedback directly from the students. We believe that the students are in the best position to judge whether a lesson helps them to learn or not. It is not how the teacher performed during the lesson (the enacted object of learning) but how the students experienced it (the lived object of learning)

that counts. The role of the expert in making a judgement on whether the research lesson has been successful in bringing learning about is thus played down. Still, the expert has a significant role in leading the post-lesson discussion to interpret why learning has or has not taken place and how the next cycle can be improved.

If the primary purpose of lesson study is for professional development, it is natural that the wisdom of practice will guide the study. Thus, experts' opinions are sought and very much respected. If teachers' benefit from lesson study and become better teachers, then naturally, students will benefit and learn better. On the other hand, if the primary purpose of learning study is to find the best way to help students master a specific object of learning and an action research approach is adopted, gathering data for interpretation and testing hypothesis to improve learning are natural consequences. Once a better way to help students learn is found, students will learn better, and it follows that teachers will gain expertise and will teach better. So, whether the initial focus is primarily on the learning of the teachers or the learning of the students, both parties will benefit in the end.

This book includes a wide variety of contributions from different countries, with rich descriptions of how the lesson study model works for them. What I appreciate most is that many chapters give detailed accounts of the research lesson, the activities used to bring about learning, and some even include details of examples and contents used in the research lesson. It is only through such information that one can come to understand in concrete terms fully. Many useful insights are shared on both in-service teacher development and initial teacher education. I found the chapter 'Lesson Study for Pre-service teachers' by J.M. Lewis of interest. The model uses a novel idea of having the instructor teach the research lesson. In this way, the enacted lesson would not deviate too much from the intended plan, as often happens due to the insufficient mastery of technical teaching skills of a student teacher! Another exciting point reported is that against all advice about how lesson study can work best, the study succeeded. The author concludes that, ultimately, it depends on whether participants can gain positive experiences that change their initial negative attitude and have ownership at the end of the process. This conclusion prompts an important research question: 'In what ways can we ensure participants gain positive experiences?'

One obvious answer to the above question is to ensure that the process of lesson study eventually leads to better student learning. By that, it also means that a pressing research question for any lesson study group is 'How can we deal with content in ways that facilitate learning?' The importance of content has been mentioned in many chapters, and it seems to be a consensus among lesson study researchers. It is nice to see some chapters developing theories on how the content should be taught, for example, the chapter by Bahn and Winslow on the theory of didactical situations, the chapter by Schoenfeld et al. on teaching for robust understanding, the chapter by Fujii on careful selection of examples based on the variation principle and the chapter by Gunnarsson, Runesson and Hakansson on how variance and invariance can inform teacher's enactment. Nakamura's chapter points to the role of the expert in helping the student teachers see the content as a part of something bigger, the whole of which it is a part. This role was much appreciated

because making explicit the relationship between this part and the whole and other parts of this whole makes for much higher-quality learning. In this way, an emerging idea of 'fusion' has been alluded to but not fully explored. For the interested readers, Lo and Chik (2016) discussed the idea of 'fusion' in some details. They differentiated the internal and external horizons of fusion. Internal horizon relates to the structure and meaning of the object of learning as experienced by the learner; it clarifies the interrelationships among an object's critical features and aspects and the part-whole relationships of these features and aspects within the object itself. Fusion in the external horizon elucidates the relationships between the object of learning and its environment as seen by the learner, and such relationships extend beyond the object's boundaries (Lo and Chik 2016: p. 296). They argued that any content (and/or an object of learning) should not be taught out of context, but both internal and external horizons of fusion should be attended to for the knowledge gained to be meaningful and worthwhile. 'Fusion' is a useful concept because we can also apply the idea to understanding the variation of lesson study across countries if we take 'lesson study' to be an 'object of learning'. To achieve a more in-depth understanding, we must try to see how the lesson study connects with its external horizon, for example, the theoretical lens used to guide the lesson study and to analyse the research lesson, the school system in which the research lesson is enacted and the culture of which it is a part. Since lesson studies aim to improve the quality of teaching and learning, which, in turn, depends on the quality of the object of learning chosen, in the future, more researches directed towards this critical aspect are needed. We can be less reliant on the expert if we can develop theoretical explanations to enlighten us on why certain acts of teaching can help students achieve a deeper understanding of the content while others do not and why some objects of learning can contribute to higher-quality learning than others. As Lo and Marton (2012) concluded in their paper, although teaching is ultimately an art, it has a scientific basis (Lo and Marton 2012).

Common to all of the chapters, we can find genuine attempts by lesson study groups to improve teaching and learning under existing constraints, to adapt lesson study to the best possible effect and to acknowledge the fact that student learning is a function of teaching. Perhaps the situation that the Japanese lesson study has never been made clear and fully unpacked (see Takahashi and McDougal's chapter) allows for explorations by different research groups, within their constraints and context, to pursue an ideal, an end product that they wish to achieve. Although the path is not clear, the goal is clear. As a result, the lesson study models thus developed are contextually viable for their local environment. The models described in this book reflect the different stages of development; some are more sophisticated, enabling very useful generalisations to be drawn (see Lewis et al.'s chapter), while some are just starting their exploration. I would consider this situation as aptly described by the saying 'every road leads to Rome'. Some roads are faster and smoother, while others may have obstacles on its way and slower, but, eventually, everyone will get there, if they will just keep going!

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