



## Academic Article

# EQUITY AND THE LESSON STUDY APPROACH IN THAILAND: CURRENT AND FUTURE DIRECTIONS

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## Abstract

This paper reviews the overall development of lesson study and the possibility of implementing the concept of equity in the Thai context. Lesson study is a widely used professional development approach for Thai teachers. However, there is no clear research on the relationship between lesson study and equity in Thailand. This article provides an overview of general lesson study conceptions to help the reader understand lesson study before exploring its development in Thailand. Subsequently, the concept of equity, which is one of the themes this research highlights, is discussed. The theoretical and practical relationships between lesson study and equity are then further examined before analyzing the research trends on this topic. The investigation shows that implementing equity issues through the lesson study approach is possible in the Thai context. Future research should further develop the notion of equity as part of an action plan to improve the lesson study approach and make it more sustainable.

**Keywords:** Lesson Study, Equity, Thailand

## Introduction

Equity is one of the most interesting concepts in contemporary education because it has been included in the Sustainable Development Goals outlined by the United Nations (UN) (Ainscow, 2020; Boeren, 2019). This concept is acknowledged in schools worldwide (Gorard & Smith, 2004) and is emphasized prominently in a well-known policy titled “Education for All,” aimed at increasing the quality of the teaching and learning process (Ainscow, 2020, p. 7). Therefore, it is necessary to investigate equity issues in education to make education more equal in various aspects.

Another important concept is lesson study (LS), a professional approach that first emerged during the late 19th century (Inprasitha, 2015; Makinae, 2019) and became widespread by the beginning of the 21st

century (Inprasitha, 2009; Lewis & Hurd, 2011; Takahashi & McDougal, 2016). This worldwide adoption by scholars demonstrates the success of the approach. For the purposes of LS, the definition proposed by Dudley (2014) applies: “Lesson study is a form of collaborative classroom enquiry in which a group of teachers work together to improve their pupils’ learning by improving the way they teach aspects of the curriculum, knowledge or skills, or the ways in which they develop their students as learners and citizens” (p. 17).

In fact, LS and equity emerged in education at around the same time (e.g., Lynch, 2000; Stigler & Hiebert, 1999), which suggests that these two ideas may relate to each other. This argument is supported by Dudley’s (2014) definition, which implies an indirect link to equity issues in its invocation of the idea of citizenship, which Westheimer and Kahne (2004) proposed as “justice-oriented” (p. 237). They explained that citizens oriented toward justice should acknowledge equity and aim to improve the society in which they reside. However, the literature on the relationship between LS and equity issues is severely limited (e.g., Baker et al., 2021; Graham, 2020), and this relationship has not yet been clearly discussed in the context of Thailand. If the concepts were well integrated in Thailand, the overall concepts regarding LS would become more comprehensive in promoting the effectiveness of students’ learning.

Therefore, this paper aims to find a way to promote equity through the LS process. This objective will help readers expand and deepen their perspectives on LS in Thailand, especially concerning equity. Specifically, the position in this paper is to determine how LS can be a tool for promoting equity in student learning. The structure of this paper involves discussing the conceptions of LS and identifying its development in the Thai context. This is to ensure that readers have a sufficient understanding of the topic. Then, the concept of equity and its relationship with LS will be presented. Thereafter, possible equitable practices, together with LS and future trends of its application incorporated with the concept of equity, will be examined.

## Basic Conceptions of Lesson Study

LS can be traced back to the Japanese educational practices of the late 19th century; this practice became well-known when Japanese students attained very high scores in global education testing (Inprasitha, 2015; Makinae, 2019; Stigler & Hiebert, 1999). The practice then became widespread in different education systems in the early 21st century (Inprasitha, 2009; Lewis & Hurd, 2011; Takahashi & McDougal, 2016). As a result, its popularity has attracted a great deal of attention.

Regarding the basic conception of LS, Fernandez and Yoshida (2004) proposed that “Lesson study is a direct translation for the Japanese term *jugyokenkyu*, which is composed of two words: *jugyo*, which means lesson, and *kenkyu*, which means study or research. As denoted by this term, lesson study consists of study or examination of teaching practice” (p. 6). This definition describes the main element: teachers are vital to maximizing students’ learning during a lesson (Stigler & Hiebert, 1999). Stigler and Hiebert (1999) identified eight main stages of conducting LS: (1) “defining the problem,” (2) “planning the lesson,” (3) “teaching the lesson,” (4) “evaluating the lesson and reflecting on its effect,” (5) “revising the lesson,” (6) “teaching the revised lesson,” (7) “evaluating and reflecting again,” and (8) “sharing the results” (pp. 112–116). As can be seen in

these eight stages, the aim of LS is to improve lessons and help students do their best in the learning process. Based on the stages provided by Stigler and Hiebert (1999), some scholars (e.g., Triwaranyu, 2007) have reduced and adapted LS into simpler forms. However, even in a simpler format, the spirit of LS can still be preserved. These steps jointly constitute a cycle of lesson implementation, establishing the spirit of action research in practice (Pang & Marton, 2003).

One main component of LS is the research lesson (Fernandez & Yoshida, 2004; Lewis & Hurd, 2011; Wake & Seleznyov, 2020). The research lesson can be viewed in practical terms as a collaborative effort between teachers' delivery of the lesson and students' learning in the classroom (Wake & Seleznyov, 2020). Wake and Seleznyov proposed that one teacher in the LS group team should be required to conduct what we call a *"research lesson,"* in which all research teams collaborate to design the lesson plan. Then, the researchers and remaining teachers in the research group should observe how the students learn in class, determine whether the task requirements for lesson plans in which all people work collaboratively are met, and evaluate how well the lesson is conducted (Lewis & Hurd, 2011; Wake & Seleznyov, 2020). This process shows how this lesson would help teachers recognize and analyze how best to improve their teaching.

According to Lewis and Hurd (2011), when teachers engage in LS, they gain pedagogical insights by reviewing and reflecting on their practices. Thus, they develop a better awareness of their teaching styles and a deeper understanding of possible ways to support student learning. Fernandez and Yoshida (2004) echoed this observation, suggesting that teachers will also understand how content and students' learning can interact. The objective of this interaction is to ensure that students correctly understand the teachers' explanations of the expected concept. Lewis and Hurd (2011) also demonstrated that students benefit from well-planned lessons developed by teachers working collaboratively in LS to nurture students' capabilities for learning to learn, which could be seen as a kind of long-term learning.

## Lesson Study in Thailand

The origin of LS in Thailand can be traced back to the first few years of the 21st century, when Dr. Inprasitha introduced this innovation from Japan (Inprasitha, 2009, 2015, 2022). The growth of LS in Thailand is apparent in various disciplines, including mathematics (Intaros & Inprasitha, 2019), social studies (Sriphorm & Silanoi, 2013), and music education (Chaleekarn, Sriraksa, & Wuttiapan, 2015). However, as we shall see, LS in Thailand has some specific features that are distinct from other places.

Before examining the LS model, it is necessary to highlight what it means to scholars. According to Cojorn (2016), Thai LS has no standardized definition. The term "lesson" in LS is variously defined as "classroom instruction" (Triwaranyu, 2017, p. 305), "classroom study" (Inprasitha, 2015, p. 217), "lesson plan" (Triwaranyu, 2017, p. 305), and "students' learning" (Triwaranyu, 2017, p. 305). This diversity makes understanding LS challenging, because it is quite hard to determine the focus of its specific work. Moreover, these definitions may not represent broader work in the field. LS is one of the most popular educational development approaches used in Thailand's education system to assist students and teachers at the primary, secondary, and

tertiary levels (Chaleekarn et al., 2015; Inprasitha, 2022; Intaros & Inprasitha, 2019; Sriphorm & Silanoi, 2013). This wide variety of applications allows flexible adaptation to Thailand's education system. However, the models applied in Thailand do not have fixed forms, and several variations of LS are practiced.

The first LS model to become popular in Thailand was LS with an open approach (Inprasitha, 2010, 2011, cited in Intaros & Inprasitha, 2019). According to the open approach, Nohda (2000) pointed out "that all students can learn mathematics in response to their own mathematical power, accompanying with certain degree of self-determination of their learning, and can elaborate the quality of their process and products toward mathematics" (p. 41). This model is directly focused on mathematics education but is applicable to other subject areas in the Thai context (e.g., Chaleekarn et al., 2015). The LS model with an open approach has become more popular in neighboring countries, especially Lao PDR and Cambodia (Inprasitha, 2015, 2022). This popularity indicates that this particular LS approach has become one of the mainstream expressions of LS.

The second model is LS combined with other teaching approaches or methods. In Thailand, the combination of LS with other approaches is not as prevalent as the first model. It has been combined with other teaching methods and approaches, such as project-based learning (Sriphorm & Silanoi, 2013) and phase-based instruction (Adulyasas & Abdul Rahman, 2014). The selected approaches may help and work well as part of the LS process. However, some researchers do not explicitly mention any specific methods to be included as part of LS (e.g., Triwaranyu, 2007). The process is purely focused on LS. From this starting point, LS can be implemented using other teaching methods and approaches that might be suitable for subject-specific knowledge.

In this instance, LS in Thailand incorporates diverse methods into the model (e.g., Adulyasas & Abdul Rahman, 2014; Sriphorm & Silanoi, 2013). This diversity can provide opportunities for teachers to choose teaching methods that they deem relevant to what they would like to teach. These opportunities could facilitate teachers' and students' learning. However, teachers must ensure that the lesson content is directly related to specific teaching approaches and methods. If teachers choose inappropriate methods, the LS model may be unsuccessful.

During an investigation of the literature on Thai LS, it was observed that LS models in Thailand contain various methods of implementation (e.g., Inprasitha, 2022; Sriphorm & Silanoi, 2013; Triwaranyu, 2007). Based on this observation, the elements of equity could be applied within the stepwise process of LS. However, the observations did not provide enough explicit evidence to identify the main features. Therefore, this paper's focus is on how to integrate LS in ways that highlight and foreground the concept of equity in Thai research. Before understanding this, however, readers should have an essential foundation for understanding the concept of equity to get an overall idea of its implementation in LS.

## Equity Issues in Education: A New Way to Strengthen the Education System?

This section provides some basic information about equity issues to increase the understanding of how LS could benefit the overall education system in Thailand. The conceptions of equity and the relationship between equity and various disciplines will be discussed.

The concept of equity is explicitly mentioned in the UN's Sustainable Development Goals and is now embraced in education systems worldwide (Ainscow, 2020; Boeren, 2019; Gorard & Smith, 2004). However, this popularity prompts some basic questions about how equity should be defined. Frønes, Pettersen, Radisić, and Buchholtz (2020) defined the notion of equity as “justice” (p. 2), and Ainscow, Dyson, Goldrick, and West (2012) described it as “fairness” (p. 2). In fact, these keywords are used interchangeably. When discussing what is viewed as “fairness” (p. 2), the concept varies in different situations based on what occurs in the classroom. Frønes et al. (2020) also pointed out that the needs of each individual can be addressed as one central requirement when people consider which level of equity should be applied. Therefore, this paper will adopt the concept proposed by Frønes et al. (2020) as a working definition.

Unterhalter (2009) indicated that the concept of equity has been popular in policy documents from this century. This popularity shows that the global education system considers this notion central among subjects in the education field. However, it should be noted that current policy documents emphasize the concept of equity more than that of equality (Unterhalter, 2009). Although these ideas are superficially similar in the roots of the words, they are used differently. Ainscow et al. (2012) also further highlighted the main questions regarding equity issues from different perspectives: (1) “Who gets what?” (2) “Who is treated in what way?” and (3) “Who can do what?” (p. 8). These three questions were clearly answered in terms of how the concept of equity is used in the education field. These questions may also highlight the differences between equity and equality in that field. However, educators should use these two ideas carefully because they are distinct (though related) concepts (Buchholtz, Stuart, & Frønes, 2020).

As a disciplinary notion, the idea of equity has also been mentioned in many learning areas. Different groups or organizations in the education field have clearly raised the concept, reflecting how these issues have become popular and necessary in the classroom setting. The first definition was developed in science education. The National Research Council (2012) defined equity issues in science education as follows: “Equity in science education requires that all students are provided with equitable opportunities to learn science and become engaged in science and engineering practices, with access to quality space, equipment, and teachers to support and motivate that learning and engagement, and adequate time spent on science” (p. 28). Based on this definition, the concept of equity may be linked to teachers' preparation, especially in how teachers prepare to help students learn. At the same time, this idea is also reflected in the classroom environment, irrespective of whether the atmosphere and materials are ready. The second field, mathematics, is the most popular in which to address equity. Various researchers in the field have specifically mentioned the notion of equity. For example, Martin (2019) discussed equity as it affects Black students in mathematics education. This author proposed radical ideas on how to help Black students learn mathematics. The education of Black

individuals is not necessarily a prominent issue in Thailand, but this paper effectively promotes equity issues in a different setting.

Therefore, the equity issue is vitally important in various education systems; this is acknowledged by educators such as Martin (2019). Ways to promote equity should be considered at both the policy and classroom levels. At the policy level, this concept may need to be clearly addressed in curriculum documents (Unterhalter, 2009). At the classroom level—which directly relates to the core of this paper—Lotan (2006) pointed out that improving equitable practices in classrooms requires teachers to understand the students' learning differences in class and to try to allow all students to have an opportunity to learn. Accordingly, it can be observed that teachers cannot improve equity in class if they do not plan the lessons and identify students' needs adequately.

### **Equity and Its Possible Applications in Thai Lesson Study**

As mentioned earlier, equity is considered one of the most powerful concepts for helping students learn in a classroom setting. However, this notion is comparatively new in Thailand's education system. This section evaluates whether equity issues can be blended with LS in Thailand, where LS is popular (Inprasitha, 2022). The link between LS and equity issues worldwide is examined before evaluating how Thai LS could embrace equity issues to provide a better understanding of how LS can be combined with equity issues.

The concept of equity has been presented alongside LS in many previous studies (e.g., Graham, 2020). Baker et al. (2021) pointed out that these two concepts can be tied together because students need equal opportunities and qualified teaching to succeed; LS is a professional development approach that enhances students to become successful learners. Although Baker et al.'s study was in the mathematics education field, their findings regarding the LS approach could apply to all disciplines.

Research on LS and equity issues has been presented globally. Graham (2020) focused on the role of preservice teachers in promoting equity issues using the LS approach. Graham's study provided a positive sign of combining equity and mathematics teaching using the LS approach. In addition, this study highlighted that the process of LS helps preservice teachers develop more sustainable knowledge and practices. Huang, Helgevold, and Lang (2021) suggested that equity issues should be highlighted and emphasized when conducting LS and become one of the tasks that teachers following LS are competent to undertake.

Baker et al. (2021), Graham (2020) and Huang et al. (2021) highlight LS operations and the concept of equity. These ideas can be applied in Thai society, where various teaching methods can be observed, some of which might indirectly incorporate the notion of equity. While it is clear that LS practices can promote equity issues to provide students with learning opportunities, no research has confirmed that LS and the concept of equity can work well in the Thailand context. Therefore, this paper examines and analyzes practices and details regarding equity in Thai LS to build on previous research that had implicitly addressed this concept. To this end, further investigation of past research on equity issues should be carried out.

## Equitable Practices and Key Research on Lesson Study in Thailand

As noted earlier, previous researchers have not discussed equitable practices in Thai LS. However, it is believed that LS in Thailand might unintentionally incorporate equity issues from different perspectives. This section investigates how equity issues can be embraced in Thailand, specifically by analyzing LS with an open approach (Inprasitha, 2010, 2011, cited in Intaros & Inprasitha, 2019), the combination of LS with other approaches (e.g., Sriphorm & Silanoi, 2013), and the stages of LS provided by Stigler and Hiebert (1999) to determine how equity issues can be harnessed to promote students' learning in Thailand.

First, LS with an open approach, as introduced by Inprasitha (2010, 2011, cited in Intaros & Inprasitha, 2019), indirectly integrates the concept of equity because the elements of the open approach have some equitable functions (Munroe, 2016). The open approach is one of the most important practices for teaching mathematics (Nohda, 2000). It normally consists of four main stages: "posing open-ended problem," "students' self-learning," "whole class discussion and comparison," and "summarize through connecting students' mathematical ideas emerged in the classroom" (Inprasitha, 2010, 2011, cited in Intaros & Inprasitha, 2019, p. 865). In the open approach, promoting "students' self-learning" (p.865) can be seen as the closest link to the concept of equity because the open approach provides a space for students to think, although that space may not be completely equitable. This idea was supported by Munroe (2016), who confirmed that the open approach could be usefully combined with the concept of equity. This could predict how equity might work in Thai LS, but no scholars have properly addressed or promoted equity. Additionally, the questions proposed by Ainscow et al. (2012) are useful for teachers if teachers and researchers consider equity issues to be part of the open approach.

When adopting the open approach as a part of LS in Thailand, most researchers have focused on the achievements of students in different aspects, such as cognitive development and skills (Chaleekarn et al., 2015; Inprasitha, 2022; Intaros & Inprasitha, 2019). More work is needed to clarify how the open approach can work well in LS to promote equity. Therefore, the first point to consider is how to design lessons that work well with LS and promote equity from the outset. Although there is no precise formula for highlighting LS with an open approach to promote equity, researchers and teachers should consider how each step of the open approach, which indicated in Inprasitha (2010, 2011, cited in Intaros & Inprasitha, 2019), can contribute to equitable practices in teaching and learning. Therefore, the promotion of LS through the concept of equity and the open approach should be properly planned and implemented in the future.

Second, some LS models cooperating with other teaching methods and approaches prevalent in Thai society could also enhance the concept of equity if they integrate equity as a part of teaching. One example is described by Sriphorm and Silanoi (2013), who applied LS in the field of social studies. They adopted the concept of project-based learning as their teaching approach in LS, aiming to improve students' learning. However, this study did not clearly mention the concept of equity. To examine the relationship between equity and project-based learning, Miller, Reigh, Berland, and Krajcik (2021) conducted research in the field of science education. Although their study did not directly concern LS, the relationship between project-based learning

and equity issues is clear. It can promote a sense of belonging in class and grant students confidence to answer questions from their friends online. From Miller et al. (2021), Sriphorm and Silanoi (2013) should analyze the important elements of project-based learning in promoting students' learning opportunities to achieve equitable practice in LS. In fact, the analysis to identify equity is not limited to the mentioned examples. If LS can be combined with other teaching methods and approaches that have elements of equity, then LS combined with those teaching methods and approaches could carry the mission of promoting equity as well.

Though the aforementioned examples indicate that LS can be implemented through different approaches, the gap not yet mentioned concerns how to promote equity as a part of LS. This section critically evaluates how LS can promote equity. Parks (2008) pointed out that teachers can realize equity when collaborating to deliver LS. This research can be linked back to the stages proposed by Stigler and Hiebert (1999), especially when teachers discuss how to improve students' learning, which can be connected to equity. These studies reveal how these processes can be integrated into aspects of LS.

One recommendation for considering equity issues in the LS process is to ensure that equitable practices and perspectives are raised in the discussion. This approach can be based on the three guiding questions raised by Ainscow et al. (2012) on the nature of the relevant subject, in which all concerned know the scope of the content taught as a point of consideration. This may facilitate interesting perspectives on classroom teaching and learning, promoting content knowledge and equity.

### **Future Directions for Lesson Study and Equity Issues in Thailand**

There are different ways to combine LS with equity issues through classroom teaching and learning. If equity is adopted based on the studies mentioned here, it can promote effective student learning in Thai society.

As discussed earlier, there are two ways to promote equity concepts: (1) through teaching methods or approaches, and (2) through the LS stages provided by Stigler and Hiebert (1999). Regardless of the method, there are some points for consideration. First, when teachers plan lessons, they should ensure that students have equal opportunities to learn and participate in the classroom (Lotan, 2006). At this stage, teachers may discuss students' individual characteristics and evaluate the suitability of the proposed learning content for the students (Lotan, 2006). This may help teachers identify and choose the best ways to help their students engage with the lessons. Second, when teachers implement the plan in the classroom, they may need to make the classroom environment positive, enabling them to build trusting relationships with students (Lotan, 2006). Teachers should make their classrooms more inclusive for everyone rather than focusing exclusively on pupils with low or high academic achievement (Lotan, 2006). Finally, the post-lesson discussion is important in terms of determining whether the teacher's plan is consistent with the spirit of equity. If the application is unsuccessful, the teacher may need to revise and plan more carefully for future lessons. Based on the aforementioned description, it is evident that the application of LS is not required for further work toward incorporating equity issues into lessons, and that LS works well within the process of equity.



The three fundamental questions posed by Ainscow et al. (2012) should become the foundation for improving these practices in Thailand. The questions, which offer a background and a basic understanding, can help teachers identify an essential idea in the promotion of effective student learning. They can underpin a method of working together to develop and reflect on lessons. The success of students' learning can be identified as the key goal of LS in Thailand. Furthermore, if such a process is continuously adopted, it may ensure that LS will affect real changes in Thai society.

## Conclusion

This paper examined whether LS could incorporate equity issues into its mission. As discussed earlier, the interpretation of equity in this study incorporates the broader sense of “justice” (Frønes et al., 2020, p. 2). Based on the literature, there is room to combine these two ideas. The first way to promote equity through an incorporated LS model is to use other teaching methods or approaches. Normally, these methods and approaches have characteristics that enable effective student learning because they center on the students (e.g., Miller et al., 2021). The second way to improve equity is via the LS stages themselves. The LS process provides teachers with the opportunity to use the concept of equity as a guide for planning and delivering lessons (Parks, 2008). As mentioned earlier, a clear formula for implementing equity in LS remains elusive. Rather, equity is treated as an abstract concept that the teacher must bear in mind when planning and conducting lessons. Accordingly, the guiding questions proposed by Ainscow et al. (2012) can be seen as a clear blueprint to help teachers determine whether the concept of equity has been comprehensively promoted in LS.

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