

## ICED 2020 proceedings:

# Lesson study (*jugyou kenkyuu*) as an educational development practice for faculty members at the University of Barcelona

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### Abstract

Lesson study (LS) is a practice that has received international credit as a useful process for teachers' professional development; nevertheless, it is rarely practiced among higher education faculty members. This article provides a brief analysis of how an academic development initiative using LS and carried out at the University of Barcelona (Spain) was perceived and experienced by its participants and of its potential for their educational development. Data was gathered through observation, reflective journals, video-recordings, and interviews, and was content-analysed. Overall, the initiative provided a valuable learning space to enhance the participants' educational competences. However, its results raised concerns regarding its sustainability and argue in favour of complementing LS with further educational training to increase the participants' pedagogical knowledge and awareness.

### 1 Introduction

Lesson study (LS) is a practice originating in Japan that since the end of the 1990s (Stigler & Hiebert, 1999) has become well-known internationally and is now present in over 30 countries (Lewis & Lee, 2017). LS has been spread globally by schoolteachers, with only a few examples in higher education (HE) among faculty members (e.g., Dotger, 2011; Lampley et al., 2017). Hence, we still lack enough studies in HE to know its possibilities and potential in HE for academic development (AD) and to compare them to what earlier studies tell us about its impact in other contexts.

This article contributes to reducing the underrepresentation of studies on LS among HE faculty members. The associated study was conducted in 2018 at the University of Barcelona (UB). Data – collected using five different instruments and techniques – was content-analysed using a qualitative approach. This paper aims to provide, in brief, data and results on how an AD initiative using LS was perceived and experienced by its participants, and on its potential for educational development within that context. The data and results address the following goals: (1) describe and analyse LS participants' perceptions and experiences of LS and its adjustments; and (2) analyse what participants' conversations reveal in relation to the learning paths that LS opens for HE faculty members and their approach to teaching and learning.

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## 2 Lesson study

LS is an iterative process in which a group of teachers collaborate to design a research lesson based on a set of student-centred goals; teach and observe that lesson; reflect, discuss and review the lesson and its instruction in order to enhance thinking on a potential reimplementation; and finally, disseminate the lesson and its rationale so that others can learn from it (Akiba et al., 2019; Fujii, 2018).

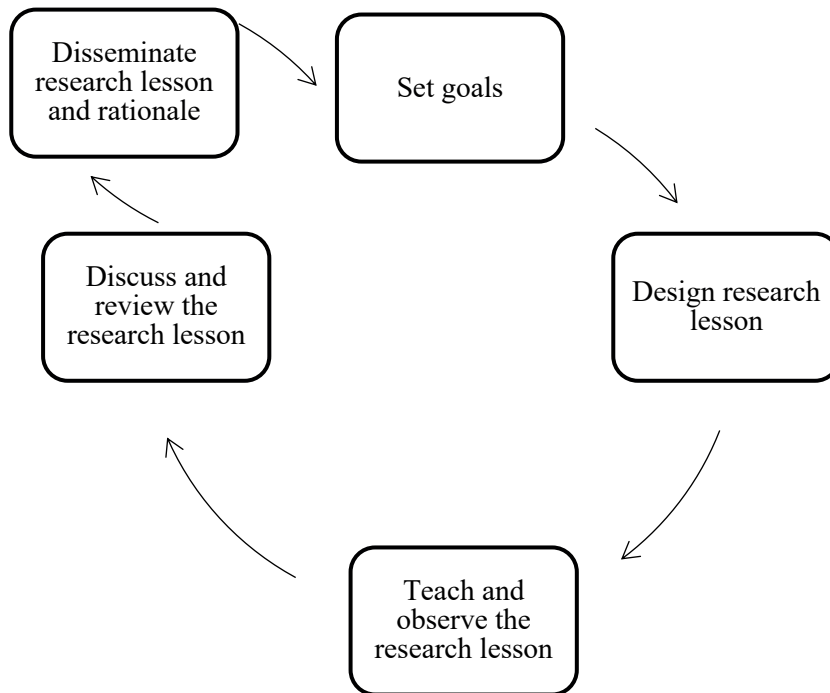


Figure 1: LS cycle.

As mentioned earlier, LS is spread all over the world, mainly due to the positive results that research keeps reporting in relation to its impact on teachers' professional development. Among other findings, previous studies reveal that LS contributes to teachers' active learning (Bocala, 2015); that it is an effective practice for teaching enhancement (Hiebert & Stigler, 2017); that it supports teachers' efficacy (Chong & Kong, 2012); that it promotes the development of teachers pedagogical content knowledge (Coenders & Verhoef, 2019); and, very specially, that it helps to increase teachers' insight into students and their learning (Chassels & Melville, 2009).

## 3 Methods

### 3.1 Context and participants

This research took place in 2018 at the UB, within the framework of an AD program based on LS among health professions educators. The participants were 12 faculty members from three different health sciences disciplines: medicine, nursing and podiatry. The participants were accompanied by two facilitators who also played the role of knowledgeable others given their background and expertise both in educational sciences and LS and in health sciences education. The participants formed three interdisciplinary groups, which each conducted an LS cycle.

### **3.2 Method, data collection and analysis**

For this research I carried out a multiple case study, a method that contributes to gathering data robust enough to support the transfer of results to other contexts (Yin, 2009). I took a phenomenological stance to approaching and analysing data, and a sociocultural and sociocognitive perspective (van Dijk, 2014), especially when analysing participants' professional conversations.

To ensure the consistency of the findings, I used and triangulated different data collection strategies – participant observation, audio- and video-recordings, pre- and post- semi-structured qualitative interviews, reflective journals, and document analysis – and gathered data until analysis reached saturation (Glaser & Strauss, 1965).

The data was then content-analysed (Hsieh & Shannon, 2005) inductively and microanalytically, following various theoretical comparison techniques arising from the analytical principles of grounded theory (Strauss & Corbin, 2015). This helped to increase the sensitivity and validity of the findings.

## **4 Findings**

In relation to the first goal, which was to describe and analyse LS participants' perceptions and experiences of LS and its adjustments to the context of the UB, the data showed that the practice of LS as an AD initiative and as carried out at the UB

- improved the participants' ability to review their in-class discourses;
- allowed them to address more teaching situations with more accuracy and in more detail;
- contributed to a gain of perspective in relation to the lessons;
- enhanced the organization of participants' ideas and of their lessons;
- helped the participants to engage in greater reflection in relation to teaching and learning;
- improved the participants' chances of offering opinions when discussing;
- was considered highly time-consuming;
- required participants and students to firstly get used to being video-recorded.

In relation to the second goal, which was to analyse what participants' conversations revealed in relation to the learning paths that LS opens for HE faculty members and their approach to teaching and learning, the data showed that

- participants' learning and discussions were more focused on their lessons (design process, structure, materials, etc.) than on their instruction or their students' learning;
- participants learned during LS through descriptive learning processes rather than through interpretative ones;
- participants' learning and discussions had room to become more student-centred;
- LS makes it possible to evince different conflicting and contradictory pedagogical notions among the participants;
- participants' discussions during LS showed that participants had a narrow view of their role as teachers.

## 5 Discussion and conclusions

The results show that the participants noted and experienced the potential of LS for stimulating reflection and improving their lessons; through LS, participants gained perspective on their lessons and their own knowledge and could see and analyse their own pedagogical viewpoints. In this manner, LS – as implemented at the UB – worked as a practice that, as in other strategies analysed in Borko et al. (2008), increased participants' educational awareness and became a collaborative space for going beyond individual knowledge.

LS also helped to scaffold teachers' designs and reflections on their lessons, and showed potential for their educational development: as suggested by Dudley (2013), by making explicit what was implicit, LS offered the participants greater chances to analyse their own pedagogical content knowledge. In this sense, participants shared and problematized their knowledge and their work, which in turn helped them to make informed decisions and influenced their approach to teaching.

The findings also demonstrate that the participants granted more importance to the product they designed (the lesson) than to how it was taught, and – more importantly – than to their students and their learning. Their approach reflected their commitment to gaining clarity on what they cooperated to create, but their descriptive approach, as also found by Chassels and Melville (2009), reflected their lack of habit commenting and discussing educational actions. In this sense, even if descriptive talks can contribute to learning (Vrikki et al., 2017), the quality of reflection has an impact on learning (Loughran, 2010); hence, if talks are too superficial, as seen in Kvam (2018), learning might not happen.

It was evident that participants' discussions and learning had room to become more student-centred. This result differs from what the literature states in relation to the goal of LS (Fernández & Zilliox, 2011; Lewis et al., 2012) and from what most previous studies suggest (i.e., Suzuki, 2012; Lee Bae et al., 2016), and shows that participants struggled to shift their attention towards their students – and how important facilitators and knowledgeable others were when they noticed (Amador & Carter, 2016). Given this, if we assume that the goal of LS is to enhance student learning, the results suggest that this AD did not make full use of LS potential.

The results also revealed conflicting pedagogical notions in the participants' discourse. They recognized it as part of their role to go beyond theory and to bring their professional experience (as health professionals) to their lessons, but they did not engage their students in critical reflection as Benbassat (2014) suggests for a student-centred approach. Also, they demanded that their students take a more active role in class, but they also argued in favour of lectures in which students listen to experts.

Finally, consistent with earlier results in HE (Dotger, 2011; Demir et al., 2012), the data shows that the main drawbacks of conducting LS as an AD initiative involve logistical issues and how time consuming it is.

Hopefully these brief findings will shed light on the learning opportunities presented by LS as an AD practice and be of assistance to faculty developers seeking to implement it or similar practices.

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