

A reflective dialogue between the lesson study experts on their journey towards becoming *koshi*: learnings, experiences and the perceived roles

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Abstract

Purpose – Lesson study (LS) is a collaborative teacher development practice, and one of the key attributes thereof is the involvement of the external knowledgeable other (*koshi*). Despite well-documented evidence that LS improves the craft of teaching, the entrenched concept of *koshi* and the role thereof is not well explored and documented. The purpose of this paper, therefore, is to reflect on and share my learnings and experiences of becoming a *koshi*, subsequently, what I perceive to be the role of a *koshi*.

Design/methodology/approach – My colleague and I engaged in a reflective dialogue about our experiences in our journey towards becoming the *koshis*. The current study is framed by Kolb's reflective practice as a theoretical lens. Guided by Kolb's reflective cycle, we engaged in dialogical reflection on our experiences of becoming a *koshi*, subsequently forming conceptual abstractions regarding the perceived roles of *koshi*.

Findings – Learning to become a *koshi* through on-the-job learning without the presence of an experienced *koshi* to learn from is a difficult undertaking. Two *koshis* are essential in the LS process internal *koshi* for planning and external *koshi* for reflection. Two broad characterisations of *koshi*'s roles are distinguished knowledge/skills sharing and *koshi*'s attributes.

Originality/value – Drawing from the findings in this paper, my learnings and experiences coalesced into rethinking the formulation of the role of *koshi* within the LS context. This is against the backdrop that, although the concept of *koshi* features quite prominently in the implementation of LS, the actual roles of *koshi* are not sufficiently documented.

Keywords Knowledgeable other, *Koshi*, Lesson study, Reflective dialogue, Self-study

Paper type Research article

Background

To contextualise my journey of becoming a knowledgeable other or a *koshi* in Japanese, I share the background of lesson study (LS) in South Africa (SA). LS was introduced to SA through the intervention of the Japan International Cooperation Agency (JICA) around the year 2010, focusing on one province (Ono and Ferreira, 2010). The purpose was to improve teachers' skills in the teaching of mathematics and science in secondary schools. Due to systemic challenges, the effective implementation of LS was acutely affected. A few years later, LS was coordinated from the national office, i.e. Department of Basic Education, subsequently all the nine provinces in SA were exposed to this teacher development practice. Like many countries that adopted and modified the Japanese LS model to suit their needs, SA was not an exception. The current cyclical model of LS broadly used in SA comprises five stages: diagnostic assessment/analysis (Stage 1), collaborative lesson planning (Stage 2), lesson presentation/observation (Stage 3), post-lesson reflection (Stage 4), and lesson improvement (Stage 5) (Sekao and Engelbrecht, 2022). The unique feature of the LS cycle in SA is Stage 1, which I have given special focus to in Figure 1. Stage 1– Diagnostic assessment/analysis – entails explicit articulation of the process of identifying the goal of the lesson. The implementation of



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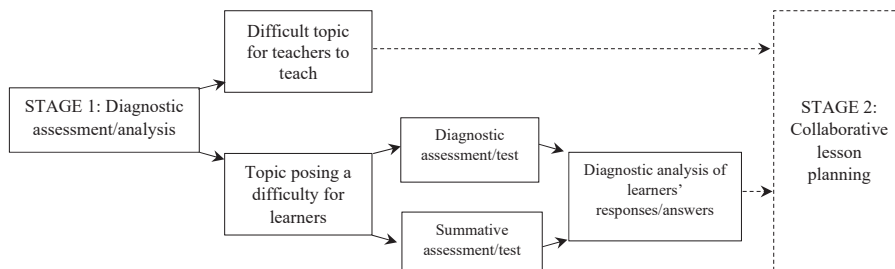


Figure 1. Process of identifying the goal of the lesson. Source: Author's own creation

Stage 1 follows a two-pronged process involving teachers' identification of the topic, which (1) they find difficult to teach or (2) poses a difficulty for learners to learn. The latter is a dominant approach to identifying the goal of the lesson. However, identifying a topic that poses difficulty for learners can be done either by designing and administering a diagnostic test and then analysing learners' responses to gain insights into their difficulties or by diagnostically analysing learners' responses stemming from summative assessment. In other words, although summative assessment is used for promotion purposes, i.e. from one grade to the next, the same learners' responses can be analysed diagnostically to identify their (the learners') misconceptions.

Generally, the role of *koshi* in SA is predominantly performed by the subject advisors because they work closely with the teachers within the education district. Subject advisors are education district officials who are responsible for teacher development in specific subjects. However, at the inception of LS within the education district where subject advisors are trained, the trainer is often perceived as the *koshi* by virtue of being knowledgeable about LS. The training referred to is the overall training on LS, which includes the roles of the *koshi*. In other words, for now, in SA, there is no exclusive/dedicated training system for becoming a *koshi*. Essentially, the primary knowledgeable other within the LS context in SA is the subject advisor; however, there are instances where a university lecturer and/or subject expert from the national office (i.e. Department of Basic Education) is invited to fulfil the role of the knowledgeable other.

Although LS has gained traction in some education districts, and the overall process thereof is understood by teachers, critical aspects that ensure deep understanding and effective implementation remain elusive. These critical aspects include quality of lesson planning, observations and reflections, as well as the explicit role of the knowledgeable other. The latter is the main focus of this study. In this qualitative self-study paper, I share my experiences on the journey towards becoming a knowledgeable other, henceforth a *koshi*, including personal learnings, challenges and perceived roles thereof. To this end, I explored the following research question through self-study: How did my journey towards becoming a *koshi* within the LS setting in SA enhance my view about the role of *koshi*? Since LS is a developing phenomenon in SA, the concept of *koshi* and the role thereof are also not deeply understood by many; therefore, self-study. Due to the insufficient proficient *koshis* in SA, and the numerous instances where I was invited to become a *koshi*, I deemed learning from experience through self-study (Kitchen and Butler, 2024) to be a viable option to answer the stated research question.

Introduction

LS is a quintessential job-embedded and teacher-led professional development practice which originated in the 19th century in Japan (Toyoda, 2011; Ebaegu and Stephens, 2014). The main attribute of LS is teacher collaboration – a team of teachers work together to plan, teach and reflect on their lessons to improve their teaching skills (Gutierrez, 2015). A *koshi* is an important outside stakeholder in LS, without whom the improvement in teaching practice may

be restricted. The fact that a *koshi* gives final comments after the post-lesson reflection session demonstrates a vital role he/she plays in ensuring teachers' improvement in content, pedagogy, as well as LS as a whole (Groves and Doig, 2016; Takahashi and McDougal, 2016). Notwithstanding the importance of the *koshi* in the context of LS, it is necessary to share some insights into what *koshi* is, firstly, outside the LS setting and then secondly, within the LS setting. The concept of more knowledgeable other (MKO) is traced to the Vygotskian era, used to unpack Vygotsky's view of Zone of Proximal Development (ZPD) (Vygotsky, 1978). In fact, the term used by Vygotsky within the context of ZPD was "adult" to denote what the child can do with the guidance of an adult who was perceived to be more knowledgeable, which, within the education context, is a teacher. Of course, for Vygotsky, the emphasis on knowledge hierarchy between the child (less knowledgeable) and the adult (more knowledgeable) was necessary and justifiable to enable the child to navigate the ZPD (Jarrett, 2022; Abtahi et al., 2017; Shabani, 2016). Drawing from Vygotsky's MKO, Jarrett (2022) dubbed MKO a catalyst to portray his/her (MKO's) role to stimulate the less knowledgeable (child) to learn to a greater degree. However, within the confines of LS, the term *knowledgeable other* (KO) is broadly used (Watanabe, 2005) instead of MKO. My view is that using the modest term KO within LS portrays and affirms the entrenched collaboration as a "default setting" of LS where all teachers are considered to be knowledgeable and their collective contributions towards improving their practice are valued. The term knowledgeable other within the LS context, therefore, could be viewed as acknowledging that people participating in LS are knowledgeable; however, other knowledgeable persons were not part of the LS team. In addition, the term KO, instead of MKO, desists from exalting one person as being more knowledgeable, thereby defeating the purpose and undermining the entrenched collaborative attribute of LS.

***Koshi* as an entrenched Japanese classroom culture that eludes LS implementation in other cultures**

Within the LS context, a *koshi* is highly revered (Seleznyov, 2018). However, a dearth of sufficient research on *koshi*, especially on the "nature and structure of the final comments" (Seino and Foster, 2021, p. 509), which often results in an incorrect understanding of the attributes and importance thereof within the LS context, could be attributed to the challenges occasioned by a borrowed cultural practice such as LS. In fact, Skott (2024) unequivocally and succinctly remarked that although LS was imported into other countries, one area that was not successfully imported is *koshi*. As Fujii (2014) puts it, the lack of detail could be attributed to the fact that LS is an ingrained Japanese classroom culture – an organic practice that every Japanese teacher is familiar with. Metaphorically speaking, for Japanese teachers, LS, including its instantiations such as *koshi*, "is like air, felt everywhere because it is implemented in everyday school activities, and so natural that it can be difficult to identify its critical and important features." (Fujii, 2014, p. 66). Certainly, Japanese teachers may not need the roles of the *koshi* documented in detail because of, as Ebaegu and Stephens (2014, p. 2) assert, Japan's high-context culture where "meaning and information is drawn from the context or internalised by people instead of making them explicit." For Japanese teachers, acquiring the skills of becoming a *koshi*, therefore, could be through participating actively in the LS activities (Takahashi, 2014) – an undertaking that they may not find difficult due to the entrenched culture of LS. In fact, Watanabe (2018, p. 10) makes an intriguing observation that in the Japanese context, "teaching is [perceived as] research and therefore teachers are researchers". Possessing research skills is an important attribute of a *koshi*, therefore, for Japanese teachers, becoming a *koshi* may not be a difficult undertaking. However, Seino and Foster (2021) make a compelling argument that for teachers outside Japan, it may be a daunting task to understand, develop and actualise the role of a *koshi*. SA is experiencing a similar difficulty of a lack of proficient knowledgeable others as per the LS prescripts. Often, subject advisors share the final comments during post-lesson reflection; however, their role as

subject advisors often infringes on their role as a knowledgeable other. For instance, as subject advisors, they are a leading voice or voice of authority in the subject they are responsible for – after all, they are the district officials; however, as knowledgeable others, they have to be modest and project the image of being a lifelong learner (Takahashi and McDougal, 2016). The tension between the subject advisor and *koshi* often muddies the deep understanding of *koshi* and *koshi*'s role within the LS context in SA; consequently, *koshi* is often viewed through the lens of a subject advisor. Essentially, understanding the role of *koshi* and discharging such roles/functions effectively remain a major challenge in the implementation of LS in SA.

The roles of *koshi*: conceptions, alternative conceptions and omissions

Notwithstanding the insufficient research on *koshi*, the available studies provide valuable insights into the role of the *koshi* within the LS context. Drawing from the work of Takahashi (2014), Watanabe (2005), and Fernandez and Yoshida (2012), the following roles of a *koshi* can be distilled: (1) bringing in new knowledge from research; (2) connecting theory and practice; and (3) creating an opportunity for others to learn how to reflect on teaching and learning. Clearly, the first two roles emphasise the depth of knowledge and experience the *koshi* ought to possess in relation to content and pedagogy – not only about theory, but extended to practice, too. Supposedly, this justifies the view that *koshi* could be a university teacher, research expert, retired school teacher, district official or subject specialist (Ebaegu and Stephens, 2014; Seleznyov, 2018; Seino and Foster, 2021). In addition to the knowledge domain that a *koshi* should have as articulated in roles (1) and (2), Takahashi and McDougal (2016) identified certain attributes that a *koshi* should possess, such as: reading and understanding the audience to pitch the comments appropriately; noticing critical issues emerging from the lesson that others may not have seen; and being modest and adopting a demeanour of or project oneself as being a (lifelong) learner thereby valuing teachers and their efforts. I contend that these attributes align with role (3) of a *koshi*, i.e. creating an opportunity for others to learn how to reflect on teaching and learning. Drawing from the conceptualisation of the roles of the *koshi* articulated in this section, as well as the proposed attributes that shape *koshi*'s demeanour, I perceive *koshi* as an integral role-player in LS. In fact, for Yoshida (2012, p. 148), "... if somebody who is knowledgeable in content and pedagogy can be involved in the lesson study, the quality of lesson study, as well as the quality of the *kyozai*kenkyu, increases." Conversely, the absence of *koshi* within the LS process tends to significantly reduce its effectiveness (Takahashi, 2014). Skott (2024) justifiably takes a radical stance by arguing that the absence of *koshi* in LS disqualifies the practice from being branded as LS.

Considering the sparsely documented roles of *koshi*, it is evident that often this tends to dilute the attributes of LS. Again, due to LS being an imported cultural practice and the insufficient detailed guidelines on the role of *koshi*, alternative conceptions and omissions are likely to characterise the adaptation and implementation of LS in other countries, especially as it pertains to the role of *koshi*. I have intentionally used the term "alternative conceptions" rather than the conventional term "misconceptions" because I viewed *koshi* through the lens of the LS implementer. After all, as Fujii (2014, p. 453) contends, "[alternative conception] is a reasonable and viable conception based on [teachers'] experiences in different contexts or in their daily life activities". In other words, the so-called teachers' misconceptions about *koshi* are, in fact, for them (teachers) a reasonable understanding of what *koshi* is or is about. For instance, Gu and Gu (2016) discovered one such alternative conception of the role of *koshi* where, instead of engaging in dialogical comments, the *koshi* engaged in monological comments. In other words, the comments revolved around *koshi*'s knowledge about the topic taught, "rather than what students have learned in class and what teachers were concerned about in their teaching" (p. 451). According to Skott (2024), monological comments are often occasioned by socio-cultural and power-related practices where respect for authority is emphasised and telling teachers is a norm.

In addition, *koshi*'s comments are often gravitated towards the process of LS (Skott, 2024) rather than towards substantive issues such as learners' thinking and teacher learning. Further,

there are often inconsistencies about when *koshi* should be involved in the LS process: during post-lesson reflection to share final comments (Wake *et al.*, 2013; Wake and Seleznyov, 2020) or during both planning and post-lesson reflection stages (Watanabe, 2005; Takahashi and McDougal, 2016). In fact, it would appear that, in most cases, a *koshi* is associated with post-lesson reflection to provide final comments.

The systematic literature review conducted by Seleznyov (2018) revealed that a significant number of studies reported that a *koshi* was not involved in the LS process. Takahashi and McDougal (2016) revealed numerous similar instances in the USA where the *koshi* was omitted from the LS processes. My view is that these alternative conceptions of a *koshi* and the role he/she ought to fulfil within the LS context are inevitable for as long as the journey towards becoming a *koshi* is based on experiential learning.

Theoretical lens

This paper emanates from my experiential learning on how I learnt to become a *koshi* as I got exposed to and gained interest in LS. My journey towards becoming a *koshi* can best be understood through the lens of Experiential Learning Theory (Kolb, 2015), which other scholars refer to as Kolb's reflective cycle (Fergusson *et al.*, 2019; Turesky and Wood, 2010). The notion of experiential learning is traced back to the Deweyan era through the seminal work titled *Experience and Education* (Dewey, 1938), wherein a high premium is placed on the value of experience to derive genuine learning. However, Kolb's experiential learning model, which incorporates four modes of experience to foster learning (Egan *et al.*, 2023; Kolb, 2015), provides an explicit account of my journey towards becoming a *koshi* in LS. The four modes are cyclical and are often represented on orthogonal axes. The first mode – *concrete experience* – which involves immersing oneself in a new learning activity, highlights a common parlance that *experience is the best teacher*. In relation to the current study, *concrete experience* included contending with and grasping the information about the role of *koshi* within the LS setting as the process of learning how to become a *koshi* unfolded, i.e. learning by doing. The second mode – *reflective observation* – involves processing, forming and transforming the learning experience. Immersing oneself in an activity such as becoming a *koshi*, is characterised by internal reflections during and after one's participation in *concrete experience*. *Reflective observation* raises questions such as how my prior theoretical knowledge about the role of *koshi* is linked to my practical experience as *koshi*? What should one modify to enhance one's *koshi* skills? The third mode – *abstract conceptualisation* – highlights the individual's analysis and interpretation of and drawing conclusions about the learning experience, thereby making connections with the theoretical knowledge. Essentially, *abstract conceptualization* highlights "integrating ideas into a working theory." (Egan *et al.*, 2023, p. 26). The fourth mode – *active experimentation* – involves making decisions and using theories to improve skills (Long and Gummelt, 2020).

For Kolb (2015), "Learning is the process whereby knowledge is created through the transformation of experience." (p. 49). From this statement, one can discern that learning is not a rigid event but a dynamic process where knowledge morphs and gets enriched as one is exposed to more experiences. Essentially, the modes of *Concrete Experience* and *Abstract Conceptualization* represent two ends of a continuum – connected dialectically to foster perceiving and grasping of experience, while the modes of *Reflective Observation* and *Active Experimentation* advance the transformation of experience (Carvajal *et al.*, 2021; Long and Gummelt, 2020). To this effect, learning is characterised by grasping and transforming experience.

Methodology

Setting the scene

I am a teacher educator in a public university in SA, and I was introduced to LS over a decade ago, under the auspices of the Japan International Cooperation Agency. Subsequently, I

introduced LS as part of, *inter alia*, the methodology of mathematics modules in the university where I am based. In addition, I train in-service teachers on LS as a community engagement programme. Yolanda (pseudonym) voluntarily agreed to participate in the reflective dialogue on our journey towards becoming *koshi* as a *critical friend*, which, within the context of self-study research, “is a valuable authority of data and analysis” (Alan *et al.*, 2021, p. 321). Yolanda is a mathematics subject specialist based in the Department of Education in the public sector and has experience in using LS to support teachers. I introduced LS to the mathematics subject advisors (including Yolanda) in the year 2017 in one of the provinces in SA, at the time when Yolanda was a mathematics subject advisor. Yolanda was one of the few mathematics subject advisors who keenly embraced LS and worked with teachers to implement it. Through my support, Yolanda became the first subject advisor to host the first LS seminar at the district level, where teachers demonstrated their teaching skills, and I was invited to be a *koshi*. Both Yolanda and I learnt in practice to become *koshis* by virtue of having introduced LS to teachers and subject advisors, respectively, and not because we were trained to become *koshis*. In fact, contrary to *on-the-job training*, our experiences of becoming *koshis* were acquired through *on-the-job learning*. Through reflective dialogue between Yolanda – my *critical friend* (Kitchen and Butler, 2024; Bullock and Sator, 2018) – and me, I share the learnings, challenges and the perceived roles of *koshi* emanating from our journey towards becoming *koshi* in the context of LS.

Self-study research

The genesis and promulgation of action research, which self-study research is part of, is traced back to the work of Kurt Lewin and his colleagues in the 1940s (Adelman, 1993). As he explored and chronicled the history of action research, Jacobs (2018) noted three forms of action research and their related world views or paradigmatic traditions: technical action research, practical action research and emancipatory action research, which are situated within positivist, interpretivist and critical science worldviews, respectively. Within the practical action research with interpretive foundations, Jacobs (2018) locates self-study research, which I adopted in the current paper. The relevance of self-study for this paper is that I studied my own practice by engaging in reflective dialogue with a *critical friend* (Kitchen and Butler, 2024; Bullock and Sator, 2018; Ritter, 2017; Vanassche and Kelchtermans, 2015) regarding a phenomenon of *koshi*. Self-study, rooted in reflective dialogues, is credited for enabling practitioners, teachers in the context of the current paper, “to develop their own practices and analyze their experiences” (Alan *et al.*, 2021, p. 319). A *critical friend* is a fundamental element of self-study research because he/she can assist in revealing the implicit information that the researcher alone may not be aware of. To this effect, by virtue of having learnt in practice to become *koshi*, Yolanda was instrumental in providing a different perspective during the generation and interpretation of the data, thereby enhancing the objectivity of the entire study.

Data generation and analysis

As can be observed from the heading of the current section, I opted for the term *data generation* instead of data collection because data were produced from our reflective dialogue and not “collected” from the participants other than the researcher, as is the norm. We held five meetings, as presented in Table 1.

Before the actual reflective dialogue between Yolanda and me to generate data, I scheduled the first meeting during which I shared the overall idea about the proposed study and its potential contributions to the often-elusive concept of *koshi*. During the second meeting, we discussed how the reflective dialogue would unfold. To make the reflective dialogue productive and meaningful, we agreed to allocate two weeks towards individual recollection of our memories about the journey we traversed in becoming *koshi*. The individual recollection of memories included eventful encounters that translated into learnings and events that constitute

Table 1. Schedule of meetings

Meetings	Purpose
1st meeting	Presenting the overview of the proposed paper on our journey towards becoming <i>koshi</i> Formal invitation for Yolanda to become a critical friend in the study
2nd meeting	Planning the reflective dialogue session and agreeing on the focus areas
3rd meeting	Engaging in reflective dialogue (which was audio-recorded)
4th meeting	Transcribing data using Sonix transcription software and data cleaning
5th meeting	Validation of the findings by a critical friend

Source(s): Author's own creation

challenges or pitfalls. Essentially, the recollection of memories was framed on: our pre-conceptions of *koshi*, formative experience of *koshi*, and abstracting the concept of *koshi*. The next session (third meeting) was the actual reflective dialogue, which spanned about two hours. The dialogue covered our individual initial understanding of *koshi* before we immersed ourselves in the LS process and accidentally assumed the role of *koshi* (pre-conception of *koshi*). Subsequently, we reflected on our practical/concrete experiences and the observed challenges of becoming *koshi* (formative experiences). Lastly, based on our experiences, we shared some insights into the proposed attributes of *koshi* (abstracting the concept of *koshi*). I audio-recorded our reflective dialogue and later transcribed it into textual data for analysis. In the fourth meeting, we dedicated our time towards transcribing the audio-recorded data using Sonix software for data transcription, followed by a data cleaning process – i.e. identifying and correcting incorrect transcriptions.

Given the predetermined aspects framing our reflective dialogue, analysis of data was mainly deductive; however, this was coupled with inductive analysis because there were individual views emerging from the reflective dialogue, especially during the abstraction of the concept of *koshi*. Drawing from thematic analysis advocated by Terry *et al.* (2017), I engaged with the transcribed data iteratively and then identified key issues that characterised the three pre-determined themes of pre-conception of *koshi*, formative experiences and abstracting the concept of *koshi*. The findings were documented in a report, after which the fifth meeting was scheduled for the critical friend, Yolanda, to authenticate the content thereof.

Findings

Introduction

Our data-generation meeting took the form of a free dialogue or conversation. Although Yolanda understood the purpose of our current meeting, at the beginning of our dialogue, I briefly reiterated the purpose thereof by emphasising that “this is not me interviewing you, but it is for both of us sharing our insights and our experiences in terms of becoming the knowledgeable others.” In addition, I reminded Yolanda that, for ethical reasons, I will conceal her name by calling her Yolanda; however, “I don’t mind if you refer to me by my real name, because I’m going to be the author of the article in any way”. I then reminded Yolanda about the three key areas that would frame our dialogue.

How was the concept of koshi introduced to us? Encountering the concept of koshi.

The initial stage of our dialogue was to share our experiences on how we became aware of the concept of a knowledgeable other. It should be noted that the term *koshi* was not a familiar term to us when we were introduced to LS; instead, the term that we first encountered was *knowledgeable other*. I have, however, used the two terms interchangeably in the findings. I was introduced to the concept of the knowledgeable other as it relates to LS in the year 2012 during training in Japan. However, the role of the knowledgeable other was not explained in

detail; therefore, my limited knowledge confined it (the role) to the knowledge of the process of LS. I shared the following information during our dialogic interchange regarding how I was first introduced to the concept of *koshi* within the context of LS:

Author: Yeah, more than 14 years ago when I got introduced to lesson study and it was in Japan when we were taken through the idea of lesson study, because that's where I actually learned about lesson study. But I must confess the idea of a knowledgeable other at that time was a new thing to me. I really didn't understand what it was about.

Essentially, although my participation in the LS training in Japan framed my initial knowledge and understanding of *koshi*, I gained deep insights into *koshi* and *koshi*'s roles from engaging with literature. Drawing from the work of researchers such as [Takahashi \(2014\)](#) and [Fernandez and Yoshida \(2012\)](#) became an inflection point in terms of my deep understanding of *koshi* and *koshi*'s roles as they pertain to LS. However, Yolanda's case differs from mine in the sense that practical experience shaped her knowledge and understanding of *koshi*.

Yolanda: For me, I learnt about this word knowledgeable other when I was first introduced to lesson study, I think it was in 2017. Then I did not understand what my role as *koshi* would be because at the time I was working with the teachers during all the lesson study cycles. So, I really did not know.

Yolanda's initial encounter with the concept of *koshi* was in 2017 when the mathematics subject advisors were trained on LS. Yolanda's province was the first of the nine provinces in SA to be trained on LS. It should be noted that for both of us, our first encounter with the concept of *koshi* was when it was merely flagged during the LS training. Therefore, it was not dealt with in detail in terms of the roles and processes. Considering that I received my training on LS in Japan – the home of LS – one would have expected to gain a deep and comprehensive perspective and understanding of the concept of *koshi*.

Preconceptions about koshi

As indicated in how we encountered the concept of *koshi*, it was inevitable that we created a mental picture or preconceptions about *koshi* before undertaking the accidental journey – accidental because we were perceived as such by virtue of having introduced LS in our respective contexts. The fact of the matter is that no one prepared us on what it really entails to become a *koshi*.

One of the preconceptions we had about *koshi* was that he/she should only know LS very well. For instance, during the dialogue, I stated that "I thought being a [koshi] would mean a [koshi] in terms of only understanding the process of lesson study. Being an expert in the process of lesson study". This perspective of being a *koshi* characterised my initial role and experience when requested to be a knowledgeable other. In addition, Yolanda had this to say:

The way it was presented was that the person who is coming from outside or who was not part of the lesson would be the one who would be the knowledgeable other. So, for me, I didn't see myself being a knowledgeable other at that time because all the time I would be involved in the lesson.

In addition, our preconception of *koshi* was that he/she participates only in the lesson observation and in the post-lesson reflections. Clearly, we had narrow preconceptions about *koshi* before immersing ourselves into the practice and assuming the role of *koshi* by default.

Mindset shift about koshi through experiential learning

As part of our dialogue, we reflected on how our participation in the LS processes, albeit unprepared, changed our worldview about *koshi* and his/her roles within the LS context. In other words, when we started our journey towards becoming *koshis*, we had certain preconceptions which were shared in the previous section; however, having gone through the experiential learning process, there were learnings acquired which resulted in our conceptual changes about *koshi*. Some of the impactful learnings pertaining to *koshi* are captured in the following dialogic exchanges between Yolanda and me.

Author: I have improved a lot in becoming a knowledgeable other. Thanks to all the training sessions that I received in Japan. There were real knowledgeable people in terms of lesson study, who were brought in to share their insights about certain aspects of lesson study. That's when I began to realise that actually being a knowledgeable other is not only about knowing the lesson study and its cycle. The misconception that I had before was that being a knowledgeable other, you reflect only on the process of the lesson study. Until I realised that actually I needed to go deeper into understanding the teaching and learning of the topic that would have been taught on that day.

My comment highlights two issues: the misconception about *koshi's* focus of reflection and the later realisation of additional areas of *koshi's* focus of reflection. For instance, the statement "Until I realised . . ." was based on the experience from participating as *koshi*, where the focus was mainly on the LS process. In addition, the other turning point in my journey towards becoming *koshi* is that *koshi* must possess a unique professional noticing skill – be able to meticulously notice the finer details of the goings-on during teaching, and then during the reflection session be able to interpret and respond to what was noticed (Jacobs *et al.*, 2010). In fact, I realised that assuming the role of *koshi* (and being introduced as such to the LS team members) tends to justifiably raise expectations of the LS team members about the expert knowledge to be shared by *koshi*. This, therefore, was a moment of awakening to the realities of what it takes to be a *koshi*.

Yolanda had her inflection point too, as reflected in the following utterances:

Yolanda: And in most cases, it has just been recent, whereby I have been exposed to understanding what knowledgeable other has to do in the lesson study sessions that we have been implementing with the schools. When I'm learning the best practices from what you are doing, when you give feedback or when you are reflecting, I wouldn't say I have grown to that level of being a knowledgeable other.

Yolanda: My understanding now, as I read [about *koshi*], confirms that a knowledgeable other should be one with a deeper understanding of the topic, who may add value to the topic rather than giving shallow reflections on things that are not going to be adding value when we talk about improving the lesson.

Another intriguing dialogue ensued where Yolanda shared a new perspective about sharing the lesson with prospective *koshi* well in advance to enable him/her to plan thoroughly and adequately.

Yolanda: I could say, broadly speaking, one [i.e. *koshi*] has to conduct research on what is going to be taught in the classroom, which therefore means that in the practice, which we never did at that time, in the practice or when practicing lesson study, the person who is going to be a knowledgeable other should be given the lesson beforehand.

Author: You mean the lesson plan?

Yolanda: The lesson plan? Sorry. The lesson plan beforehand so that the person can be able to conduct research on the topic. And then when you are a knowledgeable other, you have to listen to what other people have said, and then yours is to confirm or to make it clearer in terms of what this means or what or how it should have been taught, linking it with the [curriculum] policy at that point in time. I'm just putting myself in their [*koshis*] shoes to say they just interacted with the lesson at that point in time. They never thought about it, and then they were to say something, you see. So, one started to talk. But then, if you got the lesson, you could have maybe underlined some things beforehand that you think could contribute to the improvement of the lesson, even if they were not mentioned by the other observers, to come up with another angle that could improve the lesson.

Essentially, in this dialogue, Yolanda acknowledges that sharing the lesson plan with the *koshi* within a short time before the lesson is taught, as she experienced it before, may compromise the quality of the remarks that the *koshi* shares during reflections. At the heart of this dialogue, where a paradigm shift is evident, is the utterance "which we never did at that time" when Yolanda was referring to the practice of sharing the lesson with *koshi* well in advance. In response to and in concurrence with Yolanda's view based on experience, I added that once the lesson plan is shared with the *koshi*, it should not be changed just before it is taught because the *koshi's* hard work of preparing for the final comments may be in vain or pointless.

The other issue that Yolanda mentioned, and that was thought-provoking and fascinating, was the importance of the knowledge and understanding of the curriculum policy by *koshi*. This was triggered by my comment that “*koshi* ought to be an expert in two areas – an expert in LS and a deep understanding of the process thereof; and a deep understanding of the subject [content and pedagogy]”. In fact, at the beginning of my journey to becoming a knowledgeable other, my focus was mainly gravitated towards the former – LS process. Yolanda asserted that:

It would be lacking if the [*koshi*] doesn't understand the [curriculum] policy of this country, whereby the [*koshi*] will dwell much on the subject, and that will create some confusion for the teachers to think that they have to teach this without looking at what the policy prescribes.

Yolanda's view about the need for *koshi*'s understanding of the curriculum policy was based on the observation that teachers often neglected the key curriculum prescripts during post-lesson reflection; therefore, it was her role as *koshi* to alert teachers to this anomaly. For instance, the mathematics curriculum in SA is organised according to conceptual progression across the grades, i.e. the same mathematics concept progresses across the grades according to the degree of complexity. For Yolanda, making final comments without considering the broad curriculum prescripts and narrowly focusing on the topic taught does not add value to teacher learning. The *koshi*, therefore, ought to be mindful of these similarities and variations and make them visible to teachers.

Proposed traits of koshi

Towards the end of our dialogue and guided by our practical experiences as the knowledgeable others, we shared our views on *koshi*'s demeanour or traits. The key issues that characterise the possible traits that *koshi* ought to have included a passion for LS and a willingness to share knowledge. To this effect, I had the following to say:

I think a person should be passionate about lesson study and also knowledgeable about the subject. I can know about the subject very well, but if I don't have this thing of saying I love to share information with other people, then that doesn't make you a good [*koshi*].” Yolanda added that: “So, amongst the knowledge of lesson study and knowledge of the subject, it should be a person who willingly would say, I want to share the information that I have. That for me is another very important characteristic of or attribute of a good [*koshi*].”

This exchange points to the view that knowing the LS and the subject is not sufficient to become a *koshi*; instead, what appeals to the audience is the innate attributes. The issues of *koshi*'s innate attributes, such as demeanour, modesty and projecting an outlook of lifelong learner are advocated by [Takahashi and McDougal \(2016\)](#). Indeed, as we journeyed the path of practising as *koshis*, we were driven by passion and willingness to share knowledge.

Overall impressions about the journey towards becoming a koshi

We reflected on our overall impressions about our journey towards becoming a *koshi*. As I reflected on this journey, I compared it to “travelling without a GPS [global positioning system] navigator, literally walking in the dark and empowering myself in the process by reading a lot”. Yolanda concurred that, difficult as the journey was, she was mainly driven by passion towards LS and the mathematics subject. We concluded that relying exclusively on learning from experience to become *koshi* tends to be a cumbersome undertaking and takes too long to acquire the skill; rather, a blend of training courses and experience could yield a better outcome. Reverting to the metaphor of a GPS navigator, a training course could be a navigating tool – a lodestar that guides experiential learning towards becoming a *koshi*.

Concluding discussions

Undertaking and reflecting on the journey towards becoming a *koshi* was an insightful experience, often punctuated by intriguing moments and episodes. Immersing myself in the

activity of becoming a *koshi* has enabled me to grasp, analyse and connect my practical learning experience with theoretical knowledge. This was made possible by dialectically related modes of *concrete experience* and *abstract conceptualisation* learning continuum (Carvajal *et al.*, 2021; Long and Gummelt, 2020; Kolb, 2015). Through *concrete experimentation*, I grappled with the practical realities of what it takes to be a *koshi*, while *abstract conceptualisation* helped me connect my practical experience with theory. For instance, my initial participation as a *koshi*, as per the prescripts of *concrete experience*, was confined to the process of LS – i.e. not critically focusing on content and pedagogical issues pertaining to the subject, in this case, mathematics teaching and learning. However, when processing my experience and gaining more insights from theory pertaining to the minutiae of being a *koshi* as articulated by, *inter alia*, Takahashi (2014), my superficial understanding of *koshi* began to change for the better. My preconceptions were refuted, my mindset changed, and, most importantly, new ideas were generated pertaining to the *koshi*. For instance, a shift from *koshi* as only an LS expert to *koshi* as an expert of both LS and the subject taught. This was made possible by the related modes of *reflective observation* and *active experimentation* learning continuum to advance the transformation of my experience (Carvajal *et al.*, 2021; Long and Gummelt, 2020).

LS and its instantiations, such as a *koshi*, are rooted within the Japanese educational culture (Fujii, 2014; Ebaequin and Stephens, 2014); therefore, it is inevitable that implanting them into other cultures will be punctuated by challenges (Seino and Foster, 2021). For instance, it is unsurprising that for Japanese teachers, learning to become a *koshi* is achieved effortlessly by participating in the LS activities and observing experienced *koshis*, while it is a daunting undertaking for teachers from other countries. The major drawback of my journey towards becoming a *koshi* is that I developed the skills by learning from practice devoid of *koshi*, unlike with Japanese teachers who learn to become *koshis* by observing and being guided by other competent *koshis* in practice (Takahashi, 2014; Watanabe, 2018). Indeed, my journey was a daunting undertaking, as echoed by Seino and Foster (2021). Given the fact that LS is still developing in SA and the subsequent lack of sufficient competent *koshis*, observing and learning from other competent *koshis* is not a readily available option for now. In other words, on-the-job learning to become an effective *koshi* may not be an immediate viable option, not only in SA but in other countries too, where LS is advancing. The lack of opportunities to observe a competent *koshi* in action often deprives aspirant and emerging *koshis* of a full grasp of the role of *koshi*. In fact, although the importance of *koshi* is acknowledged and appreciated in the countries where LS is introduced, the underlying attributes of *koshi*'s role are often not fully understood and made visible (Seino and Foster, 2021). A case in point is our preconception that *koshi*'s requisite knowledge is confined to (1) the knowledge of the LS process, and (2) sharing final comments in relation to the LS process during the post-lesson reflection. Although the current study is situated within the South African context, this offers some insights into the possible default characteristic of *koshi* during the inception of LS in the absence of experienced *koshi* from whom the aspirant and emerging *koshis* can learn best practices. To mitigate this, especially in countries where LS is a novel phenomenon, on-the-job training in the form of a blended or integrated approach to develop and empower aspirant *koshis* should be considered and institutionalised, i.e. an LS training programme highlighting theory and then a practical enactment where the role of *koshi* is made visible. Essentially, structures such as the institutions of higher learning (e.g. universities) could play a leading role in collaborating with the local Ministry of Education (districts and schools) to conceptualise the training programmes that integrate theory and practice. In other words, in countries where LS is in its infancy, a dedicated and intentional training programme is essential, thereby avoiding the potential paradoxes of *koshi*. These potential paradoxes include the tension between *koshi* as an expert envisaged to bridge the gap between theory and practice, and the risk of the blind leading the blind phenomenon. Availability of formally trained *koshis* who have gone through a programme advocated above guarantees that subsequent aspirant *koshis* can learn correct practices from them through on-the-job learning, thereby mitigating the possible risk of confining the role of *koshi* to the knowledge of the LS process only.

While I embrace the roles of a *koshi* proposed by researchers such as Watanabe (2018), Takahashi (2014), and Fernandez and Yoshida (2012), I view the interpretation and deep understanding of the local curriculum policy proposed by Yolanda as a fundamental role of a *koshi*. In other words, *koshi*'s contributions based on fresh research-based ideas about pedagogy and content should be anchored on the prescripts and philosophical underpinnings of the local curriculum policy, especially as it pertains to grade specificity and conceptual progression. For instance, the mathematics curriculum in SA is based on teaching for understanding (Department of Basic Education, 2018); therefore, this differs from problem-based learning that undergirds the Japanese mathematics curriculum (Fujii, 2018). Of course, *koshi*'s final comments should, therefore, offer fresh research-based ideas about pedagogy and content (Takahashi, 2014); however, it should be done within the confines of the local curriculum prescripts.

While there is often overemphasis on *koshi* as an outside expert (Fernandez and Yoshida, 2012), the outside-ness needs to be qualified. Is it outside in terms of the school where LS is taking place or outside in terms of not being part of the LS team? Takahashi and McDougal (2016) align themselves with the latter. For instance, an experienced school principal in terms of all the knowledge, skills and attributes as per the roles of a *koshi*, of the school where school-based LS is hosted, can be a *koshi* by virtue of not having been part of the planning session. Of course, he is an outside expert relative to the LS team, but an internal person relative to the educational establishment – a school in this case. I suppose the lack of clarity of “outside” often creates confusion in understanding a *koshi*, which was evident in Yolanda's case in our reflective dialogue – she could not perceive herself as a *koshi* because she was always supporting her teachers during the LS sessions, therefore not literally an outside expert relative to the educational establishment, the district in Yolanda's context.

Researchers placed more premium on *koshi* as an expert who gives final comments during the post-lesson reflection (Takahashi, 2014; Fujii, 2016). This characterisation of a *koshi* conveys, intentionally or not, a view that a *koshi* is confined to a particular stage of LS. On the contrary, in the dialogue we had about our journey to become a *koshi*, and the view held by Takahashi and McDougal (2016), it emerged that a *koshi* has a role to play during lesson planning too. In fact, Takahashi and McDougal (2016) advocate for two *koshis* – internal *koshi* (part of the LS team) who contribute expert knowledge and skills during planning and the external *koshi* (outside the LS team) who provide expert knowledge and skills during post-lesson reflection. This will safeguard learners from being exposed to potential erroneous information and/or ineffective pedagogy that can only be corrected *post facto*. Essentially, having two *koshis* – internal *koshi* and external *koshi* – is appropriate in SA, where the implementation of LS is still developing. To this effect, Fujii (2014) cautions us not to disrespect learners as we implement LS by making them “pawns [or guinea pigs] in order to improve classroom teaching.” (p. 76). Although the context of this caution was on re-teaching the lesson, the same caution could apply to the absence of internal *koshi*.

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