

RESEARCH ARTICLE

The invisible leader: Facilitation in Lesson Study

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ABSTRACT

Background/purpose – Developing the body of knowledge about how facilitators act and engage with participants is essential to developing Lesson Study (LS) facilitation. This research reveals how two LS facilitators from the United Kingdom and the United States support and lead cycles.

Materials/methods – We used the Standards, Assessment, Instruction and Intervention, Leadership, and Sustainability (SAILS) framework (Hasbrouck & Denton, 2005; Hasbrouck & Michel, 2022) to explore and thematically code reflective semi-structured interviews between two LS facilitators. We coded and organized themes to explore the actions, processes, tools, and behaviors that facilitators use.

Results – Standards formed a key feature of LS facilitation. Leadership, how the facilitators intervened and supported participants to sustain LS, was a salient theme. The skills, tools, and processes used by the facilitators built upon existing knowledge of LS facilitators (de Vries & Uffen, 2021; Morago & Grigioni Baur, 2021; Mynott, 2018). A fundamental finding is that the facilitator is a leader who needs to be present enough to navigate discussions, yet invisible enough to not get in the way of participant learning.

Conclusion – Deepening our knowledge of what the facilitator can do to increase the sustainability of participant learning can help support future LS teams. How a facilitator thinks about aspects of their work in advance, which tools can be used during conversations, and how they summarize learning are all important aspects of their work.

Keywords – leadership, sustainable collaboration, relationship, communication, authenticity

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1. INTRODUCTION

Lesson Study (LS) literature suggests that a facilitator (Goei et al., 2021; Kager et al., 2022; Mynott, 2019), knowledgeable other (Selezniov, 2019; Takahashi & McDougal, 2016), and/ or a researcher in LS who coordinates and directs LS cycles (Hauge, 2021), is useful in supporting professional learning. Yet, when Haan and Grigioni Baur (2019) explored facilitation in LS literature, they found that only limited attempts had been made to reveal the processes, skills, and knowledge involved in LS facilitation.

This paper aims to further build upon the existing writing on LS facilitation by exploring the work of two LS facilitators working on different continents, who through reflective semi-structured interviews, share and reveal their experiences, knowledge, and expertise about their LS facilitation. Through this research, it is possible to see beyond some of the generic headings that facilitators need to lead, intervene, and establish collaborations, and to examine some of the finer details of what their practice means for standards of LS cycles, the qualities of leadership needed, and how this all supports the sustaining and developing LS cycles in the future.

2. FACILITATION LITERATURE

Haan and Grigioni Baur's (2019) review of LS facilitation echoed some earlier concerns raised by other scholars (Amadar & Carter, 2016; Coles, 2013; Lewis, 2016) in that too little is known about what facilitators do and why they do it in LS cycles. While facilitation has become more of a subject of focus since 2019 (Clivaz & Clerc-Georgy, 2021; de Vries & Uffen, 2021; Grigioni Baur & Hoznour, 2019; Morago & Grigioni Baur, 2021), the literature on LS facilitation is still relatively sparse. Therefore, despite aspects of facilitation starting to be captured in more detail, there is a need to further explore how facilitators facilitate.

Dotger (2015), Hauge (2021), and Mynott (2018) all started to explore the topic of how a facilitator facilitates LS, but each from different perspectives and positions. All three authors are themselves facilitators, although Hauge (2021) identifies more as a researcher of LS. The differences that exist between these three individuals stem from the different emphasis they place on the facilitation process.

When exploring facilitation, Dotger (2015) problematised the LS process and showed that there is more to consider around LS for a facilitator than just the research lesson cycle. She considered the parameters of the LS process from the initial participant recruitment right through to the shared-knowledge production at the end of the cycle (Dotger, 2015). That is, the importance of developing the agency of the individual participant, whilst also recognizing that certain tensions may exist. Dudley (2020) supported the management of tensions using LS norms, whilst Dotger (2015) suggested that facilitators need to be aware of how they balance facilitation with how they enable participants to think.

Mynott's (2018) work focused tightly on a single facilitator, working with one LS cycle. Within this, is an analysis of the operational skills that a facilitator could use. Mynott (2018) suggested that summarizing, providing detailed descriptions, and sharing expertise are necessary to facilitate the participants taking part in the LS cycle. Haan and Grigioni Baur (2019) highlighted Mynott's findings as being a sole example of where LS facilitation had been analyzed, and an opportunity to gain a greater understanding about the processes taken place. Although Mynott's (2018) work did not conclude additional broader findings linked to organizational and leadership factors, such as in Dotger's (2015) work, organizational and leadership skills were distinctly present in his writing, indicating that facilitators need to allow participants the space to make their own mistakes (Mynott, 2018).

A key finding of Hauge's (2021) work was that facilitators need to consider carefully when they intervene and how this intervention is undertaken (Hauge, 2021). This advances Cole's (2013) suggestion that participants, when collaborating, move beyond evaluation towards interpretation, and in doing so provide their own meta-commentary. In Hauge's (2021) findings, this was represented by helping participants reach a point of exploratory dialogue, yet recognized that this process is nuanced and in need of constant facilitator reflection.

The concept of a knowledgeable other, or expert, is a recurring idea in LS. Whilst Takahashi and McDougal (2016) provided an overview, the practicalities of LS often mean that a facilitator or one of the facilitators adopts the role of the expert within the LS (Clivaz & Clerc-Georgy, 2021; Dotger, 2015; Lewis, 2016; Mynott & Zimmatore, 2021). For example, a key reason for the difference between LS in Japan and elsewhere is that knowledgeable others in Japan often have years of experience working within LS and refining and developing their own knowledge (Takahashi & McDougal, 2016). However, this cannot be replicated so easily in educational systems where LS is either a new concept or still developing. As a result, a broader definition of the expert within LS is needed.

Clivaz and Clerc-Georgy (2021) discussed a two-expert model of facilitation, where one facilitator is present for the content knowledge and one to facilitate the LS cycle itself. Other examples have tended to be where a facilitator has responsibility for both the LS cycle process as well as additional expertise development (Dotger, 2015; Hauge, 2021; Mynott, 2018; Mynott & Zimmatore, 2021). This duality means that subject-specific expertise is sometimes an additional consideration for facilitators, but can be reduced by the organizational demands of facilitation itself (Mynott & Zimmatore, 2021). It can also mean that facilitators are having to guide participants through the LS process whilst simultaneously developing their subject knowledge (Dotger, 2015). This duality can then mean that the facilitator may be talking too much at the expense of the agency of the participants (Amadar & Carter, 2016).

This is particularly important as the agency of participants emerges from the way in which the LS cycle is facilitated. Mynott and Zimmatore (2021) found that facilitators needed to work hard and in advance of LS meetings in order to ensure that relevant information and options are made available to participants. Amadar and Carter (2016) noted that facilitators can give prompts during a LS cycle, and that these prompts can then spark turn-taking by the participants within the group. Dotger (2015) and Lewis (2016) both remarked on how important it is to give space for participants to find their own way in the LS cycle and to reach their own decisions. There is a role then for facilitators to ensure that adequate space is afforded to participants so as to ensure that they can collaborate effectively. Reference to LS norms (Dudley, 2020) also helps with this process (Dotger, 2015; Mynott & Zimmatore, 2021).

Another aspect of facilitation is the actual purpose of the LS cycle. Lewis (2016) showed that goal-setting was key to supporting a group, while Dotger (2015) suggested the need for clear direction in the LS cycle, and Mynott and Zimmatore (2021) stated that any ambiguity in focus can make facilitation that much harder. This is because focus helps support learning within the cycle and the potential outcomes (Dotger, 2015; Mynott & Zimmatore, 2021). Establishing a purpose for LS links to the wider structures of LS identified by Dudley (2020) and helps to link the LS work within the school, including the conditions that the participants work within to create purposeful and sustainable learning (Mynott, 2021).

3. METHODOLOGY

How do facilitators facilitate Lesson Study cycles? To explore this research question, we adopted a qualitative reflective semi-structured interview methodology that saw two LS facilitators interviewing each other using the questions in Appendix A. These interview questions were divided into sections relating to the LS cycle process (Dudley, 2020) and Guskey's (2000) model of evaluating professional learning outcomes. The sectioning of the questions meant that all parts of the LS cycle were considered, from initial planning to the summarization of professional learning. The two facilitators interviewed are the authors of this paper, who each work in different contexts. The first author works with LS in the United Kingdom, whilst the second author works with LS in the United States. Both have worked with collaborative professional learning for more than a decade and were therefore able to draw upon their facilitation experiences in their interviews.

The interviews were semi-structured, conducted using a conversational approach, and included clarifying and exploring tangents from questions as they emerged. Both interviews were recorded in full, and transcripts generated. These transcripts were then read and coded through open-coding. The open-coding followed Kolb's (2012) constant comparative approach, with the two researchers meeting and agreeing on codes. The researchers used a grounded theory approach to code the transcripts which allowed them to explore the conversations and group codes together as they became increasingly familiar with the transcripts. The coding process resulted in 36 codes that represented different tools, skills, processes, and decisions that facilitators made. The full list of the codes generated is shown in Appendix B.

Using the LS literature on facilitation, three groups of codes were then identified: Leadership of LS, Facilitation Skills, and Collaboration processes. The codes were grouped via a best fit approach into these wider themes so that they could be considered using the Student-Focused Coaching Standards, Assessments, Instruction and Intervention, Leadership, and Sustainability (SAILS) framework (Hasbrouck & Denton, 2005; Hasbrouck & Michel, 2022). The SAILS framework has been used effectively to explore elements of effective schools in relation to how instructional coaches, and to some degree campus administrators, establish systems to facilitate and support teachers in the delivery of explicit, targeted, and intensive interventions. The use of SAILS in this research meant that we could see beyond just the generic groupings, led by previous LS research, to explore whether facilitators should be building upon interventionist work (Mynott, 2018), leadership skills (Dotger, 2015; Lewis, 2016), or whether there were other elements in need of being understood more clearly. In order to apply the SAILS framework to LS and in working with adult participants, key aspects of the framework needed to be reconciled with adult participants rather than its original and current student-focused design (Hasbrouck & Denton, 2005; Hasbrouck & Michel, 2022).

In its current form, the SAILS framework serves as a mechanism to create shared understanding when communicating with colleagues (Hasbrouck & Michel, 2022). The standards provide a roadmap for what students should learn or master in each subject or grade level, and thereby helps everyone in the school system stay focused on the important concepts or skills that are required to be taught. Assessments gauge student performance and guide instructional planning, whilst instruction and intervention emphasizes the

importance of planning with and implementing evidence-based, research-validated resources in order to meet individual student needs. Leadership affects change through (a) clear vision, (b) transparent communication, (c) collaborative opportunities, and (d) ongoing, job-embedded professional learning. Sustainability leads to lasting change if capacity is established throughout the system.

We adapted the SAILS framework language to accommodate LS with adult participants. Instead of a Student-Focused Coach in SAILS, we shifted the focus to the LS facilitator, and the focus on students changed to the adults who were participating. As such, the standards now focus on the LS cycle itself, the processes to be followed, agreed upon adult norms, and facilitation protocols. Assessments help the facilitator to monitor and exhibit any progress in the LS focus design or delivery, as well as the facilitator's impact on the process. Instruction and intervention reflect the teaching of the lesson, post-lesson debriefing, and any changes necessary to the LS facilitator role or adult participant behavior. Leadership focuses on providing dedicated time and space for eager and open individuals to engage in recurring LS cycles, LS preparations, planning and scripting, opportunities for developing relationships, and opportunities to share learning with others. Sustainability is how the facilitator builds capacity in others to lead LS cycles or when LS cycles become more prevalent and visible throughout the system.

Standards, the quality of the LS cycle and its facilitation, are an under-discussed element of LS facilitation work. Dotger (2015) started a discussion on the importance of maintaining integrity of the LS process while supporting new participants within it. However, it can often be assumed that LS structures take care of the standards for themselves, with Mynott (2019) and Parks (2009) suggesting that this is not necessarily the case. There potentially is much more we should be saying about standards in LS. Kager et al. (2022) addressed this by suggesting that critical reflection should be added to Mynott's (2019) outcome model and that there is a need for more detail and conceptualization in LS work.

4. RESULTS

Appendix B presents the full results of the coding and the categorization of the codes according to the SAILS framework. Table 1 summarizes this in numerical form.

Table 1. Total facilitation codes, arranged according to SAILS framework

	Standards	Assessments	Instruction & Intervention	Leadership	Sustainability
Leading LS	7	2	2	7	7
Facilitation Skills	6	6	8	11	14
Collaboration Aspects	7	2	4	6	7
Total	20	8	14	24	28

The coding process shows that the discussions the facilitators had were focused more on three of the five areas of the SAILS framework: Standards, Leadership, and Sustainability. This finding is consistent with the application of the SAILS framework to facilitators talking generally about their experience. As the facilitators were discussing their facilitation based on numerous LS experiences, their responses were naturally more generalized. A more

focused version, based on a specific LS cycle, would have offered more potential for the facilitators to talk about their assessment and intervention and instructional strategies. Therefore, a valuable follow-up to this research would be to explore a specific LS cycle with facilitators to see if this is more revealing about assessment and intervention and instructional strategies.

Using the findings to consider facilitation, we can see that these two facilitators have an overall role to play in the LS cycle, rather than solely as interventionists. Dotger (2015) and Hauge (2021) both suggested that there is a need for facilitators to think about the frame of their role and therefore the techniques that they employ. Amadar and Carter (2016) found that facilitators who dominate discussions can have a negative impact on participant noticing and learning. Haan and Grigioni Baur (2019) noted in Mynott's (2018) writing that the use of summarizing, providing detailed descriptions, and expertise sharing are linked to how LS is framed, led, and sustained by facilitators, rather than facilitator simply having a role that intervenes in the discussion. These research findings seem to indicate that the facilitators in this study are both leaders who support and develop standards of LS cycles and sustain them over time.

5. DISCUSSION

Standards

Hasbrouck and Michel (2022) explored standards in relation to quality despite them being linked to standardization and restriction. When considering LS cycles, it is more helpful to consider them as ways to ensure parity for participants, as well as the quality of LS work over time.

As suggested in the literature (Dotger, 2015; Hauge, 2021; Lewis, 2016; Mynott & Zimmatore, 2021), there was an emphasis noted in the current study's transcripts on the facilitator facilitating the LS process. The codes, seven for Leading LS and seven for Collaboration, show that standards are organizationally linked to the facilitators (Evetts, 2009). These findings may suggest that Clivaz and Clerc-Georgy's (2021) use of two facilitators would be beneficial. In terms of standards, we can see the importance placed on collaboration and how participants engage with the LS process as key foci.

Collaboration and how it is maintained is a strong focus. Both facilitators work in educational systems that have collaboration, yet teachers are still likely to work on their own for a large part of their time.

Author 2 – L77 – 79: *“make sure that there's enough time devoted and that this doesn't become a one-time thing... This is not going to be just a professional development experience. We want this to be an ongoing professional learning opportunity where we can continue [the] cycle.”*

Author 2 focused on the need to ensure that the participants are working towards continued collaboration. There is an emphasis that this cycle is not the total of the work and that there should therefore be thinking and questions that stem from it that can be explored further. This sets the standard that learning will be continuous.

To support participants in doing this, both facilitators talked about collaboration preparation. Author 1 spoke about the need to encourage participants to engage with the collaborative elements and move beyond the culture of nice (Lee Bae et al., 2016).

Author 1 – L84 – 87: *“Sometimes it’s easier for participants to move to being collaborative. If you work in a place that is not collaborative and doesn’t have any cooperating teams, then there’s no shared kind of work. I think it takes a lot longer [then] because you’ve got to get them past the point of ‘Oh, I’m enjoying spending time with my workmates.’”*

Author 1 articulated a standard in this extract; as in LS cycles should not be about solely bringing people together, there needs to be more than that. Mynott (2019) showed that if collaborations are only built upon what can be exchanged between participants, then there is the potential that can become absent of any learning. So, there is a need to focus on preparing LS teams to think about how they work and how they collaborate.

In terms of setting up, maintaining, and reviewing the LS cycle, there is a role for the facilitator. As Dotger (2015) and Hauge (2021) noted, there is a need to guide participants through the LS process. We can see this in the transcripts with how the facilitators prepare for a LS cycle with participants.

Author 2 – L155: *“A didactic contract, but maybe a better way to say [it] is terms of collaboration.”*

Author 1 – L341-L342: *“And then I’ll spend 15 minutes on collaborative norms and talking around, why do we need them. What can go wrong if we don’t have them and how we all need to agree to them.”*

Norms, as detailed in the example presented, were referred to by both facilitators as an important way of creating the ethos of the LS group. In doing so, the facilitator provided a framework which the participants have agency in assembling, which means that they feel safer taking certain risks.

Standards are important, but interestingly, while many of the standards overlap with leadership and sustainability, there was a notable absence in the transcripts of the standards relating to the content. Does this suggest that there needs to be more than one facilitator supporting Clivaz and Clerc-Georgy’s (2021) structure? Or does it add weight to the need for a knowledgeable other in addition to the LS facilitator? Dotger (2015) identified the struggle of trying to multitask throughout a LS cycle, whilst Lewis (2016) showed that facilitators can improve with practice.

Leadership

With 24 coded examples, leadership was shown to be the second largest category relating to the facilitators. This resonates with Dotger (2015) and Lewis (2016), who exemplified the need to consider the facilitator role in part as a leader. Yet, through exploring the codes in more detail, we can see that there are different attributes to this leadership.

Ensuring that participants opt-in as part of the LS process is also important. While participants may have been assigned to work under LS, how they interact and take part in the LS cycle remains voluntary, helping participants see this agency.

Author 2 – L206: *“This is optional. I mean, this is something you want to participate in.”*

In addition to setting up the norms or ways of working, there are also more structural things to consider. Dotger (2015) identified the need to help problematize system differences and Mynott (2019) suggested that participants might need help in developing specific LS skills such as observation and feedback. In L68 of his transcript, Author 2 talks about undertaking “additional observations and conversations” to support the individual

participants. These processes need to be undertaken at the start of the LS process and can take time. Time that needs to be negotiated and built into the wider schedule of the LS cycle.

It is the scheduling and maintaining of the LS process that is the next aspect of a facilitator's leadership. Mynott and Zimmatore (2021) provided a detailed account of how this impacted them as facilitators, in that over time it became a harder and more consuming job. The facilitators also noted their development in their conversations, as in developing structures over time. Author 1 talked about managing and thinking about time at length. In one extract, L285-L292, he discussed how the whole LS cycle needs to be bespoke with the exploratory phase being longer and the research lessons can be "delivered really quickly because it is where it fits with the teaching." Author 2, L70, identified the need to create and maintain a schedule to support everyone knowing where they are in the process. This again reinforces the idea that the LS facilitator's role has a certain duality, in that it is not just content or interventionist, but it is more holistic and participant focused.

When thinking about the leadership elements of the facilitators within the LS cycles, a significant number of codes (11) were noted. These codes covered facilitator responses like summarizing and reformulation; building relationships and finding consensus, as well as less tangible expressions of being a facilitator like how instinct or organic responses are incorporated.

The skills are the aspect of facilitation that Mynott (2018) started to discuss. Paralanguage, summarizing, and reformulation are skills that both facilitators talked about. They also discussed other aspects of facilitation including avoiding interjections, capturing learning, and avoiding telling people what to do. These all help to develop our understanding of what facilitators do in LS cycles.

Avoiding interjections links to Amador and Carter's (2016) indication that experts need to take care not to dominate the discussion. While this might seem like they are sharing expertise, it is potentially less useful for the participants and impacts participant agency.

Author 1 – L496 – L 497: *"You have to be somebody who is strong enough to stop anybody from the group, from harassing somebody else, but you also have to be invisible enough to not get in the way."*

Here Author 1 surmises the challenge; how to be present enough but not enough to dominate. Author 1 went on to describe how this is a continuous challenge and how he is "getting better at kind of not taking up as much air" (L499).

A method both facilitators used to support choosing when to join in or not was linked to how they made notes and captured the learning within the cycle. Dotger (2015) noted the challenge of guiding the group and taking notes for analysis. Both Author 2 and Author 1 have systems of notes that involve circling or highlighting points of focus or questions to ask.

Author 2 – L464: *"I also find myself routinely with a highlighter."*

Both facilitators find that this process helps track ideas and notions within the conversation and allows them to return to, reformulate, or summarize them in the way that Mynott (2018) suggested.

Through capturing their thoughts and notes, they were able, as facilitators, to do what Hauge (2021) described as posing questions to and developing curiosity amongst the participants. This is when they were able to build in summarizing or reformulating and encouraging participants to talk so that the conversation moves beyond description to interpretation and meta-commentary (Coles, 2013).

Author 2 – L408-9: *“[I] do summarize what’s been said, and I reformulate it back to them.”*

This then leads to the less tangible aspects of facilitation leadership. These related to the way in which the facilitator links the notes they make to the participants they are working with. These are described by the facilitators as being organic or instinctive, using mood or micro-cues, to help navigate when to intervene and when to give space. As described by Lewis (2016), these skills have developed over time with the facilitators working on them as they continue to facilitate groups.

Author 1 – L478: *“it is very organic in terms of how my process works.”*

Author 1 discussed how in training someone to be a LS facilitator he had had to really consider the reasons he did things and how they worked with LS groups. Even in the conversation with Author 2, he still stated that lots of his thinking was tacit, and he was trying to reveal it to himself. This suggests that while the reflective conversation helped reveal aspects of the leadership required by LS facilitators, there is potentially much more that can be revealed.

Sustainability

Sustainability, the final element of the SAILS framework, was the most frequently coded section. While sustainability shares similarities with effective leadership for facilitators, there are also some key additions. These differences were linked to two aspects: expertise development and space for participant agency.

Expertise development was discussed initially in standards and picked up again in the leadership section. This is where participants are encouraged and supported to develop their skills. Mynott (2019) suggested that this might help improve outcomes in LS cycles. In terms of the coding in this research, these are factors that would align with Hasbrouck and Denton’s (2005) notion of something with lasting impact. In Hasbrouck and Michel (2022), developing participants through observation, conversation, and encouraging them to plan and reflect using a student lens enables participants to gain skills which they can scale up or transfer into a new situation. Expertise development was a very limited aspect of the facilitators’ conversations, but something recognized elsewhere in LS facilitation literature (Clivaz & Clerc-Georgy, 2021; Hauge, 2021; Kager et al., 2021; Mynott, 2018). It is important to note that a focus on LS process might distract facilitators from developing subject expertise. Dotger (2015) warned that navigating the LS process takes time and effort from the LS facilitator. This emphasizes why it is important that as facilitators work on ensuring expertise development, that they do not lose sight of the LS processes themselves. This is echoed in Mynott and Zimmatore’s (2021) findings.

The other theme linked to sustainability that has not always been discussed in leadership is the promotion of participant agency. Avoiding interjections, encouraging risk-taking, maintaining a student focus within discussions with adult participants, and allowing for wait time, all place the emphasis on the participants rather than the facilitator/s. This means they have the space to take part, share their ideas, and thereby to contribute. Amadar and Carter (2016), Coles (2013), and Hauge (2021) all showed that this space is important to enable participants to think about and safely take decisions.

Author 1 – L505: *“it’s the participants who come up with a research lesson plan and it’s generally one of them who teaches the research lesson.”*

Author 2 – L59 – 60: “I want people who are really eager and open and want to try new things, [but] I don’t want [to be] a person who pushes things onto others.”

Time enables agency within the participants to develop and in doing so builds the collaboration of the group further.

6. CONCLUSION

We recognize a limitation of this research is that expertise development was not a strong feature of the interviewed facilitator’s conversations. While this may have been due to the general focus of the interviews, it shows that process can dominate the facilitator’s thinking and there needs to be a continued refocusing on expertise. Dotger (2015) raised this concern, and it is important to remember that facilitators are not infallible. While expertise content was not as prioritized as organizational LS processes in this reflection, it does not diminish the process findings. Rather, it gives weight to Clivaz and Clerc-Georgy’s (2021) model of two facilitators.

By considering the work of two facilitators through the SAILS framework, we have revealed more about facilitation in LS cycles. From these focused works on LS facilitation, we can see notions of leadership and facilitation skills. The wider literature on LS facilitation shows that additional ideas of expertise, collaboration, and purpose need to be considered. These themes are referenced in Dotger (2015), Hauge (2021), and Mynott (2018), as well as expanded upon in the wider literature.

Our research reveals that if LS cycles are to be sustained, then process facilitation needs to be participant focused. Whomever is leading the LS cycle must be strong enough to guide, yet invisible enough to give participants agency to determine their learning. Our research also shows that standards of LS facilitation need to be considered. The establishment of relationships, norms, and the focus of the LS cycle are all important aspects of the facilitators work. Although relationships and processes of establishing LS collaborations can vary, it is essential that the quality of these elements are clearly outlined as this will impact the overall effectiveness of the LS cycle.

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APPENDICES

Appendix A: Qualitative Facilitation Questions

Section 1: Introduction

1. Tell us about your experience as a Lesson Study facilitator (how long? number of cycles? training attended? etc.)
2. Are there any things you do as a facilitator that you wish you didn't do?
3. What are your best facilitation qualities?

Section 2: Before/ Preparation

1. How do you prepare for a Lesson Study project?
2. How do you find the resources you need?
3. How do you choose a subject/ focus?
4. How do you narrow the focus?
5. Who do you plan the cycle outline with?
6. How do facilitators prepare the didactic contract in relation to:
 - Time management and organization
 - Group norms/ collaboration systems
 - Lesson Study norms
 - Sharing and summarizing of learning

Section 3: Immediate preparation

1. How do you prepare yourself to work with new teachers?
2. How do you plan a session?
3. What do you write on your session plan?

4. Do you have any examples of your own session plans?
5. Are you using a checklist? If yes, where does it come from?
6. Can you briefly describe the general outline of your planning, as a facilitator?

Section 4: Within the planning sessions

1. Who decides the content of the research lesson?
2. How do you decide when to move onto the next part of the plan?
3. How do you know when to speak and when to not speak?
4. How do you know when to interject?
5. When do you guide participant to research?
6. When do you guide participants to resource study?
7. Do you summarize and/or reformulate?

Section 5: Within the review session / debriefing session

1. How do you establish rules/ norms with the group?
2. What rules/ norms do you establish/use for the session to work?
3. How do you get the group to take turns?
4. How do you ensure all participants are heard?
5. How do you track the conversations? Do you use notes?
6. When do you recap /reword conversations?
7. When do you intervene into discussions?
8. What signs/ sounds/ body language do you respond to?
9. How do you manage time within the review discussion?

Section 6: After the cycle

1. Do you provide any summary of learning?
2. Do you collaborate on write up?
3. Do you help the team plan for the next cycle?

Appendix B: Table of theme and coded examples

	Themes/ Codes	Standards	Assessments	Intervention	Instruction and Leadership	Sustainability
Leading Lesson Study	Leading LS L12					
	Prepare L66					
	Additional Observation L68					
	Schedule L70					
	Norms L155/ L210/ L233/ L341/ L355					
	Opt-in L205/ L206/ L331/ L334					
	Script out L168/ L189					
	Wait time L332					
	Segment L333/ Manage time L286					
	Manage workload L79/ L31/ L108/ L180					
Facilitator	Paralanguage L38/ L39					
	Paraphrase L410/ L416/ L418					
	Find consensus L70					

Collaboration Aspects	Read mood L53/ micro-cues L56/ Instinct L58				
	Non-threatening L48/ L56 Safe L494				
	Need to be invisible L497/ L583/ L553 Avoid telling people what to do L41				
	Bring people together L47/ L51				
	Establish relationships L53/ L120/ L257				
	Avoid interjections L30				
	Listen and communicate back L55/ L441				
	Summarize L408/ L417/ L511/ L559/ L431/ L566/ L803				
	Capture learning L430				
	Notice L545 Highlight L464/ L481				
	Reformulate L409				
	Focus on misconceptions L243				
	Organic response L478/ L553				
	Move them beyond nice L86				
	Reflect on good collaboration L91				
	Work with expertise L129/ L347				
	Conflict (+ve) L540/ L541, Egos L370/ L496				
	Challenge throughout L576				
	Let participants plan L505				
	Take risks L489/ L57/ L58/ L157/ L158				
Give reflection time L183					
Student lens/ Notes L191/ L282/ L364/ 464/ 481/ L584					
Recognize external pressures/ constraints L381/ L415					

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