

**Action Research at LILA:
Exploring the Role of Graphic Facilitation in Adult Learning**

**S-547: Action Research, Final Paper
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ACTION RESEARCH AT LILA

INTRODUCTION

In this paper I will describe an action research project I conducted during the 2010-2011 academic year, in conjunction with the Learning Innovations Laboratory (LILA) at the Harvard Graduate School of Education (HGSE). Stringer (2007) describes action research as, “a collaborative approach to *inquiry* or *investigation* that provides people with the means to take systemic *action* to resolve specific problems” (p. 8). Different from traditional research, the action research paradigm requires that an investigator recognize his or her own subjectivity and positionality in relation to a project, and consider the practical implications of new knowledge. Here I outline the steps I took with my collaborators to produce a meaningful and practical research question, and to follow the “action research spiral” by looking, thinking, and acting, in order to improve existing LILA practices.

SECTION ONE: Focus and Framing

Context

LILA is a program of HGSE’s Project Zero. Established in 2000, LILA brings together academic researchers, and Chief Learning and Chief Innovation Officers (CLOs, CIOs) from a broad range of organizations. LILA has three main goals: to create social connections, to craft intellectual insights, and to have practical impact. It is an action learning community, where members learn from and with one another, with the aim of bringing new knowledge to bear on real-world challenges.

During the most recent academic year, LILA explored the theme of “The Effective Collective”. LILA participants met at three members gatherings, also called

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“learning arcs”, which took place in October, February, and April from 2010 to 2011. The typical schedule of a learning arc includes academic talks by thought leaders in the field, “learning rounds” in which one member presents a current organizational challenge to the rest of the group for consultation, and “conversation cafes” in which members convene in small groups to discuss emergent questions and themes (see Appendix A, Figure 1).

LILA meetings are an opportunity for practitioners to gain actionable insights, and for academic researchers to generate new content for the field of organizational learning. One of LILA’s co-Principal Investigators, Daniel Wilson, recently received the 2011 Outstanding Paper Award from the Literati Networks Awards for Excellence. In his paper “Building bridges for change: how leaders enable collective change in organizations” he writes, “Like a bridge across a powerful river, successful approaches to change enable people to make the journey from one place of action to another. To help make this crossing, emerging research is revealing the power of affective, social and structural bridges in supporting such change” (Wilson, 2010, p. 21). Given this action-oriented approach to research, LILA was a natural fit for an action research project.

Stakeholders

While LILA is in a sense a “flat” organization, where everyone’s ideas and opinions carry weight, it is comprised of several distinct stakeholder groups (see Appendix A, Figure 2). CLOs and CIOs are the main customers and consumers, whose organizations pay for access to LILA events. LILA staff, including both academic researchers and event facilitators, are responsible for recruiting members and planning

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and delivering LILA gatherings, as well as inter-session meetings via the phone and web. Doctoral Research Practitioners (DRPs) are HGSE students who receive course credit for collecting and analyzing data from the conversation cafes that are held during member gatherings. Additionally, LILA staff hire a team of artists, also called graphic facilitators, to work during events. In subsequent sections I will provide further information about the role these artists play.

Positionality

During the 2010-2011 academic year, I was a DRP at LILA. Therefore I was an insider to LILA, engaging in collaborative inquiry and reciprocal collaboration with other insiders, including LILA staff and LILA members (Herr & Anderson, 2005). This positionality was helpful in gaining access to the site and holding a first-person perspective on the work. However, it also meant that I had pre-existing roles and responsibilities at LILA gatherings, and at times this created challenges. I will describe these challenges in further detail in the conclusion.

Collaborators

According to Stringer (2007), researchers “need to identify and communicate with people in positions of influence and authority and gain their permission to work there, when this is organizationally appropriate” (p. 45). LILA is a small organization, and as a DRP I was fortunate to have regular contact with Daniel Wilson, one of LILA’s co-Principal Investigators. I approached Daniel in late 2010 to ask about the possibility of conducting an action research project at LILA. Daniel was interested, and also put me in touch with Marga Biller, a lead staff person and LILA facilitator. Daniel and Marga became my main collaborators, and together we produced a research question worthy of

exploration.

Research Question

LILA staff are always working to refine LILA events and improve the experience for members. When I began talking with Daniel and Marga, they had a number of potential research questions that fell into two distinct categories.

First, Daniel and Marga were curious about how to leverage member learning, and sustain engagement between learning arcs. Members often express concern about staying connected to the community and the content throughout the year.

The second category of questions related to the practice of graphic facilitation at LILA. At each LILA gathering, one or more graphic facilitators, sometimes referred to as “scribes”, create intricate, often striking visual representations of academic talks and group discussions (see Appendix B, Picture 1). These scribes are part of an organization called The Value Web, a team that “designs and delivers collaborative engagement for leaders and organizations around the world” (Value Web, 2010).

Graphic facilitation is a new addition to LILA practices: artists from The Value Web first began working with LILA in April of 2010. LILA staff believe that artwork has become an important part of LILA events, and say that the room “would feel nude without the graphics” (field notes). However, Daniel and Marga were unsure of how graphic facilitation was impacting member learning. “How does visual capture work for learning in the moment of these gatherings?” they wondered. “How does visual capture influence members afterwards? What would members find most useful?” (field notes).

After further conversation and reflection, we decided to conduct research on the

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question: *How does graphic facilitation influence member learning and engagement with LILA?* I then set out to conduct a preliminary literature review to identify theoretical assumptions and gaps in existing research.

SECTION TWO: Reviewing the Literature

Graphic facilitation has recently received attention due to a series of videos released by the Royal Society for the encouragement of Arts, Manufactures, and Commerce (RSA). In December of 2009, the RSA posted an online video that showed an artist's hand swiftly producing illustrations to accompany an academic talk on economics. Since that time, the RSA has created at least ten additional animated talks under the name "RSA animate." On its website, the RSA declared that the videos had gone "viral" (RSA, 2010). For example, a talk featuring author Ken Robinson had been viewed over four million times on YouTube at the time this paper was written (RSA Animate).

The RSA produces these videos in collaboration with Cognitive Media, an organization that offers services similar to LILA's artists from The Value Web. Cognitive Media's services include visual synthesis, visual communication, and graphic facilitation (Cognitive Media, 2011). The website for Cognitive Media features a quote from Rudolf Arnheim, an art theorist and perceptual psychologist: "The great virtue about vision is that it is not only a highly articulate medium, but that its universe offers inexhaustibly rich information about objects and events of the outer world. Therefore, vision is the primary medium of thought" (Arnheim, 1969, p. 18). According to graphic facilitators, visual information is fundamental for thinking and learning.

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Graphic facilitation has been defined as “facilitating a meeting by taking continual, visual notes on a large scale” (Valenza & Adkins, 2009, p. 38). While many researchers on graphic facilitation make reference to the ancient practices of hieroglyphics and cave drawings (Hyerle, 1996; Merkley, 2005), there is consensus that graphic facilitation as it is known today emerged in the 1960’s and 70’s, in the Bay area and Silicon Valley. Among the originators of the technique were Geoff Ball who advanced the idea of “group memory”, architects Michael Doyle and David Strauss (1976) who wrote the book *How to Make Meetings Work*, and David Sibbet, inventor of the term “group graphics” (Sibbet, 2001).

From the outset, graphic recording has been seen as more than just a new technique for group facilitation. Professionals in the field believe it is a phenomenon emerging in support of a paradigm shift, as people move from linear thinking to more systemic, interconnected interpretations of reality. For example, in describing the origins of group graphics, Sibbet (2001) says:

One day I hung up two rows of newsprint in the conference room... and began to diagram city government. Three hours and no breaks later the group had just experienced one of the most analytical and juicy seminars they had ever conducted, simply by recording boxes within boxes, drawing lines, and mapping what they knew on the diagram, with me facilitating. Something really important was going on with the graphics. The Fellows had discovered what many call “systems thinking.” (p. 2)

Sibbet sees graphic recording as more than an innovative technique; it is a new way of organizing and analyzing complex problems.

Different from linear thinking, in which parts and events are considered in isolation, systems thinking allows for contemplation of the whole (Senge, 1990). One can recognize the existence of patterns and feedback loops, as well as the interrelated

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nature of a system.

David Hyerle, an educational consultant and originator of “Thinking Maps”, contends that visual tools are currently needed to move beyond linear thinking, so that students can generate “multirelational, holistic concepts” (Hyerle, 1996, p. 11). Hyerle sees visual tools as playing an integral role in the “constructivist-cognitive revolution” (p. 13) initiated by Jean Piaget, and advanced by scholars such as Costa (1985). Constructivism encourages students to go beyond simply breaking concepts into memorizable parts, and to instead work to synthesize knowledge as a means to see the “big picture” (Hyerle, 1996, p. 14).

Renowned scholar Howard Gardner (2006) has identified the “synthesizing mind” as one of the “five minds for the future”. He says, “The ability to knit together information from disparate sources into a coherent whole is vital today...Sources of information are vast and disparate, and individuals crave coherence and integration” (p. 46). According to Gardner, one of the ways synthesis can occur is through invoking metaphors in visual representation.

Organizations like the Value Web offer graphic facilitation as a “recursive design process” that “seeks to develop the whole from the very beginning and to add levels of definition and understanding over time” (Value Web, 2010). In the context of LILA gatherings, members have the opportunity to collaboratively construct knowledge, and move from thinking linearly about puzzles and problems in their organizations, to holding a more integrated, systemic view of these issues.

There is some debate, however, over whether such a practice can enhance knowledge retention. Karpicke and Blunt (2011) found that retrieval practice, which they

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define as “the active, cue-driven process of reconstructing knowledge” (p. 1) was more supportive of learning than an elaborative learning activity like concept mapping.

Concept mapping is potentially similar to graphic facilitation, in that “students construct a diagram in which nodes are used to represent concepts and links connecting the nodes represent relations among the concepts” (p. 1). Karpicke and Blunt stress the importance of retrieval as practice to enhance knowledge retention, and comment that “When students create concept maps in the presence of materials they are learning, the activity involves elaborative studying. Students could also create concept maps in the absence of materials they are learning, and then the activity would involve practicing retrieval of knowledge” (p. 3).

Regardless of the impact of graphic facilitation on knowledge retention, there is evidence that it can enhance large-group experiences. Tyler et. al. (2005) described the significance of graphic facilitation at a multicultural, interfaith event sponsored by the Council for a Parliament of the World’s Religions (CPWR). The authors noted that graphic facilitation engaged attendees emotionally through “the experience of seeing their own words and thoughts reflected in the graphic recording” as well as “direct participation by adding their own words, stories, songs, and images on participant voicecapture graphic recordings” (p. 148). This suggests that when participants are personally involved in graphic representation, images have a strong impact.

Tyler et. al. also claim that graphics have a “summative and integrative function” (p. 150). By having the graphic facilitator review graphics at the end of the day, participants at the CPWR event had the opportunity to reflect on and integrate new knowledge. This practice was seen by the graphic facilitators as “essential” (p. 150).

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The researchers also reported a novel method for supporting sustainability of the participants' experiences. In an effort to support the goal of having participants commit to a "simple and profound act" (p. 150), graphic recorders captured commitments visually, and drew models depicting the process of following through on those commitments. Participants were allowed continued access to these graphic representations following the event.

Studying the role of graphic facilitation in a localized context has the potential to enhance procedures at LILA, as well as impact the wider field of practice. While graphic facilitators themselves have produced literature on the history, theory, and practice of their art, there seems to be little research on its impact. Research on graphic facilitation also complements the study of visual learning techniques, and learning in adulthood.

SECTION THREE: Methodology and Findings

Refining the research question and methodology

The initial literature review led me to propose an experiment in collaboration with the LILA staff and Value Web artists, to test whether a modification of the graphic facilitation practice could enhance member engagement between the February and April 2011 learning arcs. I wrote this proposal independently from Marga and Daniel, in an effort to complete a project proposal before the winter holidays.

I suggested that at the end of the February learning arc, scribes could facilitate a session in which participants would identify key learnings, as well as goals to work on for the April learning arc. All commitments were to be captured in a single graphic, a "Member Commitment Graphic", so that members would have a visual representation of

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how their personal commitment fit into the larger LILA community. I hypothesized that by visually representing connections between members and their goals, the graphic would enhance collaboration between LILA members in the months leading up to the April learning arc. I planned to use a repeated-measures design by administering a survey in advance of the February learning arc, and again before the April learning arc. The survey would measure member engagement, and test whether the new practice in graphic facilitation enhanced engagement between sessions.

After the winter break I discovered that the methodology was not a good match for LILA. One of Marga and Daniel's main concerns was that the project would require LILA members to complete formal surveys. Since members are already video-recorded during conversation cafes and asked to complete brief surveys for the research Daniel and the DRPs are conducting, Daniel and Marga were concerned that members would respond negatively to additional testing.

Further, such an experiment would significantly alter the practice of the graphic facilitators. While the two artists from The Value Web were excited about the research and happy to engage in it, they had not participated in the original conversations. It made sense to gather baseline information about graphic facilitation before proposing changes in practice.

We decided to pursue a simpler, more discreet form of data collection. After further consultation with Marga and Daniel, as well as Professor Warikoo and the Action Research class, I decided to conduct observations and brief informal interviews at the February learning arc. We asked a more basic research question: *What is the role of graphic facilitation at LILA?* Answering this question would give us grounds to

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experiment or refine practices during the year's final learning arc in April.

Relation to subjectivity

Stringer (2007) states that “As participants explore the issue at hand, they may discover the need for a variety of types of information, and data gathering becomes an ongoing process that emerges as the investigation proceeds. This contrasts with procedures of experimental research in which the data to be gathered are precisely defined in the research design.” As a former research assistant in brain imaging laboratories at Massachusetts General Hospital (MGH), I was accustomed to traditional research design. I had learned about recruiting subjects to participate in unchanging protocols, rather than adjusting protocols to fit research participants.

It was interesting to recognize my own subjectivity, and adapt to the needs of the research context, collaborators, and participants. This is an important aspect of action research, and a cause for the action research facilitator to refine and adjust methods in an ongoing way.

The Action Research Spiral

Stringer (2007) presents a basic framework for conducting action research that includes looking, thinking, and acting (see Appendix A, Figure 3). In the “look” phase, a researcher gathers data and builds a picture of the situation being examined. The “think” phase involves analyzing the data and asking, “What is happening here?” (p. 8), as well as theorizing about why it is so. In the “act” phase, the researcher reports data, implements changes, and evaluates the outcome.

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First Step: Look

As I mentioned previously, we decided to collect data at the February 2011 learning arc in the form of observations and brief informal interviews. Over the course of two days, from February ninth to tenth, I engaged in observation that yielded both quantitative and qualitative data.

Artists create graphics in front of the LILA audience, in real-time during opening remarks, academic lectures, and learning rounds. To determine whether members view graphics while they are being created, I recorded the frequency with which members looked at graphics-in-process. I recorded the number of glances a graphic received in ten-minute increments. I took notes during these observation periods to capture additional qualitative data.

During breaks and meals, I observed the way participants behaved in relation to completed graphics. I recorded information in field notes.

Additionally, I engaged in brief informal interviews with both graphic facilitators, three of five DRP's, and twelve of twenty-four LILA members (half of all members in attendance). I conducted these interviews in a standard, open-ended way. If a participant was looking at a graphic I asked, "What is going on for you right now?" or "What do you think?" In other contexts, such as drinking coffee during a break, I asked "What do you think of the graphics?" In order to maintain a conversational interaction, I did not take notes during the interview, and later recorded comments in field notes.

Second Step: Think

In the second step of the action research spiral, the researcher analyzes the data, and begins to interpret and explain results. Based on the quantitative data and the field

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notes, I identified five distinct roles for graphic facilitation at LILA. These roles included aesthetics, conversation piece, record-keeping, cognitive integration, and cognitive comparison (see Appendix A, Figure 4). Here I explain each of these roles in further detail; I then offer an interpretation of the cognitive comparison findings.

Aesthetics

Graphic facilitation stimulates the senses in terms of sight, sound, and smell. An obvious observation is that graphics visually enhance the LILA experience. Events often take place in the Gutman Conference Center, which features shades of gray and olive green. The graphics bring color to an otherwise monochrome space (See Appendix B, Picture 2).

An additional observation is that while graphics are being created, the marker makes a signature squeaky sound as it travels across the paper. In this way, graphic facilitation can add a background noise to academic talks as the visual representation emerges in real time. It is notable that the videos from RSA animate begin with the image of a hand drawing the RSA logo, accompanied by the sound of the signature squeak (RSA animate).

The final aesthetic contribution is not necessarily a positive one. Graphic facilitators worry about the odor of markers, and do their best to minimize it. On two different occasions, an artist asked whether I could smell the markers.

Conversation Piece

I observed that completed graphics created an “art exhibit” effect in the event space. On the first day, staff constructed a corridor between the main meeting room and the lunch room by lining the space with graphics from the previous LILA gathering.

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During the morning break on the first day, I observed at least three groups of people standing in this area. Participants talked to each other and did not look often at the graphics, but remained standing in front of them. The graphics seemed to create a space for organic social interaction. Graphics were also used during a “walk-about”, at which point members were asked to move around the room and review the graphics in preparation for the conversation café portion of the meeting. In this way, graphics were intentionally used to spark conversation.

Record-Keeping

One of the functions of graphic facilitation is to produce a permanent record of academic talks. I found that graphics served as a record both while artists were in the process of creating them, as well as after they were complete.

Based on audience observations, it was clear that some LILA participants looked at graphics while they were being drawn. The quantitative data showed that the graphic received about twelve glances every ten minutes during LILA opening remarks, and about five glances every ten minutes during both of the scientific talks. I did not notice participants tracking graphics during the learning rounds, although one participant later told me that he was tracking the graphic the entire time.

While I did not record data for individual participants, I noticed that some audience members glanced at the graphics in-process often, and some never looked at them. This was corroborated later in the informal interviews: certain participants reported actively choosing to track the emerging graphics, and some reported purposefully ignoring them.

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Participants were able to use the graphics to “catch up” in real time. For example, one of the DRP’s was absent during a portion of an academic talk. When he returned, he stared at the graphic, trying to figure out what he had missed. A LILA staff member looked at the graphic during a pause in the talk in order to improve the blog post she was working on for the LILA website.

Completed graphics are hung in the space during the meeting, and are therefore available for participants to review. I observed one member photographing the graphics on his phone (see Appendix B, Picture 3).

Cognitive Integration

The brief informal interviews with LILA members revealed that some members use the graphics to integrate and synthesize learning, as one might suspect based on the graphic facilitation literature. One member said, “I love it. I have a photographic memory, so I can close my eyes and see the graphic. I see things in systems. The graphic helps me see connections between topics” (field notes). However, only two participants, or one sixth of all those interviewed, indicated using the graphic in this way.

Cognitive Comparison

What was perhaps the most surprising and interesting finding also came out of the informal interviews. Four of the twelve participants I spoke to, one third of all those interviewed, indicated that they used the graphics for what I call “cognitive comparison.” They said things like “I look at the graphic after each talk to compare it to my own take-aways”, and “I check what they’re capturing against what I am” (field notes). One participant said, “It’s interpreted; it’s their perception. I wish it was un-interpreted” (field notes).

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The data about cognitive comparison might be interpreted according to adult developmental theory. Kegan (2009) describes three “plateaus in adult mental development” (p. 16), each of which is characterized by a distinct way of making meaning. From the first of these, the socialized mind, “We are shaped by the definitions and expectations of our personal environment.” From the next level of development, the self-authoring mind, “Our self coheres by its alignment with its own belief system/ideology/personal code; by its ability to self-direct, take stands, set limits, and create and regulate its boundaries on behalf of its own voice.” From the self-transforming mind, a rare and even more complex level of meaning-making, “Our self coheres through its ability not to confuse internal consistency with wholeness or completeness, and through its alignment with the dialectic rather than either pole” (p. 17).

The fact that many LILA participants compare their own interpretations with those of the graphic artists suggests that they are operating from at least the self-authoring level of mind. This is not surprising, considering that the role of CLO or CIO generally requires self-direction and visionary leadership.

Cognitive comparison has the potential to serve as a developmental support for the self-transforming mind, since it urges participants to acknowledge their own points of view, while engaging in a dialog with the artists’ points of view. Still, members may be happy to have a larger role in “authoring” graphics. The ability to see one’s own perspective represented in the graphic itself would further support the opportunity to hold multiple perspectives.

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Additional Feedback

The informal interviews yielded additional feedback that did not fit clearly into any of these five distinct roles for graphic facilitation at LILA. A number of participants said they were impressed by the artists' ability to listen and capture information, as well as their artistic talents. One participant talked about a past experience of being asked to draw his own pictures. Another said that graphic facilitation is used at her company. She said, "I'm not sure how useful it is for talks, but it's very helpful during conversations" (field notes).

During a break on day two, one LILA member told me, "I like the graphic with bigger pictures, and less space filled. I like more neutral colors. I don't like words squished in; it seems like there wasn't time, like it wasn't a priority, and it's off-putting. I don't like pictures that just look like fillers" (field notes). Later that day, a member said that when he looks at graphics he focuses on the structure, and notices how the space is filled.

Third Step: Act

Stringer (2007) states that, "Elements and categories that have emerged from the interpretive processes...suggest key areas or aspects of the situation that need to be dealt with in any plan for taking action. Participants then work creatively to identify *what* they will do to gain a more positive outcome, and *how* they will go about the tasks they have set themselves" (p. 125). Following my analysis, I met with Daniel and Marga to share the findings. Our conversation sparked a number of ideas about improvement. Some of these changes were indeed carried out at the April 2011 LILA learning arc (for a summary, see Appendix A, Figure 5).

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One important factor to consider for the April LILA gathering was that, due to scheduling conflicts, it was not to be held in its usual location. Rather than the Gutman Conference Center at HGSE, it would take place at the Harvard Hillel. The team was therefore adjusting to a new space, as well as working to integrate new information from the action research project.

Building on data related to the art exhibit effect, Daniel and Marga talked about setting up a permanent corridor of graphics. Daniel and Marga thought this would provide a transitional space between the dining and main meeting rooms at the Harvard Hillel, and would create an area where people could view graphics and engage socially. While during the February learning arc the makeshift corridor had been moved after day one, the April event included a corridor that was left in place for the duration of the meeting (see Appendix B, Picture 4).

Based on the record-keeping effect, and the fact that people seem to look at graphics in-process, Daniel and Marga considered changing the positioning of the graphic facilitators during learning rounds. While at the February event the graphic facilitator worked off to the side, at the April event she was included in the circle of participants (see Appendix B, Picture 5).

Based on the findings related to cognitive comparison we began to wonder, “How do you get member input into the graphic?” (field notes) We discussed the possibility of leaving a portion of the graphic blank, where members could post sticky notes about their own interpretations of LILA content after each talk. The graphic facilitators could then fill the space with graphics inspired by these notes. We also considered asking members to identify where their own insights appeared in the graphic. Members could then place

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sticky notes directly on the image. The team carried out the latter sticky-note experiment at the April event.

In a pre-event meeting with the graphic facilitators, the team decided to expand the use of what is called the “Harvest Wall” (see Appendix B, Picture 6). The artists were already using this practice at the February event, but in a modest format. In April, a sign on the Harvest wall announced: “Add your ideas, insights, & questions” (field notes). The harvest wall allowed participants to post information, which the artists turned into small graphics. Marga is now considering creating a book of these harvested images that participants could take into their practices at work.

The team is still evaluating the April event. I will continue to work with Marga and Daniel, as well as the graphic facilitators, to identify the outcomes of the project.

SECTION FIVE: Conclusions

Limitations

From my point of view, the main shortcoming of the project was the lack of collaboration with the graphic facilitators themselves. This limitation was not a matter of interest or motivation on the part of the artists; they are open about their practices, and interested in gaining feedback for the sake of improvement. However, they are busy, and rarely visit the Harvard campus. In fact, both artists frequently travel for their work, and are often out of the country. If I were starting this project over again, I would systematize a way to include them in the progress of the research. Their perspectives are key to the research question and methodology, and my collaborators and I would have benefited from their further involvement.

Reflecting on positionality

As a DRP and a LILA “insider”, I had a first-hand perspective on the research project. I was able to use myself as a data point, asking, “What is it like to look at graphics as they are being created?” and “What happens if I stop in the corridor to study completed graphics and engage with other participants?”

However, being a DRP also meant I had existing responsibilities at LILA gatherings. I contributed to setting up and breaking down of the space, blogging for the website, and documenting conversations at cafés. The two-day events were long and exhausting, and it was difficult to incorporate further data collection into the experience. This project gave me an opportunity to wear the multiple hats of an action researcher, and to experience how challenging this undertaking can be.

Final thoughts

After only one year of implementation, graphic facilitation has become an important practice at LILA member gatherings. As I told one of the artists on the second day of the April event, “We’re doing this research because graphic facilitation is important. LILA wouldn’t be the same without it” (field notes).

There are a number of reasons why LILA would feel “nude” without graphic facilitation. This practice adds color and sound to gatherings, provides space for reflection and social interactions, and generates an emergent record of events. Further, the graphics enhance participants’ learning, often by providing content that supports the consideration of multiple points of view.

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This action research project at LILA has implications for the wider realm of adult learning. When working with mature, self-directed learners, it is important to consider how they approach subject material, and provide opportunities for them to self-author. The LILA team is experimenting with different forms of interactivity, to allow member voices to speak more loudly. These types of experiments can provide valuable information and ideas for “best practices” to a range of adult learning and leadership training organizations.

The LILA community proved its status as an action learning community by seeking feedback, reflecting on new information, and using data to enhance its practices. I’m grateful to have participated in one loop of LILA’s action research spiral, and I wish the community well as it travels on to the next iteration.

Acknowledgements

I would like to thank my collaborators, Daniel Wilson and Marga Biller, artists Kelvy Bird and Sita Magnuson, all LILA participants, Professor Natasha Warikoo and Teaching Fellow Karin Liiv, and all of my S-547 classmates!

Appendix A: Figures

Figure 1- February 2011 LILA Agenda

Wednesday, Feb 9th	Thursday, Feb 10th
Breakfast and New Member Orientation	8:00 Breakfast
Welcome, Framing and Member Puzzles	8:30 Welcome and Reflections
Break	9:00 Learning to Team, Teaming to Learn <i>Dr. Amy Edmondson shares her latest research and thinking on the conditions that support team performance and learning.</i>
The Effective, Elicit Collective: Learning in Trafficking & Terrorist Networks <i>Dr. Michael Kenney shares his latest thinking and research on how terrorist and drug cartels adapt and learn.</i>	9:30
Lunch	10:00
	10:30 Break
	11:00 Round Table Discussion <i>Our guests explore emerging questions from the two days</i>
	11:30
	12:00 Lunch
	12:30
Team Learning Simulation: Mt. Everest <i>Dr. Amy Edmondson facilitates a group simulation that explores the environmental and team conditions that inhibit/support learning.</i>	1:00 SWN (So what now?) Cafés <i>Small groups discuss how they are considering bringing ideas back into their practice to meet the challenges they are face.</i>
Break	1:30
	2:00
Connection Cafés <i>Small groups discuss connections between today's content and the challenges they face.</i>	2:30 Feedback & Looking Ahead
	3:00
Community Reflections	
Group Dinner <i>TBD</i>	

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Figure 2- Key Stakeholders at LILA

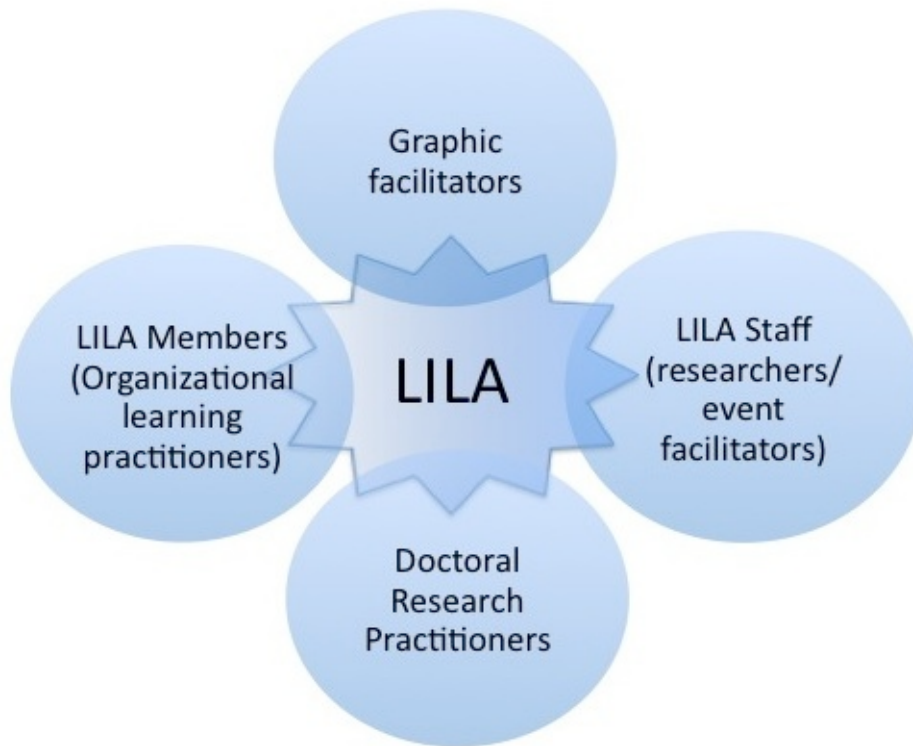


Figure 3- From Stringer (2007), p. 9

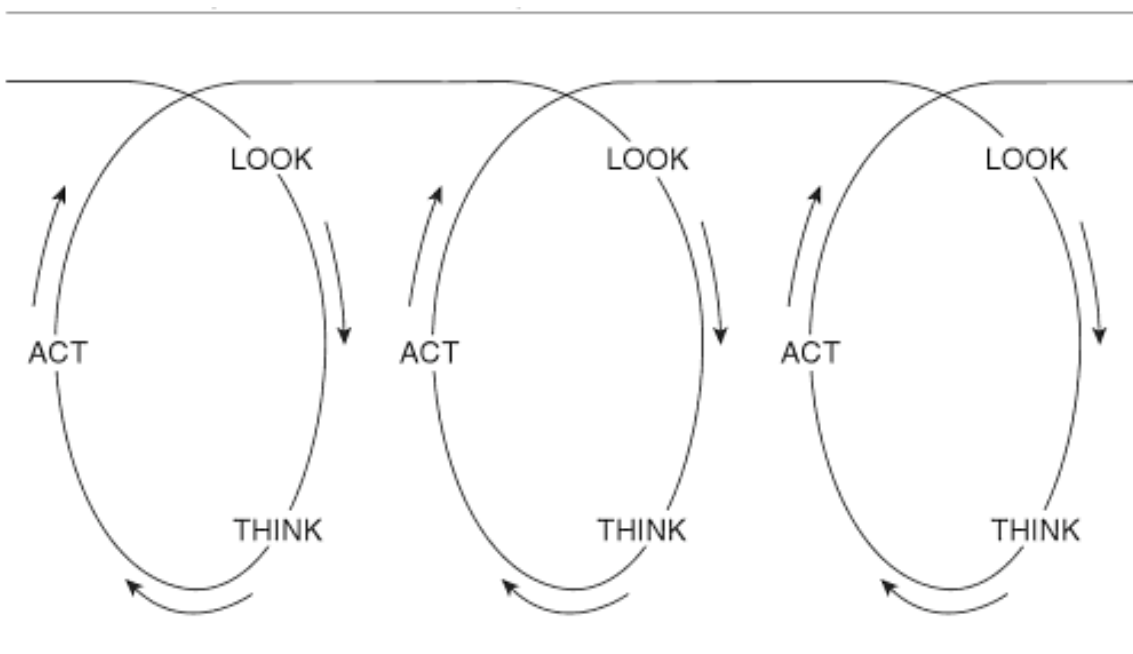


Figure 1.1 Action Research Interacting Spiral

Figure 4- Findings

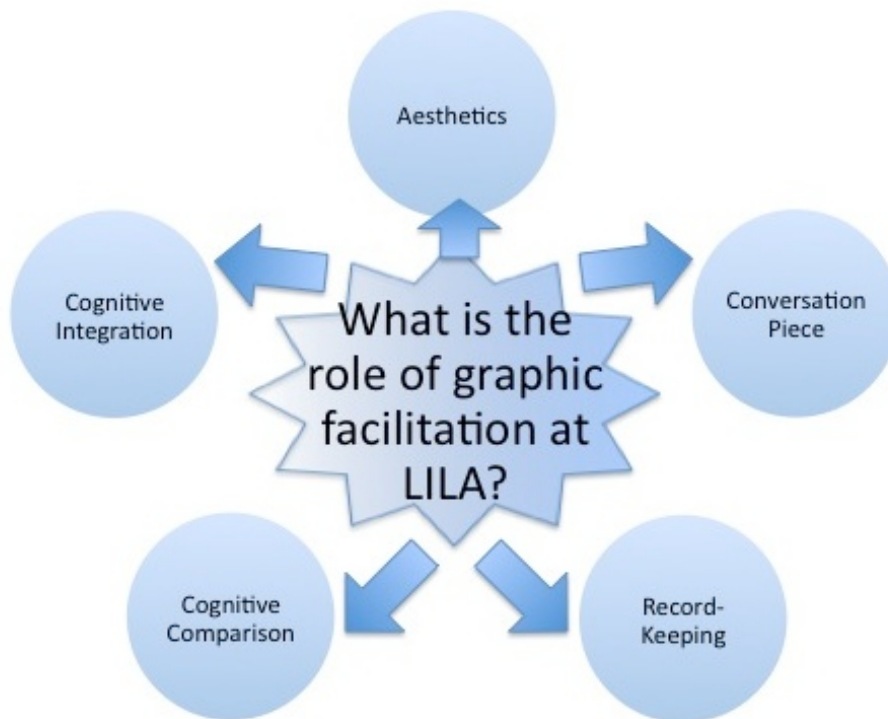


Figure 5- Evidence-Based Changes in LILA Practices

February 2011 Learning Arc	April 2011 Learning Arc
The graphic facilitator stood to the side of the participant circle during learning rounds	The graphic facilitator was included in the participant circle during learning rounds
A corridor of graphics existed only on Day 1 of the event	A corridor of graphics existed for the duration of the event
Participants passively viewed graphics	Participants actively posted notes on graphics
Facilitators build a small harvest wall	Facilitators built a large harvest wall

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